AMENDED SEPTEMBER 20, 1973

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. 687
*N° de l'autorisation de forage*

Date Issued March 12, 1973
*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* |
|---|---|---|
| Union Aklavik F-38 | 3880 | |

| (Permittee, License, Lessee) – *(Détenteur de permis ou de licence, du concessionnaire)* | Exploratory Licence No. – *N° de licence de sondage* |
|---|---|
| Union Oil Company of Canada Limited | 2264 |
| (Operator) – *(Exécutant)* Union Oil Company of Canada Limited | Exploratory Licence No. – *N° de licence de sondage* 2264 |

LOCATION – *EMPLACEMENT*

| Unit – *Unité* | Section | Grid – *Étendue quadrillée* | Latitude | Longitude |
|---|---|---|---|---|
| F | 38 | 68°10'N, 135°00'W | 68°07'15"W | 135°09'11"W |

| Unique Well Identifier – *Code d'ordinateur* | Universal Well Location Reference – *Références universelles d'emplacement du puits* |
|---|---|
| 300F386810135000 | 68.12083°N 135.15306°W |

| | Date | Depth – *Profondeur* |
|---|---|---|
| Spudded *Début des travaux* | Mar 17/73 | 60' |
| Suspended *Suspension des travaux* | | |
| Resumed Operations *Reprise des travaux* | | |
| Finished Drilling *Forage terminé* | June 8/73 | 6745' |
| Deepened *Approfondissement* | | |
| Complete (Gas/Oil) *Achèvement (Gaz/Pétrole)* | | |
| Abandoned *Abandon* | June 10/73 | 6745' |
| Rig Released *Fin des travaux* | June 11/73 | |

Pool(s) *Gisement(s)*

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

Elevation: Gr. *Altitude du sol* 23' est. K.B. *du carré d'entraînement* 40'

Rig No. *N° de la tour de forage* 1E

Drilling Contractor *Entrepreneur en forage* S&T Drilling Ltd

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

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. 20' x 28" Refrigeration conductor pipe | | | | 60 | 230 sacks + 3% $CaCl_2$ |
| 2. 13-3/8" | K-55 | 68 | 510.3 | 505 | 900 sacks + 3% $CaCl_2$ |
| 3. 9-5/8" | K-55 | 40 | 2765.07 | 2760 | 1300 sacks |
| 4. | | | | | |
| 5. | | | | | |
| 6. | | | | | |

| Geological Tops *Sommet des formations* | Elevation – *Profondeur* Depths *Sous le niveau du sol* | Sub-Sea *Sous le niveau de la mer* |
|---|---|---|
| CRETACEOUS | | |
| Upper Cret.Shale | 850 | - 810 |
| Upper SS.Division | 1875 | -1835 |
| Upper SH.Sil.Div. | 2340 | -2300 |
| Lower SS.Div. | 3900 | -3860 |
| JURASSIC | | |
| Husky | 4168 | -4128 |
| Bug Creek (L.SS) | 4945 | -4905 |
| PERMIAN | | |
| Permian Cong. | 5337 | -5297 |
| PRE-PERMIAN | | |
| Siluro-Ordovician | 6047 | -6007 |
| (Road River | | |
| TD | 6747 | -6707 |

Core Record – *Carottes*

| From – *de* | To – *à* | Rec. *Récupérés* | From – *de* | To – *à* | Rec. *Recup.* |
|---|---|---|---|---|---|
| Sidewal | core only. | | | | |
| 31 shots | from 2930 | to 6678 feet | | | |

Log Record – *Diagrammes*

| Run *Série* | Type of Log *Genre de diagramme* | From – *De* | To – *À* |
|---|---|---|---|
| 1 | Dipmeter | 6747 | 2761 |
| | BHC Sonic Log | 6747 | 2761 |
| | Dil | 6747 | 2761 |
| | Compensated Neutron porosity | 6747 | 2761 |
| | (w/Gamma Ray) | 2761 | 40 |
| | Bariod ppm Log | 60 | TD |
| | Directional Log (computed) | 6736 | 2838 |

## CEMENTING RECORD (Plug, Squeeze, etc.) / CIMENTATION (Bouchon, sous pression, etc.)

| Date | From – de | To – à | Remarks – Remarques |
|---|---|---|---|
| June 10/73 | 6745 | 6645 | 60 sks cement no feel |
| June 10/73 | 5100 | 4900 | 120 sks cement felt top @ 4880 3% Ca |
| June 11/73 | 2750 | 2650 | 65 sks cement felt top @ 2632 3% Ca |

## PERFORATING RECORD (Bullet, Jet) / PERFORATION (à balles, à jet)

| Date | From – de | To – à | Remarks – Remarques |
|---|---|---|---|
| | | | |

## SERVICING RECORD (Acidizing, Fracing, etc.) / ENTRETIEN (acidification, fracturation, etc.)

| Date | From – de | To – à | Remarks – Remarques |
|---|---|---|---|
| | | | |

## 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 faillissement | F.F.B.H.P. Pression de fond à l'écoulement définitif | I.H.P. Pression hydrostatique de début | F.H.P Pression hydrostatique définitif | Remarks – Remarques |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | May 10/73 | Bug Creek (Lower Sand) | 4950 | 4975 | 124 | 65 | 134 | 2337 | 2336 | 639 | 1633 | 2778 | 2743 | Rec'd 3497 feet water cut mud and mud water, BHT 146°F. |
| 2 | June 3/73 | Pre-permian (ordivcian) | 6060 | 6327 | 30 | 45 | 60 | 2438 | 2481 | 75 | (Valve Closed) | 3141 | 3161 | Rec'd 45' of very slightly ga cut drilling mud, 200 PPM BHT 148°F (Partial mierun) |

## ANALYSIS – ANALYSE

| Lab. No. N° de laboratoire | Sample Echantillon | From – de | To – à | Source | Remarks – Remarques |
|---|---|---|---|---|---|
| Core Lab 7021-3805 | Water | 4950 | 4975 | DST No. 1 | |

## PRESENT STATUS OF WELL / ETAT ACTUEL DU PUITS

| | | |
|---|---|---|
| Oil Pétrole | | (Interval) (Intervalle) |
| Gas Gaz | | (Interval) (Intervalle) |
| Dry Sec | | D&A |
| Susp. Travaux sus. | | |

Company / Société: Union Oil Company of Canada Limited

Signed by / Signé par: J. J. Sullivan

Title / Titre: Drilling Superintendent

Date: July 27, 1973

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

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

Indian and Northern Affairs  Affaires indiennes et du Nord

Well Name
Nom du puits: Union Aklavik F-38

Drilling Authority No.
Autorisation de forage n° 687

Field/Area
Gisement/Région: Aklavik

Date Issued
Date d'émission: March 12, 1973

Location — Unit — Section
Emplacement — Unité: F-38-68-10-135-00

Permit or Lease
3880

Latitude: 68°07'15"  Longitude: 135°09'11"

U.W.I.R.
N.R.U.E.P.: 68.12084 -- 135.15306

U.W.I. No.
N.I.P. No.: 300F386810135000

File Microfilmed

Rig Release Date
Date de transfert de la tour de forage: 11-06-73

Tour Sheets, Microfilmed

Status
Statut: D + A

Information Release Date
Date de publication autorisée des informations: 11-06-75

CHANGE OF NAME:
CHANGEMENT DE NOM:

Change of Location
Changement de emplacement

| INDEX | DATE RECEIVED RECU LE | | INDEX |
|---|---|---|---|
| Application for a Drilling Authority | 19-03-73 | K | Demande d'autorisation de forage |
| Well Completion Data | 13-8-73 | K | Renseignements sur le forage d'un puits |
| Well History Report | 13-8-73 | K | Données chronologiques sur le puits |
| Application to Amend a Drilling Authority | | | Demande de modification d'une autorisation de forage |
| Application to Change a Well Name | | | Demande de changement du nom d'un puits |
| Application to Abandon a Well or Suspend Drilling | 31-7-73 | K | Demande d'abandon d'un puits ou de suspension du forage |
| Application to Alter Condition of a Well | | | Demande d'autorisation de modifier l'état d'un puits |
| Well History Supplement | | | Supplément aux données chronologiques sur le puits |
| Well Completion Data | | | Renseignements sur le forage d'un puits |
| Work-Over Report No. . . . . | | | Rapport de reconditionnement n° . . . . . |
| Application to Commingle Production before Measurement | | | Demande d'autorisation de mélanger la production avant jaugeage |
| Data for Back Pressure Test on Natural Gas Wells | | | Données de calcul de la capacité de production d'un puits de gaz naturel — Méthode graphique n° 7 |
| Data for Back Pressure Test on Natural Gas Walls | | | Données de calcul de la capacité de production d'un puits de gaz naturel — Méthode de Vitter |
| M.P.R. — Oil — Calculations | | | Calcul du T.M.P. (Taux maximal de production) de pétrole |
| New Oil Well Report | | | Rapport sur un nouveau puits de pétrole |
| New Gas Well Report | | | Rapport sur un nouveau puits de gaz naturel |
| Well Inspection Report | | | Rapport d'inspection de l'emplacement d'un puits |
| Rig Inspection Report | 19-4-73<br>30-5-73 | K | Rapport d'inspection d'une tour de forage |
| Battery Inspection Report | | | Rapport d'inspection d'une batterie de puits |
| Equipment Report | | | Rapport d'inspection des compteurs |
| Well Card | 20-9-73 | K | Fiche de puits |
| New Service Well Report | | | Rapport sur un nouveau puits de service |
| Strat Service Logs | | | Rapport mensuel des injections d'eau |
| Logs — Large scale | | | Diagrammes: Grande échelle |
| Logs — Small scale | | | Diagrammes: Petite échelle |

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. 687
*N° de l'autorisation de forage*

Date Issued March 12, 1973
*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* |
|---|---|---|
| Union Aklavik F-38 | 3880 | |

| (Permittee, Licensee, Lessee) — *(Détenteur de permis ou de licence, du concessionnaire)* | Exploratory Licence No. — *N° de licence de sondage* |
|---|---|
| Union Oil Company of Canada Limited | 2264 |
| (Operator) — *(Exécutant)* | Exploratory Licence No. — *N° de licence de sondage* |
| Union Oil Company of Canada Limited | 2264 |

LOCATION — *EMPLACEMENT*

| Unit — *Unité* | Section | Grid — *Étendue quadrillée* | Latitude | Longitude |
|---|---|---|---|---|
| F | 38 | 68°10'N, 135°00"W | 68°07'15"W | 135°09'11"W |

Unique Well Identifier — *Code d'ordinateur*: 300F386810135000

Universal Well Location Reference — *Références universelles d'emplacement du puits*: 68.12083°N 135.15306°W

| | Date | Depth — *Profondeur* |
|---|---|---|
| Spudded — *Début des travaux* | Mar 17/73 | 60' |
| Suspended — *Suspension des travaux* | | |
| Resumed Operations — *Reprise des travaux* | | |
| Finished Drilling — *Forage terminé* | June 8/73 | 6745' |
| Deepened — *Approfondissement* | | |
| Complete (Gas/Oil) — *Achèvement (Gaz/Pétrole)* | | |
| Abandoned — *Abandon* | June 10/73 | 6745' |
| Rig Released — *Fin des travaux* | June 11/73 | |

Pool(s) — *Gisement(s)*:

Interval(s) Open to Production — *Intervalle(s) de production*:

Elevation: Gr. — *Altitude du sol*: 23' est. K.B. — *du carré d'entraînement*: 40'

Rig No. — *N° de la tour de forage*: 1E

Drilling Contractor — *Entrepreneur en forage*: S&T Drilling Ltd

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

## 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. 20' x 28" Refrigeration conductor pipe | | | | 60 | 230 sacks + 3% $CaCl_2$ |
| 2. 13-3/8" | K-55 | 68 | 510.3 | 505 | 900 sacks + 3% $CaCl_2$ |
| 3. 9-5/8" | K-55 | 40 | 2765.07 | 2760 | 1300 sacks |
| 4. | | | | | |
| 5. | | | | | |
| 6. | | | | | |

| Geological Tops — *Sommet des formations* | Elevation — *Profondeur* Depths — *Sous le niveau du sol* | Sub-Sea — *Sous le niveau de la mer* |
|---|---|---|
| CRETACEOUS | | |
| Upper Cret.Shale | 850 | - 810 |
| Upper SS.Division | 1875 | -1835 |
| Upper SH.Sil.Div. | 2340 | -2300 |
| Lower SS.Div. | 3900 | -3860 |
| JURASSIC | | |
| Husky | 4168 | -4128 |
| Bug Creek (L.SS) | 4945 | -4905 |
| PERMIAN | | |
| Permian Cong. | 5337 | -5297 |
| PRE-PERMIAN | | |
| Siluro-Ordovician | 6047 | -6007 |
| (Road River | | |
| TD | 6747 | -6707 |

Core Record — *Carottes*

| From — *de* | To — *à* | Rec. — *Récupérées* | From — *de* | To — *à* | Rec. — *Récup.* |
|---|---|---|---|---|---|
| Sidewall core only. 31 shots from 2930 to 6678 feet | | | | | |

Log Record — *Diagrammes*

| Run — *Série* | Type of Log — *Genre de diagramme* | From — *De* | To — *À* |
|---|---|---|---|
| 1 | Dipmeter | 6747 | 2761 |
| | BHC Sonic Log | 6747 | 2761 |
| | Dil | 6747 | 2761 |
| | Compensated Neutron porosity (w/Gamma Ray) | 6747 | 2761 |
| | | 2761 | 40 |
| | Baroid ppm Log | 60 | TD |

## CEMENTING RECORD (Plug, Squeeze, etc.) / CIMENTATION (Bouchon, sous pression, etc.)

| Date | From – de | To – à | Remarks – Remarques |
|---|---|---|---|
| June 10/73 | 6745 | 6645 | 60 sks cement no feel |
| June 10/73 | 5100 | 4900 | 120 sks cement felt top @ 4880 3% Ca |
| June 11/73 | 2750 | 2650 | 65 sks cement felt top @ 2632 3%Ca |

## PERFORATING RECORD (Bullet, Jet) / PERFORATION (à balles, à jet)

| Date | From – de | To – à | Remarks – Remarques |
|---|---|---|---|
| | | | |

## SERVICING RECORD (Acidizing, Fracing, etc.) / ENTRETIEN (acidification, fracturation, etc.)

| Date | From – de | To – à | Remarks – Remarques |
|---|---|---|---|
| | | | |

## 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 | May 10/73 | Bug Creek (Lower Sand) | 4950 | 4975 | 124 | 65 | 134 | 2337 | 2336 | 639 | 1633 | 2778 | 2743 | Rec'd 3497 feet water cut mud and mud water, BHT 140°F. |
| 2 | June 3/73 | Pre-permian (ordivcian) | 6060 | 6327 | 30 | 45 | 60 | 2438 | 2481 | 75 | (Valve Closed) | 3141 | 3161 | Rec'd 45' of very slightly gas cut drilling mud, 200 PPM BHT 148°F (Partial misrun) |

## ANALYSIS – ANALYSE

| Lab. No. N° de laboratoire | Sample Échantillon | From – de | To – à | Source | Remarks – Remarques |
|---|---|---|---|---|---|
| | | | | | |

## PRESENT STATUS OF WELL / ETAT ACTUEL DU PUITS

| | | |
|---|---|---|
| Oil Pétrole | | (Interval) (Intervalle) |
| Gas Gaz | | (Interval) (Intervalle) |
| Dry Sec | | D&A |
| Susp. Travaux sus. | | |

Company / Société: Union Oil Company of Canada Limited

Signed by / Signé par: J. J. Sullivan

Title / Titre: Drilling Superintendent

Date: July 27, 1973

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

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

DEPT. OF INDIAN AFFAIRS & NORTHERN DEVELOPMENT
MINERAL DIVISION
JUL 30 1973
OTTAWA, ONT.

CANADA

Drilling Authority No. 687

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

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

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

Name and number of well Union Aklavik F-38

Location: Unit F Section 38 Grid 68°10'N, 135°00'W

Latitude 68°07'15"W Longitude 135°09'11"W

From Established Reference Marker

Universal Well Location Reference 68.12083°N, 135.15306°W

Permit No. Lease No.

Union Oil Company of Canada Limited
(Permittee, Licencee, Lessee)

Date of commencement of proposed program June 10, 1973

## OIL, GAS, AND WATER ENCOUNTERED
(Depths)

Oil at

Gas at

Water at

Total Depth 6745 Date of last operations June 11, 1973

Present condition of well D&A

## CASING RECORD

| Casing Size O.D. Inches | Weight | Amount | Set At— | Sacks of Cement and Additives | Amount Pulled |
|---|---|---|---|---|---|
| 1. 20"x28" | Refrigeration Cond. | 60' | 60' | 230 sks cmt + 3% $CaCl_2$ | None |
| 2. 13-3/8" | 68 | 510.3' | 505 | 900 sks cmt + 3% $CaCl_2$ | None |
| 3. 9-5/8" | 40 | 2765.07 | 2760 | 1300 oil well cmt. | None |
| 4. | | | | | |
| 5. | | | | | |

## PROPOSED ABANDONMENT PROGRAM

| Plug No. | Plug Position | Geological Formation | Number of Sacks of Cement | Remarks |
|---|---|---|---|---|
| 1 | 6745-6645 | Pre-Permian | 60 | No feel |
| 2 | 5100-4900 | Permian, Jurassic | 120 | Felt top @ 4880 |
| 3 | 2750-2650 | Cretaceous | 65 | Felt top @ 2632 |

Cut casing 3' below ground level, set 5 sacks cement inside of casing, welded steel plate on top. Welded pipe to top of casing, extending 6' above ground level. Weld well name plate horizontally to the top of pipe.

The following logs have been run Dipmeter, BHC Sonic, Dil, Compensted Neutron Porosity Gamma

Other operations proposed Abandon well, restore well site location and access road.

Operations to be carried out by S&T Drilling Rig # 1E Contractor Licence No.

Address 5825-98 Street, Edmonton 85, Alberta Address

Responsible Agent in field J. J. Sullivan

Dated at Calgary, Alberta, this 27th Day of July 1973

Signed by J. J. Sullivan J.J. Sullivan Company Union Oil Company of Canada Limited

Title Drilling Superintendent Operator's Exploratory Licence No. 2264

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:

Dated July 31, 19 73

A. L. Laderoute
District Conservation Engineer

IAND 52-90-5 (7-71)

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

Voir au verso

CANADA

N° de l'autorisation de forage . . . . . .

MINISTÈRE DES AFFAIRES INDIENNES ET DU NORD CANADIEN

DIVISION DU PÉTROLE ET DES MINÉRAUX

# Demande d'abandon d'un puits ou de suspension du forage

Conformément au «Règlement sur les terres pétrolifères et gazifères du Canada», nous demandons l'autorisation d'abandonner le puits ci-après ou de suspendre les travaux de forage

Nom et n° du puits . . . . . .

Emplacement: Unité . . . . . Section . . . . . Étendue quadrillée . . . . . .

Latitude . . . . . Longitude . . . . . .

Code d'ordinateur . . . . . .

Références universelles d'emplacement du puits . . . . . .

N° de permis . . . . . N° de concession . . . . . .

. . . . . (Détenteur de permis ou de licence, ou concessionnaire)

Date du début d'exécution du programme projeté . . . . . .

## PÉTROLE, GAZ ET EAU
(Profondeur)

Pétrole à . . . . . .

Gaz à . . . . . .

Eau à . . . . . .

Profondeur globale . . . . . Date des derniers travaux . . . . . .

État actuel du puits . . . . . .

. . . . . .

. . . . . .

. . . . . .

## TUBAGE

| Diamètre extérieur (en pouces) | Poids | Longueur | Fixation à | Sacs de ciment et d'additifs | Longueur récupérée |
|---|---|---|---|---|---|
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | |
| 4. | | | | | |
| 5. | | | | | |

## PROGRAMME D'ABANDON PROJETÉ

| Bouchon | | Formation géologique | Nombre de sacs de ciment | Remarques |
|---|---|---|---|---|
| N° | Profondeur | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Les diagrammes suivants ont été tracés: . . . . . .

Autres travaux projetés . . . . . .

. . . . . .

Les travaux seront exécutés par . . . . . N° de permis de l'entrepreneur . . . . . .

Adresse . . . . . Adresse . . . . . .

Agent extérieur responsable . . . . . .

Fait à . . . . . le . . . . . 19 . . . . . .

Signé par . . . . . Société . . . . . .

Titre . . . . . N° de licence de sondage de l'exécutant . . . . . .

**Nota: Aviser le bureau de l'ingénieur en conservation du district avant de commencer les travaux**

*(À l'usage de la Division du pétrole et des minéraux)*

## APPROBATION

Demande étudiée et programme approuvé, sous réserve des conditions suivantes:

. . . . . .

. . . . . .

. . . . . .

. . . . . .

Date . . . . . , 19 . . . . . .

Ingénieur en conservation du district

*Présenter les formules en triple exemplaire à l'ingénieur en conservation du district*

IAND 52-90-5 (7-71) – – *ministère des Affaires indiennes et du Nord canadien.*

See Reverse

Drilling Authority No. 687

CANADA

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT

OIL AND MINERAL DIVISION

# Application for a Drilling Authority

This notice of intention to begin drilling operations, in triplicate, and where required a plan of survey approved by the Surveyor General showing the target area or the site of the well must be submitted and approved before commencing operations.

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

Name and number of well UNION AKLAVIK F-38

Location: Unit F Section 38 Grid 68.10'-135.00'
Latitude 68°07'15"N Longitude 135°09'11"W
Unique Well Identifier 300F386810135000
Universal Well Location Reference 68.12083°N 135.15306°W

Elevation: Ground 23' (est) K.B. 41' feet above sea-level.
Well is expected to produce from L. Cretaceous, Jurassic, Permian or Pre-Permian formation at a depth of about 3600'-TD feet. Expected total final depth 7200'
Area assigned to well
(for District Conservation Engineer's use only)

Permit No. 3880 Lease No. Acreage 47858
Permittee, licensee, or lessee UNION OIL COMPANY OF CANADA LIMITED
Exploratory Licence No. 1459
Surface owned by Crown or Crown
(If alienated submit name and address of owner and occupant.)

Petroleum and natural gas rights owned by
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. 28" x 20" | Refrigerated | and conductor pipe | new | 60 | 160 |
| 2. 13-3/8" | 68# | K-55 | new | 500 | 800 |
| 3. 9-5/8" | 40# | K-55 | new | 1500-3000 | 705-1350 |
| 4. 7" | 26# | N-80 K-55 | new | (If required) | |
| 5. | | | | | |

Expected water, gas, and oil horizons and type of control equipment. Lower Cretaceous Sandstone, Mid - L. Jurassic sandstone, Permian, or Prepermian. Control by adequate mud weight and shaffer and Hydril BOPs.

Well will be drilled with Rotary Rig No. 1. E. by S. & T. Drilling (Western Co. Ltd.)
(Drilling Contractor or company)

Responsible agent of applicant:–
Contractor's Business Licence No.
At well. J. J. Sullivan. At registered office. Eric J. Connor
Address Box 999, 335-8 Ave. S.W. Calgary, Alta. Address Box 999, 335-8 Avenue S.W. Calgary, Alta.
It is understood that if changes become necessary, notice of the change of plan will be submitted.
Dated at Calgary, Alberta, this 1st day of March 19 73
Signed by J. J. Sullivan J J Sullivan Company UNION OIL COMPANY OF CANADA LIMITED
Title Drilling Superintendent Operator's Licence No. 1429

*(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 CONDITION OF APPROVAL

Dated. MARCH 12 19 73 A. L. Laevens
District Conservation Engineer

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

IAND 52-90-1 (8-71)

Voir au verso

N° de l'autorisation de forage. . . . . .

CANADA

MINISTÈRE DES AFFAIRES INDIENNES ET DU NORD CANADIEN

DIVISION DU PÉTROLE ET DES MINÉRAUX

# Demande d'autorisation de forage

Avant de commencer les travaux, soumettre (en triple exemplaire) et faire approuver le présent avis (indiquant l'intention d'entreprendre des travaux de forage) et, au besoin, un plan d'arpentage reconnu par l'arpenteur général, montrant l'aire de sondage ou l'emplacement du puits.

Conformément au «Règlement sur les terres pétrolifères et gazifères du Canada», nous demandons l'autorisation d'effectuer des travaux de forage.

Nom et n° du puits . . . . . .

Emplacement: Unité . . . . . Section . . . . . Étendue quadrillée . . . . . .
Latitude . . . . . Longitude . . . . . .
Code d'ordinateur . . . . . .
Références universelles d'emplacement du puits. . . . . .

Élévation: du sol . . . . . du carré d'entraînement . . . . . pieds au-dessus du niveau de la mer
Production prévue quand les tiges atteindront la formation . . . . . à une profondeur approximative de . . . . . pieds. Profondeur totale prévue. . . . . .
Superficie assignée au puits . . . . . .

(à l'usage de l'ingénieur en conservation du district)

. . . . . .
N° de permis . . . . . N° de concession . . . . . Superficie . . . . . .
Détenteur de permis ou de licence, ou concessionnaire . . . . . .
N° de permis de prospection . . . . . .
Terres appartenant à la Couronne ou à . . . . . .

(Dans le cas de terres aliénées, donner le nom et l'adresse du propriétaire et de l'occupant)

Détenteur(s) des droits pétroliers et gaziers . . . . . .
Nous prévoyons utiliser les colonnes de tubage suivantes et de les cimenter ou de les sceller, tel qu'il est indiqué ci-dessous:—

| Diamètre extérieur (en pouces) de tubages | Poids (liv./pi.) | Qualité | Tubages neufs ou usagés | Profondeur estimative | Sacs de ciment |
|---|---|---|---|---|---|
| 1. . . . . | | | | | |
| 2. . . . . | | | | | |
| 3. . . . . | | | | | |
| 4. . . . . | | | | | |
| 5. . . . . | | | | | |

Nappes d'eau, de gaz et de pétrole prévues et genre de matériel anti-éruption. . . . . .
. . . . . .
. . . . . .
Le puits sera foré à l'aide de la tour rotary n°. . . . . par . . . . . .

(Entrepreneur ou société de forage)

. . . . . .
Agent responsable pour le requérant:— N° de permis de l'entrepreneur . . . . . .
Sur le chantier . . . . . Au siège . . . . . .
Adresse . . . . . Adresse . . . . . .
Il est entendu que, dans le cas de modifications indispensables, un avis sera soumis.
Datée — . . . . . le . . . . . 19. . . . .
Signé par . . . . . Société. . . . . .
Titre . . . . . N° de licence de sondage de l'exécutant . . . . . .

*(À l'usage de la Division du pétrole et des minéraux)*

## APPROBATION

Demande étudiée et approuvée sous réserve des conditions suivantes:
. . . . . .
. . . . . .
. . . . . .
Date . . . . . 19. . . . . .

CONDITIONS OF APPROVAL FOR DRILLING AUTHORITY NO. 687

FOR UNION AKLAVIK F-38

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

2. The Company will submit to this office, on Tuesdays 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 waste 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.

6. All significant shows of oil and/or gas are to be reported to the District Conservation Engineer immediately.

7. Should a fatal accident occur, drilling operations are to be suspended and the District Conservation Engineer notified immediately. Permission to resume drilling must be granted by the District Conservation Engineer after a fatality.

8. Forward to this Office two field print copies of all well logs with formation tops marked thereon and three copies of core analysis and fluid analysis as soon as they are available.

9. Formation tops (samples or logs) of the section penetrated each week are to be reported with the weekly drilling reports.

10. You are required to report to the Inuvik Office at least twenty-four (24) hours <u>before</u> spudding.

A. F. Halcrow
District Conservation Engineer
District 2 and 3

# WELL PROGNOSIS
# UNION AKLAVIK C-38

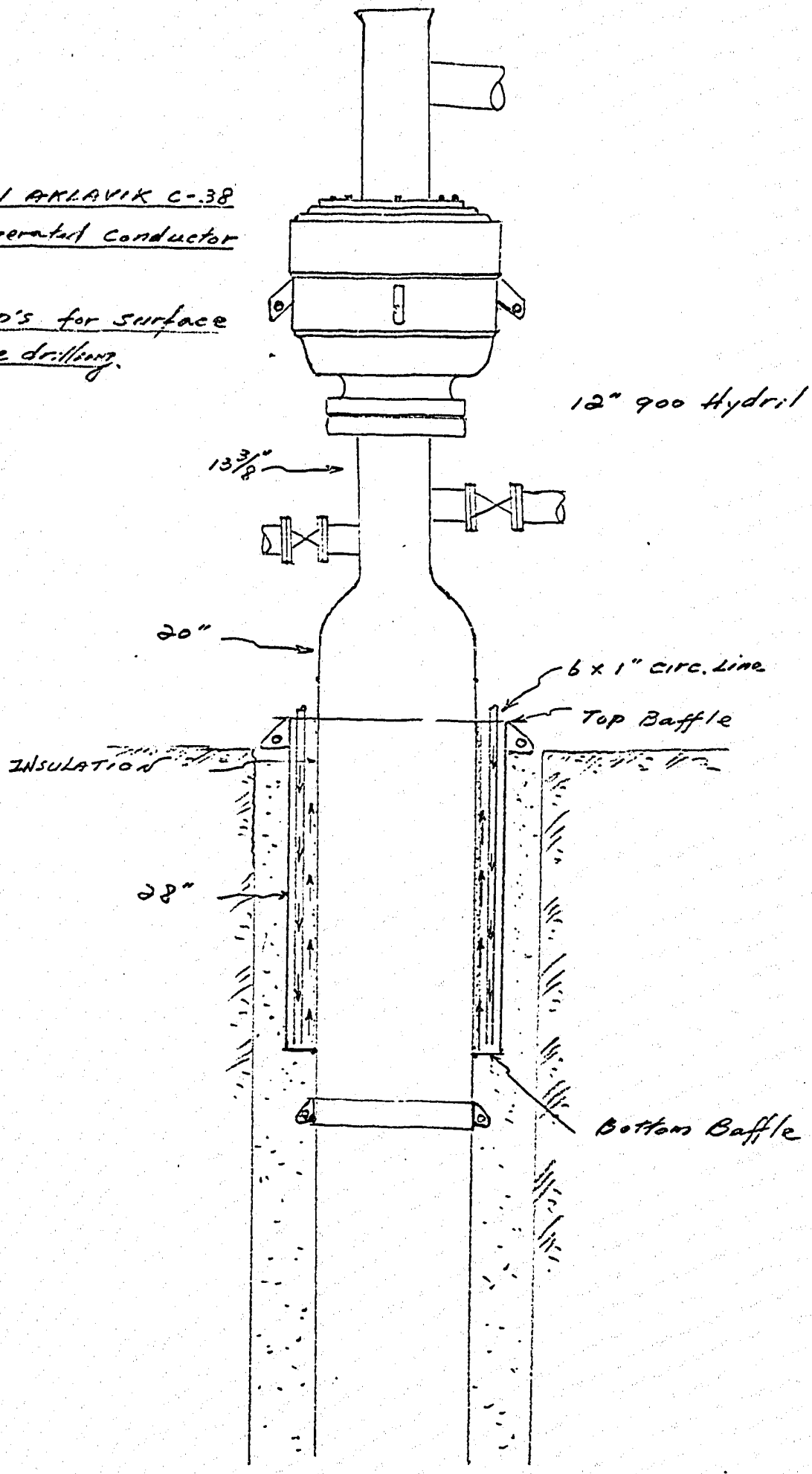
## FORMATION TOPS

| | Depth | Subsea | Thickness |
|---|---|---|---|
| River Delta deposits | 0 | +41 | |
| "PERMAFROST" | 450 | | 450 |
| Upper Cretaceous | 500 | -459 | 1900 |
| Base Albian | 2400 | -2359 | 1200 |
| Lower Sandstone Division | 3600 | -3559 | 300 |
| Husky Shale (Jurassic) | 3900 | -3859 | 500 |
| Bug Creek Sandstone | 4400 | -4359 | 200 |
| MAJOR UNCONFORMITY | | | |
| Permian Detrital | 4600 | -4559 | ±2600 |
| UNCONFORMITY | | | |
| Pre Permian (Middle Devonian, Silurian, Ordovican or Carbonaceous) | 4868 | -4827 | |
| Approximate TD | 7200 | | |

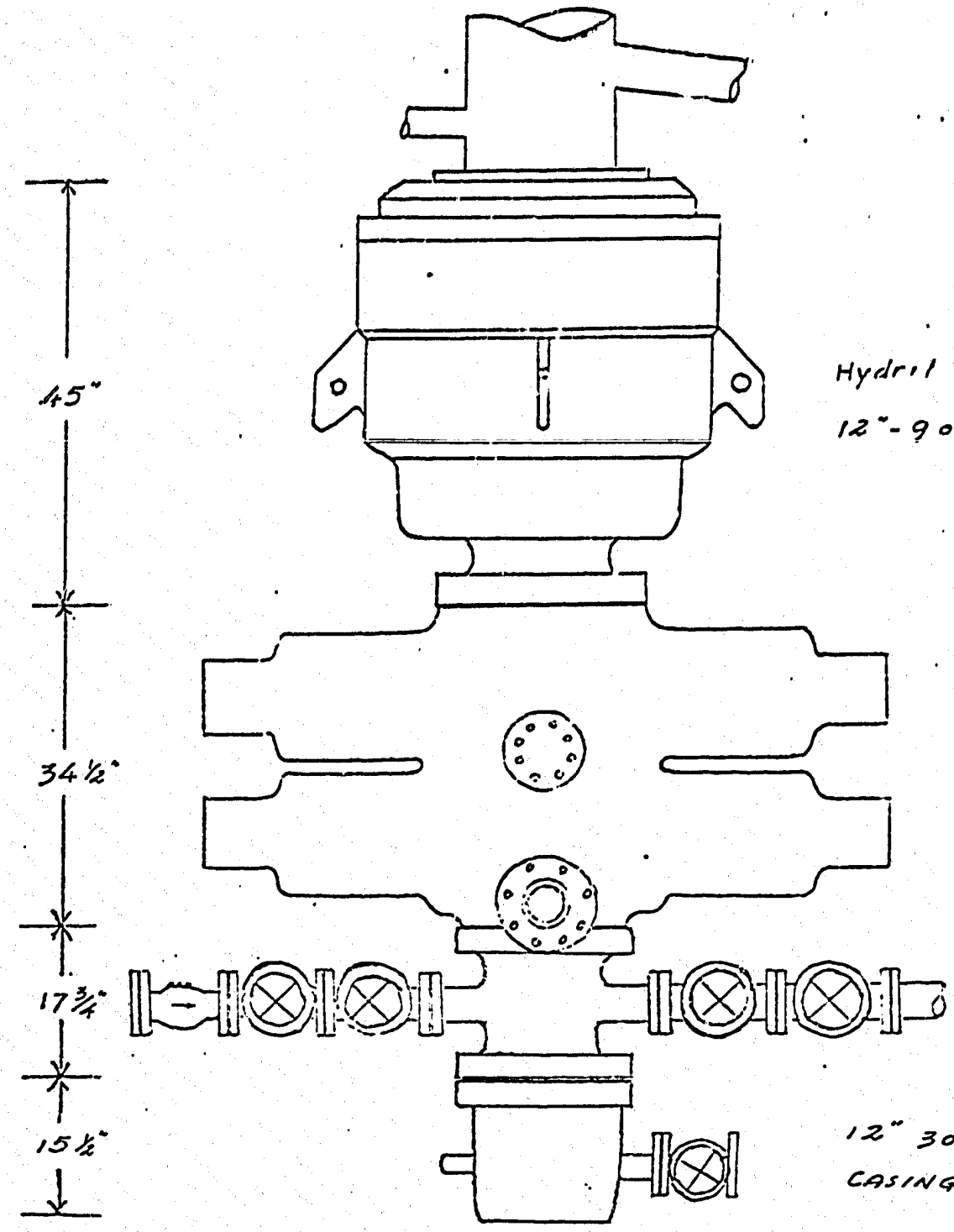
UNION AKLAVIK C-38

Refrigerated Conductor

BOP's for surface hole drilling.

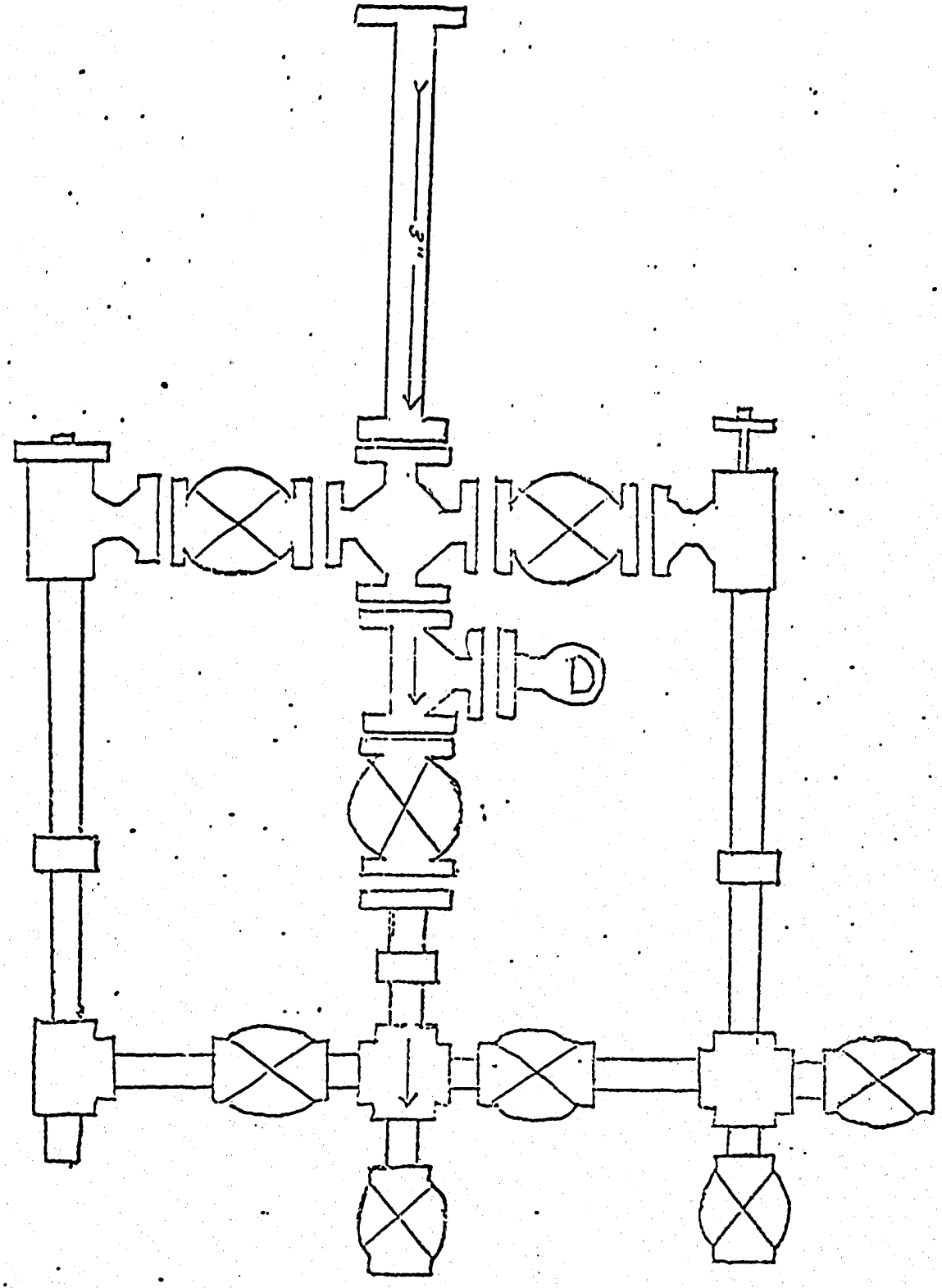


UNION OKLAVIK C-38



UNION SHAFFER C-38

3000 PSI WP. CHOKE manifold



MACKENZIE
DELTA
Union Aklavik K-38
CHANNEL
ENOCH
CONVERSION SCALE FOR ELEVATIONS
Metres
Feet
N.

PROVISIONAL MAP

107 B/4

# CANADA

1:50,000

136°00′ 59 460000m. E. 61 62 55′ 63 64 65 50′ 66 67 68 69 45′ 70 71 72 40′ 73 74 75 35′ 76 77 78 79 80 81 82

68°15′

Joins 107B/5

7570000m. N.

69 68 67 66 65 64 63 62 61 60 59 58 57

Canoe Lake

Creek

Martin

LOWER CANYON

MOUNT GIFFORD

RICHARDSON

MOUNTAINS

ML

Joins 117A/1

59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82

CARTE PROVISOIRE

EDITION 1

107 B/4

499000m. E.

135°00'

68°15'

7569000m. N.

West Chan.

Aldrich Chan.

Reel Channel

Aklavik

CHANNEL

REEL

M C K E N Z I E

ML

LOWER CANYON

MOUNT GIFFORD

Union Akkavik

Joins 107B/3

AP

# CANADA

1:50,000

Joins 107B/5

RICHARDSON

ML

Canoe Lake

Creek

Mat

LOWER CANYON

Willow

MOUNT GIFFORD

RANGE

CARTE PROVISOIRE

EDITION 1

107 B/4

| Refer to this map as: | 107 B/4 EDITION 1 ASE SERIES A 733 |
|---|---|

82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 499000m. E. 135°00'

68°15'

70 69 68 67 66 65 64 63 62 61 60 59 58 57 56

7569000m N

10'

Joins 107B/3

82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99

West Chan

Aklavik Chan

Arbuckle

Peel Channel

Aklavik

CHANNEL

REEL

M A C K E N Z I E

ML

Union Aklavik E-38

LOWER CANYON

CONVERSION SCALE F

30 20 10 0 100 50 0 100 50 200 100 300 400

Joins 117A/1

ML

MOUNTAINS

Creek

Martin

Willow

Creek

Bue

Creek

Burner Plume

Creek

UPPER CANYON

JURASSIC BUTTE

AKLAVIK RANGE

Joins 106M/13

68°00'

136°00'

459000m. E.

754000m. N.

Compiled 1958, by the SURVEYS AND MAPPING BRANCH, DEPARTMENT OF ENERGY, MINES AND RESOURCES, from aerial photographs taken in 1954. Printed 1967.

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

# AKLAVIK RANGE

DISTRICT OF MACKENZIE
NORTHWEST TERRITORIES

| Roads: | Routes: |
|---|---|
| all weather | toute saison |
| dry weather | période sèche |
| cart track | de terre |
| trail or portage | sentier ou portage |

SCALE 1:50,000 ÉCHELLE

Miles 1 0 1 2

Metres 1000 500 0 1000 2000 3000 4000

Yards 1000 500 0 1000 2000 3000 4000 Verges

ML

D E L T A

CHANNEL

CHANNEL

PEEL

HOOPER

Union Aklavik

Fault

Creek

Bug L

HUSKY

Ck

Jimmy

Joins 107B/8

Joins 106M/14

81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98

25′ 20′ 10′ 05′

68°00′ 135°00′

55 56 57 54 53 52 51 50 49 48 47 46 45 44 43

7544000m. N.

499000m. E.

NGE
IE
RIES

2 3 Miles

3000 4000 Mètres

4000 Verges

CONTOUR INTERVAL 50 FEET
Elevations in Feet above Mean Sea Level
North American Datum 1927 (1954)
Transverse Mercator Projection

Some names on this map are not yet official. Corrections or additions are invited by the Surveys and Mapping Branch.

This Provisional Map is equivalent to a standard map in accuracy of content.

ÉQUIDISTANCE DES COURBES 50 PIEDS
Élévations en pieds au-dessus du niveau moyen de la mer
Niveau de référence nord-américain 1927 (1954)
Projection transverse de Mercator

Certains noms inscrits sur cette carte ne sont pas encore officiels. La Direction des levés et de la cartographie saurait gré au public de lui signaler corrections et additions.

Cette carte provisoire est l'équivalente d'une carte régulière au point de vue précision de l'information.

Rédigée en 1958, par la DIRECTION DES LEVÉS ET DE LA CARTOGRAPHIE, MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES, d'après des photographies aériennes prises en 1954. Imprimée en 1967.

Ces cartes sont en vente au Bureau de distribution des cartes, ministère de l'Énergie, des Mines et des Ressources, Ottawa.

CARTER MAPPING
510-5 STREET S.W.
264-1230 AREA

107 B/4
EDITION

3 of

ML

MOUNTAINS

AKLAVIK RANGE

Creek

Martin

Willow

Bue

Creek

Fault

RIVER

Bonnet Plume

Creek

UPPER CANYON

JURASSIC BUTTE

Jimmy

61 55′ 62 63 64 50′ 65 66 67 68 69 70 71 72 40′ 73 74 75 35′ 76 77 78 79 30′ 80 81 82

57 56 55 54 53 52 51 50 49 48 47 46 45 44 43

Joins 106M/13

# AKLAVIK RANGE

DISTRICT OF MACKENZIE

NORTHWEST TERRITORIES

SCALE 1:50,000 ÉCHELLE

Miles 1 0 1 2

Metres 1000 500 0 1000 2000 3000 4000 Mètres

Yards 1000 500 0 1000 2000 3000 4000 Verges

| Roads: | Routes: |
|---|---|
| all weather | toute saison |
| dry weather | période sèche |
| cart track | de terre |
| trail or portage | sentier ou portage |

ANCH,
URCES,

ML

D E L T A

CHANNEL

PEEL CHANNEL

ENOCH

Union Ailavik

Bug L.

Creek

Ck.

Joins 106M/14

82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 499000m. E.

57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 7544000m. N.

25' 20' 10' 05' 68°00' 135°00'

CONVERSION SCALE FOR ELEVATIONS

Feet: 100 200 300 400 500 600 700 800 900 1000

Metres: 50 100 150 200 250 300

T.N.

0°28' or 8Mils

38°34' or 685 Mils

Grid North

Magnetic North

Use diagram only to obtain numerical values.
APPROXIMATE MEAN DECLINATION 1966
FOR CENTRE OF MAP
Annual change decreasing 5.5'

| GRID ZONE DESIGNATION | 100,000 M. SQUARE IDENTIFICATION |
|---|---|
| 8W | M L (5) |

TO GIVE A REFERENCE TO NEAREST 100 METRES

EXAMPLE: ROCK

| | | |
|---|---|---|
| EASTING: Read number on grid line immediately to left of point. | 87 | |
| Estimate tenths of a square from this line eastward to point. | | 6 |
| | 876 | |
| NORTHING: Read number on grid line immediately below point | 54 | |
| Estimate tenths of a square from this line northward to point. | | 6 |
| | 546 | |
| MILITARY GRID REFERENCE | 876546 | |

Nearest similar grid reference 100,000 metres (about 62 miles)

ONE THOUSAND METRE
UNIVERSAL TRANSVERSE MERCATOR GRID
ZONE 8

3 Miles
0 Mètres

CONTOUR INTERVAL 50 FEET
Elevations in Feet above Mean Sea Level
North American Datum 1927 (1954)
Transverse Mercator Projection

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Niveau de référence nord-américain 1927 (1954)
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4 of 4

CARTER MAPPING LIMITED
510-5 STREET S.W., CALGARY
264-1230 AREA CODE 403

107 B/4
EDITION 1

# REPORT

# on the

# DRILLING AND ABANDONMENT

# of

# UNION AKLAVIK F-38

# Unit F, Section 38,

# Grid Corner 68° 10' N & 135° 00' W




Reported by:

MACRAE GEOLOGICAL CONSULTANTS LTD.

L. B. MacRae, P. Geol.

July, 1973

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Baroid ppm Log . . . . . .Pocket #1

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# GEOLOGICAL SUMMARY & PERTINENT DATA

**Company:** Union Oil Company of Canada Limited,
335 Eighth Avenue South West,
Calgary, Alberta.

**Well Name:** Union Aklavik F-38

**Location:** Unit F, Section 38, Grid Corner
68°10' N and 135°00' W

**Coordinates:** Latitude 68°07' 15" N,
Longitude 135°09' 11" W

**Universal Well Location Reference:** 68.12083°N, 135.15306°W

**Permit No.:** 3880 - September 16, 1964

**Well Classification:** New Field Wildcat

**Elevations:** Ground - 23 feet (est.)
Kelly Bushing - 40 feet

**Objective:** To evaluate the hydrocarbon potention of a geophysically defined structure in the eastern part of Union's permit block.

To examine the reservoir characteristics of the sandstones of the Lower Cretaceous, Jurassic and Permian (?) which may be productive from stratigraphic traps. These sandstones are interpreted-from outcrops to be present on this permit in a clean marine facies and from indicated good reservoir characteristic on open hole tests in the closest wells.

Other major reservoir prospects are reef dolomite and limestone or porous carbonate banks of the Middle Devonian, Silurian and Ordovician.

**Final Status:** Dryhole - Abandoned

## GEOLOGICAL SUMMARY & PERTINENT DATA (cont'd)

**Stratigraphy:**

| MARKER | LOG TOPS | |
|---|---|---|
| | Drilled Depth | Subsea |
| **Quaternary:** | | |
| Pleistocene | surface | + 40 |
| **Cretaceous:** | | |
| Upper Cretaceous Shale | 850 | - 810 |
| Upper Sandstone Division | 1875 | -1835 |
| Upper Shale & Siltstone Division | 2340 | -2300 |
| Lower Sandstone Division | 3900 | -3860 |
| **Jurassic:** | | |
| Husky | 4168 | -4128 |
| Bug Creek (Lower Sand) | 4945 | -4905 |
| **Permian:** | | |
| Permian Conglomerate | 5337 | -5297 |
| **Pre-Permian:** | | |
| Siluro-Ordovician (Road River?) | 6047 | -6007 |
| T.D. | 6747 | -6707 |

**NOTE:**
These tops are based only on log correlations of surrounding wells and with surface sections in the nearby Aklavik range. They could change when palynological age analyses are completed.

**Formation Tests:** DST No. 1 - 4950 to 4975
DST No. 2 - 6060 to 6327

**Cored Intervals:** None

**Sidewall Cores:** 31 shots from 2930 to 6678 feet

**Oil Shows:** 5110 - 5120 - Trace light oil stain.

**Gas Shows:**
825 - 845 - Trace gas show at Base of Permafrost.
4056 - 4095 - Weak gas readings.
4955 - 4965 - Trace gas show.

## GEOLOGICAL SUMMARY & PERTINENT DATA (cont'd)

**Schlumberger Logs:**

| | |
|---|---|
| Dipmeter | 6747 - 2761 |
| BHC Sonic Log | 6747 - 2761 |
| Compensated Neutron Porosity | 6747 - 2761 |
| (w/gamma ray) | 2761 - 40 |
| Dual Induction-Laterlog | 6747 - 2761 |

**Gas Mud Logging:** Baroid

**Wellsite Supervision:**

Supervisors: Drilling - John Dorch
- Bill MacIntosh

Geological - Blair MacRae
- Joe Harris

**Contractor:** S & T Drilling (Western) Co. Ltd.
Rig No. 1E

**Casing:** $13\frac{3}{8}$ to 505 feet
$9\frac{5}{8}$ to 2760 feet

**Plugs:**

No. 1 - 6745 to 6645 with 60 sacks of cement.
No. feet.

No. 2 - 5100 to 4900 with 120 sacks of cement.
Top plug at 4880 feet.

No. 3 - 2750 to 2650 with 65 sacks of cement.
Top plug at 2634 feet.

**Spud Date:**

March 17, 1973 at 6:00 A.M.

**Rig Released:**

June 11, 1973 at 5:00 P.M.

**Total Days:**

88 days

# FORMATION TEST NO. 1

**Interval:** 4950 to 4975

**Formation:** Bug Creek (Lower Sand)

**Mud Properties:** Weight - 10.7
Viscosity - 72
Water loss - 8.0

**Times:**

| | |
|---|---|
| Preflow . . . . . | 10 minutes |
| Initial Shut-in . . . . | ~~60~~ minutes 65 |
| Flow Period . . . . . | ~~120~~ minutes 124 |
| Final Shut-in . . . . . | ~~120~~ minutes 134 |

**Blow:** Weak initial puff, increasing to good air blow during preflow period. A good air blow throughout the main flow period.

**Pressures:**

| | |
|---|---|
| IHP | ~~2750~~ 2778 |
| FHP | ~~2750~~ 2743 |
| ISIP | 2340 2337 |
| FSIP | ~~2340~~ 2336 |
| IFP | ~~630~~ 639 |
| FFP | ~~1630~~ 1633 |

**Recovery:** 3497 feet of fluid consisting of 270 feet of water cut drilling mud, 1600 feet of muddy water, and 1627 feet of clear water. Chloride content 5,500 ppm.

**Temperature:** 146°F

# FORMATION TEST NO. 2

**Interval:** 6060 to 6327

**Formation:** Pre-Permian (Ordivician)

**Mud Properties:** Weight - 9.9
Viscosity - 60
Water loss - 8.0

**Times:**

| | |
|---|---|
| Preflow | 6 minutes |
| Initial Shut-in | 45 minutes |
| Flow Period | 30 minutes |
| Final Shut-in | 60 minutes |

**Blow:** Very weak air blow during preflow. No air blow when valve opened during main flow period. Reset tool after 10 minutes, with negative results. Left for 30 minutes with dead blow.

**Pressures:**

| | | |
|---|---|---|
| IHP | ~~3110~~ | 3141 |
| FHP | ~~3110~~ | 3161 |
| ISIP | ~~2460~~ | 2438 |
| FSIP | ~~2460~~ | 2481 |
| IFP | ~~70~~ | 70 |
| FFP | (Valve closed) | |

**Recovery:** 45 feet of very slightly gas cut drilling mud. Chloride content 200 ppm.

**Temperature:** 148°F

**Conclusion:** Partial misrun - tool failed to open during main flow period. Positive test only during 6 minute preflow.

## SIDEWALL CORE DESCRIPTIONS

| Number | Depth | Recovery | Description |
|---|---|---|---|
| 1 | 6678 | 1¼" | Shale - dark grey, hard, (splinter). |
| 2 | 6611 | ¼" | Shale - dark grey, hard, shattered. |
| 3 | 6490 | ¼" | Shale - dark grey, hard, shattered. |
| 4 | 6418 | 1 " | Shale - dark grey, hard, shattered. |
| 5 | 6328 | ¾" | Shale - dark grey, medium hard. |
| 6 | 6183 | ¾" | Shale - red, medium hard. |
| 7 | 5872 | ½" | Shale - red, medium hard. |
| 8 | 5482 | ¾" | Shale - red, medium hard. |
| 9 | 5320 | 1½" | Shale - medium to dark grey, medium hard, (core badly broken). |
| 10 | 5128 | ¾" | Shale - dark grey, medium hard. |
| 11 | 4972 | ½" | Sandstone - buff, shattered, (core soaked with mud). |
| 12 | 4961 | 1 "(est) | Shale - dark grey, hard, shattered, (core badly broken). |
| 13 | 4936 | 1 " | Shale - dark brown, medium hard, (core broken). |
| 14 | 4885 | 2 " | Shale - dark grey, medium hard. |
| 15 | 4705 | 1 " | Shale - dark brownish-grey, medium hard. |
| 16 | 4472 | 1½" | Shale - dark grey, medium hard. |
| 17 | 4400 | ½" | Shale - medium brown, (core broken). |
| 18 | 4336 | ½" | Shale - dark grey. |
| 19 | 4244 | ¾" | Shale - dark grey, medium hard. |
| 20 | 4145 | ¾" | Shale and sandstone - medium brown. |

## SIDEWALL CORE DESCRIPTIONS (cont'd)

| Number | Depth | Recovery | Description |
|---|---|---|---|
| 21 | 4035 | 1 " | Shale - dark grey, (core badly broken). |
| 22 | 3970 | 2" (est) | Sandstone - white, very fine grained, quartz, trace glauconite, (core badly broken). |
| 23 | 3962 | 1 " | Shale - dark grey, medium hard. |
| 24 | 3932 | ¾" | Sandstone - white, very fine to fine grained, quartz, trace glauconite. |
| 25 | 3875 | 1½" (est) | Shale - dark greyish-brown, (core completely broken). |
| 26 | 3665 | 1 " | Shale - dark grey, medium hard. |
| 27 | 3529 | 1¼" | Shale - dark grey, medium hard, (core partially broken). |
| 28 | 3325 | 1¼" | Shale and sandstone - (badly soaked in mud). |
| 29 | 3165 | 1½" | Shale - dark grey, medium hard. |
| 30 | 3055 | 1½" | Shale - dark grey, medium hard. |
| 31 | 2930 | 1½" | Shale - dark grey, medium hard, with some sandstone, brown, very fine grained. |

## SAMPLE DESCRIPTIONS

NOTE: Samples are time lagged.

| | |
|---|---|
| 0 - 50 | No samples. |
| 50 - 60 | Gravel - pebbles of white quartzite, some dark grey shale, some greenish-grey shale, with trace of wood fibre, and much cement from conductor barrel. |
| 60 - 70 | Cement cavings - with some pebbles of white quartzite and pale green shale, as above. |
| 70 - 80 | Cement cavings - with some pebbles of above quartzite, light green and dark grey shale fragments. |
| 80 - 90 | Cement cavings - with some pebbles of quartzite, as above, with much dissolved clays. |
| 90 - 100 | Cement cavings - with some pebbles of quartzite as above. |
| 100 - 110 | Cement cavings - with some medium to coarse grains of quartzite, and dark grey shale fragments in a clay (dissolved) matrix. |
| 110 - 120 | Cement cavings - with some wood and plant fibre and occasional quartzite pebble in above clay matrix. |
| 120 - 130 | Sand - light grey, slightly pink, very fine to coarse grained, quartz (clear and rose), some quartzite, common dark grey to black carbonaceous fibre fragments, unconsolidated, with dissolved clay matrix, much cement cavings. |
| 130 - 140 | Sand - light pinkish-grey, very fine to coarse grained, quartz (clear and rose), some red feldspars, common light brown to black wood fibres, unconsolidated, with dissolved clay matrix. |
| 140 - 150 | No returns - soluble clays. |
| 150 - 160 | Sand - light pinkish-grey, very fine to fine grained, quartz (clear and rose), common carbonaceous shale fragments, occasional quartzite pebble, unconsolidated, with washed out clay matrix, much cement cavings. |

SAMPLE DESCRIPTIONS (cont'd)

160 - 170 Sand - light pinkish-grey, as above, pyritic, with common quartzite pebble fragments, some dark grey shale fragments with much dissolved clay, much cement cavings.

170 - 180 Sand - light pinkish-grey, very fine to medium grained, quartz (clear and rose), abundant black carbonaceous shale fragments, common quartzite pebble fragments, some shale fragments - light to medium grey, unconsolidated, with much dissolved clays, some cement cavings.

180 - 190 Small sample - mostly dissolved clays and some sand, light pinkish-grey, very fine to medium grained, quartz (clear and rose), abundant black carbonaceous shale, common quartzite pebble fragments, unconsolidated, some cement cavings.

190 - 200 Small sample - mostly dissolved clays, with some sand, light pinkish-grey, as above.

200 - 210 Very small sample - mostly dissolved clays with trace of above sand.

210 - 220 Small sample - mostly dissolved clays, some sand, light pinkish-grey, very fine to medium grained, quartz (clear and rose), abundant carbonaceous shale and fibre fragments, trace muscovite and pyrite, some white and medium grey quartzite pebble fragments, unconsolidated.

220 - 230 Sand - light pinkish-grey, very fine to fine grained, quartz (clear to opaque, some rose), some carbonaceous shale fragments, unconsolidated, with much dissolved clays.

230 - 240 Sand - light pinkish-grey, very fine to fine grained, as above, trace biotite, with much dissolved clays.

240 - 250 Sand - light pinkish grey, very fine to fine grained, quartz (clear and rose),common carbonaceous shale fragments, trace mica, unconsolidated, with much dissolved clays.

250 - 260 Sand - light pinkish-grey, fine grained, as above, with much dissolved clays.

## SAMPLE DESCRIPTIONS (cont'd)

260 - 270 Sand - light pinkish-grey, very fine to medium grained, quartz (clear and rose to yellow), common carbonacecus shale fragments, trace muscovite, trace biotite and chlorite, unconsolidated, with much dissolved clay.

270 - 280 Sand - light pinkish-grey, very fine to medium grained, as above, with much dissolved clay.

280 - 290 Sand - light pinkish-grey, very fine to fine grained, quartz (clear, some rose and yellow), common carbonaceous shale fragments, trace mica, unconsolidated, with much dissolved clays.

290 - 300 Sand - light pinkish-grey, very fine to medium grained, as above, with much dissolved clays.

300 - 310 Sand - light pinkish-grey, very fine to medium grained, unconsolidated, as above, with much dissolved clays.

310 - 320 Sand - pink, very fine to fine grained, quartz (clear and rose), some carbonaceous shale fragments, some red shale and sandstone fragments, unconsolidated, with some dissolved clays.

320 - 330 Sand - pink, very fine to fine grained, quartz (clear and rose), abundant carbonaceous shale fragments, unconsolidated.

330 - 340 Sand - pink, very fine to medium grained, as above, unconsolidated.

340 - 350 Sand - pink, very fine to fine grained, quartz, (clear and rose), some red shale fragments, common dark grey fragments, trace muscovite, unconsolidated.

350 - 360 Sand - pink, as above, unconsolidated.

360 - 370 Sand - light pinkish-grey, very fine to medium grained, quartz (clear and rose), abundant carbonaceous shale fragments, unconsolidated.

370 - 380 Sand - pink, very fine to medium grained, as above, trace muscovite and biotite.

380 - 390 Sand - pink, very fine to medium grained, quartz (clear and rose), abundant carbonaceous, shale fragments, trace wood and plant fibre, unconsolidated.

## SAMPLE DESCRIPTIONS (cont'd)

390 - 400 Sand - pink, very fine to medium grained, as above.

400 - 410 Sand - pink, fine to medium grained, (quartz - clear and some rose), abundant black carbonaceous shale fragments, trace muscovite and biotite, unconsolidated.

410 - 420 Sand - pink, fine to medium grained, as above.

420 - 430 Sand - pink, fine grained, quartz (clear and rose), abundant carbonaceous shale fragments, unconsolidated.

430 - 440 Sand - pink, very fine to medium grained, as above, unconsolidated.

440 - 450 Sand - pink, very fine to medium grained, quartz (clear and rose), some red chert and red shale, abundant carbonaceous shale fragment, unconsolidated.

450 - 460 Small sample - Sand - pink, fine to medium grained, as above, unconsolidated, with some dissolved clays.

460 - 470 Sand - pink, very fine to fine grained, quartz, (clear and rose), abundant carbonaceous shale fragments, unconsolidated.

470 - 480 Sand - pink, very fine to medium grained, as above, unconsolidated.

480 - 490 Sand - pink, fine to medium grained, quartz, (clear and rose to yellow), some red chert and red shale, abundant dark grey and black carbonaceous shale fragments, trace biotite, chlorite, and muscovite, unconsolidated.

490 - 500 Small sample - Sand - pink, very fine to medium grained, as above, unconsolidated.

500 - 510 Cement cavings with some sand - light pink, fine to medium grained, quartz (clear to rose), as above, unconsolidated, with some wood fibre from wooden plug.

510 - 520 Cement cavings with some sand - as above.

## SAMPLE DESCRIPTIONS (cont'd)

520 - 530 S nd - light pinkish-grey, very fine to medium grained, quartz (clear to rose), common small carbonaceous shale fragments, some large pebbles of white quartzite, some large vari-coloured shale fragments - brown, dark grey, green, red, unconsolidated, with much dissolved clays, common cement cavings.

530 - 540 Sand - pink, very fine to medium grained, quartz (clear to rose), abundant small carbonaceous shale fragments, unconsolidated, with some cement cavings.

540 - 550 Sand - as above, with abundant cement cavings.

550 - 560 Sand - light pinkish-grey, fine to medium grained, quartz (clear to some rose), common small carbonaceous shale fragments, unconsolidated, with some dissolved clays, some cement cavings.

560 - 570 Small sample - Sand - light pinkish-grey, fine to coarse grained, as above, with trace quartzite pebble and large green shale fragment, unconsolidated, some dissolved clays, common cement cavings.

570 - 580 Small sample - Sand - light pinkish-grey, very fine to medium grained, as above, with much dissolved clays, common cement cavings.

580 - 590 Very small sample - Cement Cavings - with some sand, as above.

590 - 600 Sand - light pinkish-grey, fine to medium grained, quartz, (clear to some rose), common carbonacecus shale fragments, unconsolidated, much dissolved clays, with abundant cement cavings.

600 - 610 Sand - light pinkish-grey, very fine to coarse grained, quartz (clear to rose), common black carbonaceous shale fragments, unconsolidated, with dissolved clays, common cement cavings.

610 - 620 Sand - light pinkish-grey, fine to medium grained, as above, some dissolved clays, common cement cavings.

620 - 630 Sand - light pinkish-grey, fine to medium grained, occasionally coarse, as above, trace quartzite pebble, with much dissolved clays, common cement cavings.

## SAMPLE DESCRIPTIONS (cont'd)

630 - 640 Sand - light pinkish-grey, fine to medium grained, quartz (clear to rose), some pink feldspars, common black carbonaceous shale fragments, unconsolidated, some dissolved clays, common cement cavings.

640 - 680 No returns - mud ring formed and blocked flow line. Estimate claystone, as below.

680 - 690 Claystone - medium grey, bentonitic, soft, plastic when wet.

690 - 700 Claystone - as above.

700 - 710 Claystone - medium grey, bentonitic, silty, soft, plastic when wet.

710 - 720 Claystone - medium grey, as above.

720 - 730 Claystone - medium brownish-grey, bentonitic, silty, soft, plastic when wet.

730 - 740 Claystone - as above, common cement cavings.

740 - 750 Claystone - medium brownish-grey, bentonitic, silty, soft, plastic when wet.

750 - 760 Claystone - medium grey, as above.

760 - 770 Claystone - light to medium grey, bentonitic, soft, plastic when wet.

770 - 780 Claystone - medium grey, sandy, bentonitic, soft, as above.

780 - 790 Sand - medium to dark pinkish-grey, fine to very coarse grained, conglomeratic in part, quartz (clear to milky), trace pink feldspars, abundant dark grey siltstone fragments, some carbonaceous fragments, some dark grey chert, trace sideritic ironstone, some green chert, unconsolidated.

790 - 800 Sand - dark pinkish-grey, fine to very coarse grained, conglomeratic, quartz and vari-coloured chert - white, brown, green, black, some dark grey siltstone and shale fragments, unconsolidated.

## SAMPLE DESCRIPTIONS (cont'd)

800 - 810 Conglomerate - composed of pebbles and granules of chert - common brown, some dark grey and black, dark grey siltstone fragments, common small pyrite nodules, possible granite fragments, trace limestone fragments, some medium grey very fine grained sandstone.

810 - 820 Conglomerate - composed of granules and small pebbles of mainly sandstone - medium grey, very fine grained, common light and dark grey chert, some yellow and rose quartz.

820 - 830 Conglomerate Sandstone - medium grey, fine to very coarse grained, quartz (clear to rose), some pyrite, unconsolidated, with abundant granules and pebbles of siltstone, medium grey, sandy, abundant vari-coloured chert, trace granite.

830 - 840 Conglomerate - composed of granules and small pebbles of medium to dark grey siltstone, dark grey, brown and yellow chert, some silty shale, trace pyritic light green shale, in a matrix of coarse grained sand.

840 - 850 Conglomerate - as above.

850 - 860 Shale - dark grey, silty, chunky, medium hard, with common chert pebbles - dark grey to black, some brown.

860 - 870 Siltstone - medium grey, some brownish-grey, chunky, medium hard, with some granules of chert (cavings?).

870 - 880 Shale - medium to dark grey, very silty, chunky, medium hard, with many interbeds of siltstone, medium to dark grey, medium hard, with common vari-coloured chert pebbles - brown, red, yellow, black.

880 - 890 Siltstone - medium grey, very argillaceous, chunky, medium hard, with scattered light-coloured chert pebbles.

890 - 900 Siltstone - medium grey to brownish-grey, chunky, medium hard, with some cavings of vari-coloured chert pebbles and unconsolidated sand.

900 - 910 Siltstone - medium grey, as above, with occasional scattered light and dark grey chert pebbles.

## SAMPLE DESCRIPTIONS (cont'd)

910 - 920 Siltstone - medium grey, as above, with scattered pebbles of brown and black chert, and white quartzite.

920 - 930 Siltstone - medium grey, sandy, chunky, medium hard, with some pyrite nodules, common pebbles of quartz and chert (cavings?).

930 - 940 Siltstone - medium grey, very argillaceous, chunky, medium hard.

940 - 950 Siltstone - medium grey, as above, common pebbles of vari-coloured chert (cavings?).

950 - 960 Very poor sample - many cavings of cement and unconsolidated sand, some siltstone, medium grey, as above.

960 - 970 As above.

970 - 980 Shale - medium to dark grey, silty, chunky, medium hard, with many cavings of unconsolidated sand.

980 - 990 Siltstone - medium grey, very argillaceous, chunky, medium hard, with cavings of above sand.

990 -1000 Siltstone - medium grey, very argillaceous, chunky, medium hard, with some cavings of above sand.

1000 -1010 Siltstone - medium grey, as above, trace cavings of sand.

1010 -1020 Siltstone - medium grey, as above.

1020 -1030 Siltstone - medium grey, some pyritic, medium hard, with cavings of chert granules.

1030 -1040 Siltstone - medium grey, sandy in part, chunky, medium hard.

1040 -1050 Siltstone - medium grey, as above, pyritic in part, with cavings of chert granules.

1050 -1060 Siltstone - medium grey, sandy, chunky, medium hard, with common cavings of cement, quartzite and chert pebble fragments.

1060 -1070 Siltstone - medium grey, slightly sandy, chunky, medium hard.

## SAMPLE DESCRIPTIONS (cont'd)

| | |
|---|---|
| 1070 - 1080 | Siltstone - medium grey, as above, with some calcite (fracture fill), and cavings of chert granules. |
| 1080 - 1090 | Siltstone - medium grey, as above. |
| 1090 - 1100 | Siltstone - medium grey, chunky, medium hard. |
| 1100 - 1110 | Siltstone - medium grey, as above. |
| 1110 - 1120 | Siltstone - medium grey, somewhat sandy, chunky, medium hard, with cavings of unconsolidated sand. |
| 1120 - 1130 | Siltstone - medium grey, slightly pyritic, as above, with interbeds of shale, medium to dark grey, silty, chunky, medium hard, with trace of calcite. |
| 1130 - 1140 | Shale - medium grey, silty, chunky, medium hard, with thin interbeds of above siltstone. |
| 1140 - 1150 | Shale - medium grey, silty, as above. |
| 1150 - 1160 | Shale - medium grey, silty, as above. |
| 1160 - 1170 | Shale - medium grey, silty, as above. |
| 1170 - 1180 | Shale - medium grey, silty, as above. |
| 1180 - 1190 | Siltstone - medium grey, argillaceous, chunky, medium hard. |
| 1190 - 1200 | Siltstone - medium grey, sandy in part, as above. |
| 1200 - 1210 | Siltstone - medium grey, chunky, medium hard. |
| 1210 - 1220 | Siltstone - medium grey, sandy, as above. |
| 1220 - 1230 | Siltstone - medium grey, chunky, medium hard. |
| 1230 - 1240 | Siltstone - medium grey, as above. |
| 1240 - 1250 | Siltstone - medium grey, some brown, slightly sandy, chunky, medium hard, with some pyrite. |
| 1250 - 1260 | Siltstone - medium grey, slightly glauconitic, slightly sandy, chunky, medium hard. |

## SAMPLE DESCRIPTIONS (cont'd)

1260 - 1270 Siltstone - medium brownish-grey, slightly sandy, chunky, medium hard.

1270 - 1280 Shale - medium to dark grey, silty, chunky, medium hard, with some dark brown ironstone, trace pyrite.

1280 - 1290 Siltstone - medium grey, argillaceous, chunky, hard, with some interbeds of shale, medium to dark grey, as above, some dark brown ironstone fragments.

1290 - 1300 Shale - medium to dark grey, silty, chunky, medium hard.

1300 - 1310 Shale - medium to dark grey, as above, with thin interbeds of siltstone, medium grey, as above, some brown ironstone, trace pyrite.

1310 - 1320 Shale - dark grey, silty, chunky, medium hard.

1320 - 1330 Shale - dark grey, silty, as above, with some interbeds of siltstone, medium grey, as above, with common brown ironstone.

1330 - 1340 Shale - dark grey, silty, chunky, medium hard, with some brown ironstone.

1340 - 1350 Shale - dark grey, silty, as above, with common brown ironstone.

1350 - 1360 Shale - dark grey, silty, as above, with trace brown ironstone.

1360 - 1370 Shale - dark grey, silty, chunky, medium hard, with some brown ironstone.

1370 - 1380 Shale - dark grey, silty, chunky, medium hard, with some brown ironstone and reddish-brown ironstone.

1380 - 1390 Shale - dark grey, silty, as above, with trace ironstone.

1390 - 1400 Shale - dark grey, silty, as above, with some brown ironstone.

1400 - 1410 Shale - dark grey, silty, as above, with some brown ironstone and thin interbeds of siltstone, medium grey.

1410 - 1420 Shale - dark grey, silty, as above, with stringer of above siltstone, trace brown ironstone.

## SAMPLE DESCRIPTIONS (cont'd)

| | |
|---|---|
| 1420 - 1430 | Siltstone - medium grey, sandy, chunky, medium hard, with many interbeds of above shale, with common brown to reddish-brown ironstone. |
| 1430 - 1440 | Shale - dark grey, silty, chunky, medium hard, with thin interbeds of siltstone, medium grey, slightly sandy, medium hard. |
| 1440 - 1450 | Shale - dark grey, silty, as above, with some brown ironstone. |
| 1450 - 1460 | Shale - dark grey, silty, as above, with some brown ironstone and pyrite. |
| 1460 - 1470 | Shale - dark grey, silty, as above, with common brown ironstone. |
| 1470 - 1480 | Siltstone - medium grey, slightly sandy, medium hard, with many interbeds of above shale, some brown ironstone. |
| 1480 - 1490 | Shale - dark grey, silty, chunky, medium hard, with trace of brown ironstone. |
| 1490 - 1500 | Shale - dark grey, silty, as above, slightly pyritic, with some pyrite nodules, trace brown ironstone. |
| 1500 - 1510 | Shale - dark grey to dark brown, as above, with interbeds of siltstone, medium grey, sandy. |
| 1510 - 1520 | Shale - dark grey, silty, chunky, medium hard, pyritic, with some brown ironstone and with interbeds of above siltstone. |
| 1520 - 1530 | Siltstone - medium to dark grey, argillaceous, medium hard, common reddish-brown to dark brown ironstone, with interbeds of above shale. |
| 1530 - 1540 | Shale - dark grey, silty, chunky, medium hard. |
| 1540 - 1550 | Shale - medium to dark grey, very silty, medium hard, with some brown ironstone. |
| 1550 - 1560 | Shale - dark grey, silty, chunky, medium hard, with some brown ironstone, trace pyrite. |
| 1560 - 1570 | Siltstone - medium grey, medium hard, with many interbeds of above shale. |

## SAMPLE DESCRIPTIONS (cont'd)

1570 - 1580 Siltstone - medium grey, as above, with interbeds of above shale, trace pyrite nodules.

1580 - 1590 Siltstone - medium grey, trace glauconite, medium hard, with thin interbeds of dark grey shale, trace brown ironstone.

1590 - 1600 Shale - dark grey, silty, chunky, medium hard, trace pyrite, with many interbeds of above siltstone.

1600 - 1610 Shale - dark grey, silty, chunky, medium hard.

1610 - 1620 Shale - dark grey, silty, as above, with trace pyrite and brown ironstone, with thin interbeds of siltstone medium grey, slightly sandy in part.

1620 - 1630 Siltstone - medium grey, sandy, medium hard, with common medium grey chert pebble fragments and common brown ironstone, with stringer of sandstone, medium grey, very fine grained, silty, slightly salt and pepper, glauconitic, very well cemented, argillaceous and silt, tight.

1630 - 1640 Conglomerate - composed of pebble fragments of chert- light to dark grey, common black, some sideritic ironstone fragments, some pyrite nodules in a shale matrix.

1640 - 1650 Conglomerate - composed of chert pebble fragments - medium to dark grey, occasionally light grey, with some brown ironstone fragments in a medium grey siltstone matrix, slightly pyritic.

1650 - 1660 Conglomerate - composed of dark grey chert pebble fragments, black to occasionally light grey, pyritic, some brown ironstone fragments, in a siltstone matrix.

1660 - 1670 Sandstone - light to medium grey, very fine grained, silty, slightly salt and pepper, slightly glauconitic, very well cemented, silt, tight, with common pyrite nodules, some light to medium grey chert pebble fragments, with many interbeds of shale, dark grey, slightly micromicaceous, silty, chunky, medium hard.

1670 - 1680 Siltstone - light grey, sandy, limy, medium hard to hard, grading into a silty sandstone, with some reddish-brown to brown ironstone fragments, trace chert fragments.

## SAMPLE DESCRIPTIONS (cont'd)

| | |
|---|---|
| 1680 - 1690 | Siltstone - brownish-grey, slightly pyritic, medium hard, with interbeds of shale, dark grey, silty, chunky, medium hard, with trace of medium grey chert pebble fragments. |
| 1690 - 1700 | Siltstone - light to medium grey, slightly sandy, medium hard, with many interbeds of shale, dark grey, silty, chunky, medium hard. |
| 1700 - 1710 | Shale - dark grey, silty, as above, with thin interbeds of siltstone, light to medium grey, as above, slightly pyritic. |
| 1710 - 1720 | Siltstone - light grey, slightly sandy, very slightly limy, medium hard, with thin interbeds of shale, dark grey, silty, as above. |
| 1720 - 1730 | Siltstone - light grey, sandy, limy, hard, with thin interbeds of shale, dark grey, silty, trace Inoceramus. |
| 1730 - 1740 | Siltstone - light to medium grey, common brownish-grey, slightly sandy, medium hard, with thin interbeds of shale, dark grey, silty, as above. |
| 1740 - 1750 | Siltstone - light to medium grey, slightly sandy, medium hard. |
| 1750 - 1760 | Siltstone - light to medium grey, slightly sandy, medium hard, with stringer of shale, dark grey. |
| 1760 - 1770 | Siltstone - light to medium grey, slightly sandy, medium hard, with thin interbeds of shale, dark grey, silty, chunky, medium hard, with trace dark brown sideritic ironstone. |
| 1770 - 1780 | Siltstone - light to medium grey, slightly sandy, medium hard, with thin interbeds of shale, dark grey, silty. |
| 1780 - 1790 | Siltstone - light to medium grey, slightly sandy, medium hard, with many interbeds of shale, dark brownish-grey, silty, chunky, medium hard. |
| 1790 - 1800 | Siltstone - light to medium grey, some brownish-grey, slightly sandy, medium hard. |
| 1800 - 1810 | Shale - dark grey, silty, slightly micromicaceous, chunky, medium hard, with many interbeds of above siltstone. |

SAMPLE DESCRIPTIONS (cont'd)

1810 - 1820 Shale - medium to dark grey, very silty in part, chunky, medium hard, with many interbeds of siltstone, as above.

1820 - 1830 Shale - dark grey, silty, slightly micromicacecus, chunky, medium hard, with thin interbeds of above siltstone.

1830 - 1840 Shale - dark grey, silty, chunky, medium hard, with some thin interbeds of siltstone, light to medium grey, slightly sandy, limy, medium hard.

1840 - 1850 Shale - dark grey, silty, as above, with many interbeds of above siltstone.

1850 - 1860 Siltstone - light to medium grey, slightly sandy, slightly limy, hard, with thin interbeds of above shale.

1860 - 1870 Siltstone - light to medium grey, sandy, slightly limy, hard, slightly fractured and filled with anhydrite, very small cephalopod, with many interbeds of shale, dark grey, silty, as above.

1870 - 1880 Shale - dark grey, brownish-grey, slightly micromicaceous, silty, chunky, medium hard, with many interbeds of siltstone, as above, with stringer of sandstone, light grey, very fine grained, silty, clean, quartzose, well sorted, well cemented, silt, tight.

1880 - 1890 Sandstone - light grey, very fine grained, clean, quartzose, glauconitic, well sorted, well cemented, silt to limy, tight, with many interbeds of shale, blackish-grey, micromicaceous, chunky, medium hard, and siltstone, light to medium grey, as above.

1890 - 1900 Sandstone - light grey, very fine to fine grained, clean, quartzose, glauconitic, micaceous in part, well cemented, silt and limy, tight, with many interbeds of shale, dark grey, silty and micromicaceous and siltstone, light to medium grey.

1900 - 1910 Sandstone - light grey, very fine, clean, quartzose, glauconitic, well cemented, silty, tight, with many interbeds of above shale and siltstone.

## SAMPLE DESCRIPTIONS (cont'd)

1910 - 1920 Shale - dark grey, as above, trace Inoceramus, some pyrite nodules, with thin interbeds of siltstone and sandstone, light grey, very fine grained, quartzose, glauconitic, very well cemented, silt, slightly limy, tight.

1920 - 1930 Shale - dark grey, silty, micromicaceous, as above, with thin interbeds of above siltstone and sandstone.

1930 - 1940 Sandstone - light grey to light buffish-grey, very fine grained to fine grained, quartzose, very slightly glauconitic, fair sorting, well cemented, silty and clayey, tight, with several chips showing trace porosity, with many interbeds of shale, dark grey, as above.

1940 - 1950 Sandstone - light grey, very fine grained, silty, clean, quartzose, slightly glauconitic, well cemented, silt, tight, with many interbeds of above shale and siltstone.

1950 - 1960 Sandstone - light buffish-grey, very fine to fine grained, quartzose, slightly glauconitic, fair sorting, well cemented, silty, tight, with many interbeds of shale, dark grey, micromicaceous, chunky, medium hard.

1960 - 1970 Sandstone - light buffish-grey, very fine to fine grained, quartzose, glauconitic, very slightly carbon flecked, well cemented, silt, trace porosity, with several chips with poor porosity, with many interbeds of shale, as above.

1970 - 1980 Sandstone - white to light buffish-grey, very fine grained, quartzose, glauconitic, well sorted, very well cemented, silt, generally tight, with several chips with very poor porosity, with thin interbeds of shale, dark grey, as above.

1980 - 1990 Sandstone - light grey to light buffish-grey, very fine grained, silty, quartzose, slightly glauconitic as above, silt and limy cement, tight, with many interbeds of siltstone, light to medium grey, sandy, limy, hard, and shale, dark grey, as above.

## SAMPLE DESCRIPTIONS (cont'd)

1990 - 1995 Circulated sample - Shale - dark grey, micro-micaceous, chunky, medium hard, with interbeds of siltstone, light grey, clean, quartzose, hard, and sandstone, light grey, very fine grained, quartzose, trace glauconitic, very well sorted in part, well cemented, silt and clay, tight.

1995 - 2000 Shale - dark grey to blackish-grey, micromicaceous, some silty, chunky, medium hard, with many interbeds of sandstone, light grey to light buffish-grey, very fine grained, trace fine grained, quartzose, slightly glauconitic, very well sorted, well cemented, silt and limy, tight.

2000 - 2010 Sandstone - light grey, very fine grained, quartzose, glauconitic, slightly micaceous, well cemented, silt and slightly limy, tight, with thin interbeds of shale, dark grey, as above.

2010 - 2020 Trip sample - Shale - dark grey, silty, chunky, medium hard, with thin interbeds of sandstone, light grey, some light buffish-grey, very fine grained, quartzose, glauconitic, well cemented, very limy, tight.

2020 - 2030 Sandstone - light greyish-buff to light grey, very fine grained, silty, quartzose, trace carbon flecked, very limy, very well cemented, tight, with many interbeds of shale, dark grey.

2030 - 2040 Shale - dark grey, silty, chunky, medium hard, with some pyrite nodules, and thin interbeds of sandstone, light grey to light buffish-grey, very fine grained, quartzose, trace glauconitic, well cemented, very slightly limy, silty, tight.

2040 - 2050 Shale - dark grey, silty, some micromicaceous, chunky, medium hard, with some interbeds of sandstone, light grey, very fine grained, quartzose, slightly glauconitic, very well cemented, silty, tight.

2050 - 2060 Sandstone - light grey to light buffish-grey, very fine to fine grained, quartzose, glauconitic, trace carbon flecked, well sorted, well cemented, silt, very slightly limy, tight, some chips fractured and filled with calcite, with many interbeds of shale, dark grey, as above.

## SAMPLE DESCRIPTIONS (cont'd)

2060 - 2070 Shale - dark grey, micromicaceous, some silty, chunky, medium hard, with thin interbeds of sandstone, light grey to light buffish-grey, very fine grained, silty, quartzose, faintly glauconitic, well cemented, silt, very slightly limy, tight.

2070 - 2080 Shale - dark grey to blackish-grey, micromicaceous, chunky, medium hard, with some pyrite nodules, and thin interbeds of sandstone, light grey, very fine grained, quartzose, glauconitic, well cemented, silt, tight, with several chips with closed fractures filled with calcite.

2080 - 2090 Shale - dark grey, as above, silty in part, with interbeds of siltstone, medium grey to brownish-grey, sandy, hard, and stringer of sandstone, light grey, as above, with trace of free calcite.

2090 - 2100 Sandstone - light grey, very fine grained, quartzose, glauconitic, trace light brownish sideritic ironstone grains, well sorted, well cemented, very limy, tight, with interbeds of siltstone, brownish-grey to medium grey, hard.

2100 - 2110 Shale - dark grey, silty, slightly micromicaceous, chunky, medium hard, with many interbeds of sandstone, light grey, very fine grained, quartzose, glauconitic, as above, silt cement, tight.

2110 - 2120 Shale - dark grey, silty, slightly micromicaceous, as above, with thin interbeds of sandstone, light grey, very fine grained, quartzose, glauconitic, as above, tight, and siltstone, medium grey.

2120 - 2130 Siltstone - light to medium grey, sandy, clean, quartzose, hard, with many interbeds of above shale, and thin interbeds of above sandstone.

2130 - 2140 Shale - dark grey, silty, micromicaceous, chunky, medium hard, with interbeds of siltstone, light to medium grey, sandy, hard, and sandstone, light grey, very fine grained, silty, quartzose, trace glauconitic, well cemented, slightly limy, silt, tight.

2140 - 2150 Shale - dark grey, silty, as above, with thin interbeds of siltstone, light to dark grey, brownish-grey, medium hard, and some interbeds of sandstone, light grey, very fine grained, quartzose, slightly glauconitic, well cemented, silt, tight.

## SAMPLE DESCRIPTIONS (cont'd)

2150 - 2160 Shale - dark grey, silty, as above, with many interbeds of siltstone, brownish-grey to medium grey, sandy, medium hard, and stringer of sandstone, light buffish-grey, very fine grained, quartzose, well cemented, slightly limy, silt, tight.

2160 - 2170 Sandstone - light grey, very fine to fine grained, quartzose, trace glauconitic, carbon flecked and occasional carbonaceous parting, well sorted, well cemented, silt, tight to very poor porosity, with some interbeds of shale, dark grey, as above.

2170 - 2180 Sandstone - light grey, very fine to fine grained, quartzose, trace glauconitic, trace carbon flecked, well cemented, silt, tight, with thin interbeds of shale, dark grey, as above, and trace of light to black chert pebbles.

2180 - 2190 Sandstone - light grey, very fine grained, trace fine grained, quartzose, slightly glauconitic, trace carbon flecked, well cemented, silt, very limy in part, tight, with thin interbeds of shale. dark grey, silty, micromicaceous, chunky, medium hard.

2190 - 2200 Sandstone - light buffish-grey, very fine to fine grained, quartzose, trace glauconitic, trace carbon flecked, well cemented, some very limy, silt, tight, trace white clay fragments, occasional brown, dark grey and green chert pebble, with stringer of shale, dark grey, silty.

2200 - 2210 Sandstone - light buffish-grey, very fine grained, quartzose, very finely carbon flecked, well cemented, very slightly limy, silt, tight, trace white clay fragments, with thin interbeds of above shale.

2210 - 2220 Sandstone - light grey, very fine grained, silty, quartzose, trace carbon flecked, well cemented, silt, tight, trace free calcite, some white clay fragments, with thin interbeds of shale, dark grey, silty.

2220 - 2230 Trip sample - Shale - dark grey, silty, chunky, medium hard, with thin interbeds of sandstone, light grey, very fine grained, quartzose, as above, tight, some white clay fragments.

## SAMPLE DESCRIPTIONS (cont'd)

2230 - 2240 Sandstone - light grey, very fine grained, silty, quartzose, trace carbon flecked, well cemented, very limy, tight, trace white clay fragments, with many interbeds of above shale.

2240 - 2250 Sandstone - light buffish-grey, very fine to fine grained, dirty, quartzose, slightly argillaceous, well cemented, silt, slightly limy, tight, some light grey chert pebbles, trace white clay fragments, with many interbeds of shale, dark grey, silty, as above.

2250 - 2260 Shale - dark grey, micromicaceous, some silty, chunky, medium hard, with many interbeds of sandstone, light grey, some dirty brownish-grey, very fine to commonly fine grained, quartzose, trace glauconitic, well cemented, silt, tight, trace light grey chert pebble fragments.

2260 - 2270 Sandstone - light grey, commonly dirty brownish-grey, very fine grained, quartzose, slightly glauconitic, trace carbon flecked, slightly argillacecus, some sideritic fragments, well cemented, silt and clay, tight, some white clay fragments, with many interbeds of above shale.

2270 - 2280 Sandstone - light grey, very fine to fine grained, quartzose, glauconitic, very finely carbon flecked, well cemented, silty, tight, some white clay fragments, with thin interbeds of above shale.

2280 - 2290 Sandstone - light grey, very fine grained, quartzose, trace glauconitic, very finely carbon flecked, well cemented, silt, tight, trace pyrite nodules, common white clay fragments.

2290 - 2300 Sandstone - light grey, very fine grained, quartzose, trace glauconitic, very finely carbon flecked, well cemented, slightly limy, silty, tight, trace free calcite, some white clay fragments, with thin interbeds of shale, dark grey, silty, micromicaceous, chunky, medium hard, trace slickensides.

2300 - 2310 Sandstone - light grey, very fine to fine grained, quartzose, slightly carbon flecked, well cemented, silt, tight, some free calcite and white clay fragments, with many interbeds of shale, dark grey, micromicaceous, trace slickensides.

SAMPLE DESCRIPTIONS (cont'd)

2310 - 2320 Sandstone - light grey, very fine grained, occasionally fine grained, quartzose, slightly carbon flecked, well cemented, slightly limy, silt, tight, with thin interbeds of shale, dark grey, micromicaceous, some silty, with common sideritic ironstone fragments.

2320 - 2330 Sandstone - light grey, very fine grained, silty, quartzose, slightly carbon flecked, trace glauconitic in part, well cemented, silt, tight.

2330 - 2340 Sandstone - light grey to medium grey, dirty in part, very fine to fine grained, quartzose, as above, tight, with many interbeds of siltstone, medium grey, argillaceous, some sandy, and shale, dark grey, as above.

2340 - 2350 Shale - dark grey, silty, chunky, medium hard, with many interbeds of siltstone, medium to dark grey, sandy, hard.

2350 - 2360 Trip sample - Shale - dark grey, as above, with many interbeds of siltstone, light to medium grey, sandy, medium hard and abundant (cavings?) of pebbles and granules of vari-coloured chert - brown, black, grey, yellow and clear quartz.

2360 - 2370 Siltstone - light to medium grey, some brownish-grey, sandy in part, chunky, medium hard, with common light to black, some brown chert pebbles and trace of sandstone, light grey, very fine grained, quartzose, carbon flecked as above.

2370 - 2380 Shale - dark grey, silty, chunky, medium hard, with common cavings of chert - brown, black, some red.

2380 - 2390 Siltstone - medium to dark grey, slightly sandy, slightly carbon flecked, medium hard, with stringer of sandstone, light grey, very fine grained, quartzose, glauconitic, as above, tight, and common vari-coloured chert pebbles (cavings?).

2390 - 2400 Shale - dark grey, micromicaceous, some silty, chunky, medium hard, with many interbeds (possibly all cavings) of sand, light pinkish-grey, very fine to very coarse grained, conglomeratic, quartzose, with abundant granules of red feldspar and red sandstone fragments, vari-coloured chert, loose.

SAMPLE DESCRIPTIONS (cont'd)

2400 - 2410 Siltstone - dark grey, dark brownish-grey, very argillaceous, medium hard, with abundant cavings of above loose unconsolidated sand.

2410 - 2420 Shale - dark grey to blackish-grey, silty, chunky, medium hard, with many interbeds of siltstone, medium to dark grey, very slightly limy, medium hard, with common cavings of above loose sand.

2420 - 2430 Siltstone - dark brownish-grey to dark grey, slightly carbon flecked, medium hard, with stringer of sandstone, light grey, very fine to fine grained, quartzose, well cemented, silt, tight.

2430 - 2440 Siltstone - medium grey, occasionally light grey and limy, sandy, medium hard.

2440 - 2450 Siltstone - light grey, clean, quartzose, sandy, hard, with many interbeds of siltstone, medium to dark grey, argillaceous, medium hard.

2450 - 2460 Siltstone - light to dark grey, as above, with thin interbeds of shale, dark grey to blackish-grey, micromicaceous, silty, chunky, medium hard.

2460 - 2470 Siltstone - light grey, clean, quartzose, hard, with many interbeds of shale, dark grey, very silty, medium hard.

2470 - 2480 Siltstone - medium grey, some light to dark grey, medium hard.

2480 - 2490 Shale - dark grey, silty, chunky, medium hard, with thin interbeds of siltstone, light to medium grey, as above.

2490 - 2500 Shale - dark grey to blackish-grey, micromicaceous, common silty, medium hard, with thin interbeds of siltstone, medium grey, medium hard, trace free calcite.

2500 - 2510 Shale - dark grey to blackish-grey, micromicaceous, common silty, chunky, medium hard, with thin interbeds of siltstone, medium grey, some brown.

2510 - 2520 Siltstone - light to medium grey, slightly sandy in part, with many interbeds of above shale.

SAMPLE DESCRIPTIONS (cont'd)

2520 - 2530 Siltstone - medium grey, some light grey, as above, with stringer of shale, dark grey, as above.

2530 - 2540 Shale - dark grey to blackish-grey, slightly micro-micaceous, silty, chunky, medium hard, with very thin interbeds of above siltstone.

2540 - 2550 Shale - dark grey, as above.

2550 - 2560 Shale - dark grey, silty, slightly micromicaceous, chunky, medium hard.

2560 - 2570 Shale - blackish-grey, micromicaceous, chunky, medium hard, with stringer of siltstone, light grey.

2570 - 2580 Shale - dark grey, as above.

2580 - 2590 Shale - blackish-grey, micromicaceous, chunky, medium hard, with trace of light grey siltstone.

2590 - 2600 Shale - dark grey, silty, chunky, medium hard.

2600 - 2610 Shale - dark grey, silty, as above.

2610 - 2620 Shale - dark grey, silty, as above.

2620 - 2630 Shale - blackish-grey, micromicaceous, slightly silty, chunky, medium hard.

2630 - 2640 Shale - blackish-grey, micromicaceous, as above.

2640 - 2650 Shale - dark grey, silty, some micromicaceous, chunky, medium hard, with trace of light grey siltstone.

2650 - 2660 Shale - dark grey, some brownish-grey, silty to very silty, chunky, medium hard, with thin interbeds of siltstone, medium grey.

2660 - 2670 Siltstone - medium brownish-grey, very argillaceous, occasionally sandy, medium hard, with many interbeds of shale, dark grey, silty.

2670 - 2680 Shale - dark grey, very silty in part, chunky, medium hard, with thin interbeds of siltstone, light grey, clean, quartzose, sandy, very slightly limy.

## SAMPLE DESCRIPTIONS (cont'd)

2680 - 2690 Shale - dark grey, common brownish-grey, very silty in part, chunky, medium hard, with thin interbeds of siltstone, light grey, as above.

2690 - 2700 Shale - dark grey, silty, some slightly micromicaceous, chunky, medium hard, with stringer of above light grey siltstone, trace calcite.

2700 - 2710 Shale - medium brownish-grey to dark grey, silty to very silty, chunky, medium hard, with common light brown sideritic ironstone fragments.

2710 - 2720 Shale - dark grey, silty, chunky, medium hard, with common light brown sideritic ironstone fragments, with thin interbeds of siltstone, medium grey, sandy.

2720 - 2730 Shale - dark grey to dark brown, very silty, chunky, medium hard, with trace of light brown sideritic ironstone, and thin interbeds of siltstone, light to medium grey, sandy, slightly glauconitic, very limy in part, hard.

2730 - 2740 Siltstone - light to medium grey, some brownish-grey, slightly sandy, slightly carbon flecked, hard, with many interbeds of shale, dark grey, silty, chunky, medium hard, with common light brown sideritic ironstone fragments.

2740 - 2750 Siltstone - medium brownish-grey, very argillaceous trace light grey and clean, medium hard, with some interbeds of shale, dark grey, very silty, medium hard, with common light brown sideritic ironstone.

2750 - 2760 Siltstone - light grey to dark brownish-grey, very argillaceous, slightly carbon flecked, medium hard, with many interbeds of dark grey shale, with common light brown sideritic ironstone fragments.

2760 - 2770 Cement cavings with stringer of siltstone, medium brownish-grey, very argillaceous, medium hard.

2770 - 2780 Siltstone - medium brownish-grey, very argillaceous, medium hard, with much cement cavings as above.

2780 - 2790 Shale - dark grey, silty, slightly micromicaceous, chunky, medium hard.

## SAMPLE DESCRIPTIONS (cont'd)

2790 - 2800 Siltstone - medium brownish-grey, very argillaceous, medium hard, with thin interbeds of shale, dark grey, as above.

2800 - 2810 Siltstone - medium brownish-grey, as above, with some cement cavings.

2810 - 2820 Siltstone - medium brownish-grey, as above, with many interbeds of shale, dark grey, silty, chunky, medium hard, with trace of pyrite.

2820 - 2830 Shale - dark grey, micromicaceous, some silty, chunky, medium hard, with many interbeds of siltstone, medium brownish-grey, as above.

2830 - 2840 Siltstone - medium brownish-grey, very argillaceous, medium hard, with some interbeds of shale, dark grey, as above, with trace of brown calcitic material.

2840 - 2850 Siltstone - medium greyish-brown, very argillaceous, medium hard, with thin interbeds of shale, dark grey, as above, with traces of brown calcitic fragments, trace pyrite.

2850 - 2860 Shale - dark grey, very silty in part, trace pyritic, chunky, medium hard, with stringer of above siltstone.

2860 - 2870 Siltstone - medium greyish-brown, very argillaceous, medium hard.

2870 - 2880 Siltstone - medium greyish-brown, argillaceous, medium hard.

2880 - 2890 Siltstone - medium greyish-brown, as above, with stringer of shale, dark grey.

2890 - 2900 Siltstone - medium greyish-brown, as above, grading to a silty shale, trace pyrite.

2900 - 2910 Shale - dark brownish-grey, very silty, chunky, medium hard.

2910 - 2920 Shale - dark grey, slightly micromicaceous, silty, chunky, medium hard, with trace pyrite.

## SAMPLE DESCRIPTIONS (cont'd)

2920 - 2930 Shale - dark grey, dark brownish-grey to dark greyish-brown, silty, chunky, medium hard, with trace brown sideritic ironstone.

2930 - 2940 Shale - dark brownish-grey, silty, slightly micromicaceous, chunky, trace splintery, medium hard.

2940 - 2950 Shale - dark grey, silty, slightly micromicaceous, chunky to platy, medium hard, trace sideritic ironstone.

2950 - 2960 Shale - dark brownish-grey, chunky to splintery, medium hard, trace pyrite.

2960 - 2970 Shale - medium grey, brownish-grey, slightly micromicaceous, chunky to splintery, medium hard.

2970 - 2980 Shale - dark grey, as above, chunky, trace splintery, medium hard.

2980 - 2990 Shale - blackish-grey, slightly micromicaceous, platy, trace splintery, medium hard, trace pyrite, trace sideritic ironstone.

2990 - 3000 Shale - blackish-grey, as above, chunky to platy, medium hard, trace brown sideritic ironstone, trace vari-coloured chert grains and clear quartz grains. (Probable uphole sand grains re-introduced to mud system by gunning tanks.)

3000 - 3010 Shale - dark grey, chunky to platy, some splintery, medium hard, with some sideritic ironstone fragments, with thin interbeds of siltstone, medium brown, slightly sandy, argillaceous, medium hard.

3010 - 3020 Trip sample - Shale - dark grey, slightly micromicaceous, platy to splintery, medium hard, with abundant cement and loose sand grains.

(NOTE: Cleaned all mud tanks of much cement, tophole loose sand and shale fragments which were being re-circulated down hole.)

3020 - 3030 Shale - medium to dark grey, slightly micromicaceous, chunky, platy and splintery, medium hard, with common cement cavings.

3030 - 3040 Shale - medium to dark grey, some brownish-grey, platy to splintery, medium hard.

SAMPLE DESCRIPTIONS (cont'd)

| | |
|---|---|
| 3040 - 3050 | Shale - medium to dark grey, as above, platy to splintery. |
| 3050 - 3060 | Shale - dark grey, micromicaceous, platy, some splintery, medium hard, with trace of sideritic ironstone. |
| 3060 - 3070 | Shale - dark grey, brownish-grey, slightly micro-micaceous, platy to splintery, some chunky, medium hard, some light brown sideritic ironstone. |
| 3070 - 3080 | Shale - dark grey, slightly micromicaceous, chunky to splintery, medium hard. |
| 3080 - 3090 | Shale - dark grey, micromicaceous, chunky to splintery, medium hard, trace brown sideritic ironstone. |
| 3090 - 3100 | Shale - blackish-grey, micromicaceous, slightly silty, chunky to splintery, medium hard, with trace of brown sideritic ironstone. |
| 3100 - 3110 | Shale - dark grey, micromicaceous, chunky, medium hard. |
| 3110 - 3120 | Shale - dark grey, some dark brown, as above. |
| 3120 - 3130 | Shale - dark grey, slightly micromicaceous, slightly silty, chunky, medium hard, trace brown sideritic ironstone. |
| 3130 - 3140 | Shale - dark grey, slightly silty, chunky, medium hard. |
| 3140 - 3150 | Shale - dark grey, silty, chunky, medium hard, with thin interbeds of siltstone, medium brownish-grey, very argillaceous, medium hard. |
| 3150 - 3160 | Shale - dark grey, silty, chunky, medium hard, with trace pyrite. |
| 3160 - 3170 | Shale - dark grey, silty, as above. |
| 3170 - 3180 | Shale - dark grey, dark brownish-grey, silty, chunky, medium hard. |
| 3180 - 3190 | Shale - dark grey, silty, as above, with trace of sideritic ironstone fragments. |

SAMPLE DESCRIPTIONS (cont'd)

3190 - 3200 Shale - dark grey, silty, chunky, medium hard, with common brown sideritic ironstone, and thin interbeds of sandstone, medium brownish-grey, dirty, very fine grained, quartzose, very argillaceous, trace glauconitic, very well cemented, silt-argillaceous, tight.

3200 - 3210 Siltstone - medium brownish-grey, sandy, medium hard, with stringer of sandstone, medium to light grey, dirty, very fine to fine grained, quartzose to slightly salt and pepper, trace glauconitic, very well cemented, silt-argillaceous, tight, with many interbeds of dark grey shale, common sideritic ironstone.

3210 - 3220 Siltstone - medium greyish-brown, medium grey, sandy to very sandy in part, trace glauconitic, occasional black chert pebble, common sideritic ironstone, medium hard, with stringer of sandstone, light to medium grey, dirty in part, very fine grained, slightly salt and pepper, well cemented, silt-argillaceous, tight.

3220 - 3230 Shale - dark grey to blackish-grey, silty, chunky, medium hard, with many interbeds of above siltstone, medium brownish-grey, very sandy, occasional black chert pebbles, and stringer of sandstone, light grey, very fine to fine grained, slightly salt and pepper, as above, tight.

3230 - 3240 Shale - dark grey, silty, chunky, medium hard, with common interbeds of siltstone, medium brownish-grey, as above, and stringer of sandstone, light grey, very fine to fine grained, slightly salt and pepper, glauconitic, very well cemented, silt-argillaceous, tight, with common sideritic ironstone fragments, trace dark chert granules.

3240 - 3250 Siltstone - medium to dark brownish-grey, sandy in part, very argillaceous, medium hard, with many interbeds of shale, dark grey, silty, chunky, medium hard, with stringer of sandstone, as above, traces of sideritic ironstone, calcite, slickensides.

3250 - 3260 Siltstone - medium brownish-grey, sandy, as above, with many interbeds of shale, dark grey, as above.

SAMPLE DESCRIPTIONS (cont'd)

3260 - 3270 Shale - dark grey, silty, chunky, medium hard, with many interbeds of siltstone, medium brownish-grey, as above, with trace of sandstone.

3270 - 3280 Shale - dark grey, as above, with many interbeds of siltstone, medium brownish-grey, very sandy, very argillaceous, medium hard, and sandstone, medium brownish-grey, dirty, some light grey, very fine to fine grained, slightly salt and pepper, glauconitic, well cemented, argillaceous, tight.

3280 - 3290 Siltstone - medium grey, sandy, trace glauconitic, medium hard, with some interbeds of shale, dark grey, silty, chunky, medium hard, trace of sandstone.

3290 - 3300 Shale - dark grey, silty, as above, with many interbeds of siltstone, medium grey, slightly sandy, very argillaceous, medium hard, with trace sandstone.

3300 - 3310 Siltstone - medium brownish-grey to medium grey, slightly sandy, trace glauconitic, medium hard, with many interbeds of shale, dark grey, silty, as above, trace sandstone.

3310 - 3320 Shale - dark grey, silty, chunky, medium hard, with some interbeds of siltstone, medium brownish-grey, very argillaceous, medium hard.

3320 - 3330 Siltstone - medium brownish-grey, very argillaceous, medium hard, with stringer of sandstone, light grey, very fine grained, slightly salt and pepper, trace glauconitic, well cemented, silt and clay, tight.

3330 - 3340 Sandstone - light to medium grey, some medium brownish-grey, dirty in part, very fine to fine grained, slightly salt and pepper, trace glauconitic, well cemented, silt, tight, with common sideritic fragments, trace light grey and black chert pebbles.

3340 - 3350 Siltstone - medium greyish-brown, slightly sandy, very argillaceous, medium hard, with thin interbeds of sandstone, light grey, some medium brownish-grey, very fine to fine grained, slightly salt and pepper, well cemented, silt, tight, with common sideritic ironstone fragments.

## SAMPLE DESCRIPTIONS (cont'd)

3350 - 3360 Shale - dark grey, silty, chunky, medium hard, with thin interbeds of sandstone, light grey, occasionally medium grey, very fine grained, quartzose to very slightly salt and pepper, trace glauconitic, well cemented, limy, silty, tight.

3360 - 3370 Trip sample - Shale - dark grey, silty in part, slightly micromicaceous, chunky, some platy, some splintery, medium hard, with stringer of above sandstone.

3370 - 3380 Siltstone - medium grey, slightly sandy, medium hard, with trace of sandstone, as above, and thin interbeds of shale, dark grey, as above.

3380 - 3390 Siltstone - medium brownish-grey, slightly sandy, medium hard, with thin interbeds of siltstone, light grey, clean, quartzose, sandy, limy, hard.

3390 - 3400 Siltstone - medium grey to medium brownish-grey, sandy, argillaceous, chunky, medium hard, some pyrite nodules, with common interbeds of shale, dark grey, silty, chunky, medium hard, trace slickensides, and stringer of sandstone, light grey, very fine grained, silty, quartzose, very well cemented, silt, tight.

3400 - 3410 Siltstone - dark greyish-brown, slightly carbonaceous in part, slightly sandy, very argillaceous, medium hard, with some interbeds of sandstone, light grey, very fine grained, silty, quartzose to slightly salt and pepper, very well cemented, silt, tight, hard.

3410 - 3420 Siltstone - dark grey to dark brownish-grey, slightly carbonaceous in part, very argillaceous, medium hard, with common dark brown sideritic ironstone, with many interbeds of sandstone, light grey, very fine grained, very slightly salt and pepper, very well cemented, silt, some siliceous with a quartzitic appearance, tight, slightly fractured and filled with calcite.

3420 - 3430 Sandstone - light grey, very fine grained, quartzose to quartzitic, very well cemented, commonly siliceous, tight, very hard, with some interbeds of siltstone, medium grey to medium brown, as above, trace slickensides.

SAMPLE DESCRIPTIONS (cont'd)

3430 - 3440 Sandstone - light grey, very fine grained, quartzose to very slightly salt and pepper, very well cemented, siliceous, tight, (possible quartzite pebbles in part) with many interbeds of ironstone, medium to dark brown, fractured and filled with calcite, and thin interbeds of shale, dark grey, slightly micromicaceous, slightly slickensides, hard.

3440 - 3450 Sandstone - light grey, very fine grained, as above, tight, very hard, with interbeds of ironstone, as above and shale, dark grey, some silty, brittle, platy, hard.

3450 - 3460 Siltstone - dark grey to dark brownish-grey, very argillaceous, slightly sandy, medium hard, fractured, common calcite, with some brown sideritic ironstone, trace sandstone.

3460 - 3470 Siltstone - medium to dark grey, very argillaceous, medium hard, with interbeds of shale, dark grey, silty, chunky, medium hard, with stringer of sandstone, light to medium grey, very fine grained, quartzose, very well cemented, siliceous, tight.

3470 - 3480 Shale - dark grey, silty, chunky, hard, with many interbeds of above siltstone, common sideritic ironstone, stringer of sandstone, as above.

3480 - 3490 Siltstone - medium to dark grey, dark brownish-grey, very argillaceous, medium hard, with many interbeds of above shale, and stringer of above sandstone.

3490 - 3500 Siltstone - medium brownish-grey, sandy, medium hard, with thin interbeds of sandstone, light grey, very fine grained, quartzose, very well cemented, silt, slightly siliceous, tight, with trace of granules of white quartzite.

3500 - 3510 Shale - dark grey, silty to very silty, chunky, hard, with some dark brown sideritic ironstone fragments.

3510 - 3520 Shale - dark grey, silty, chunky, hard, with common to abundant sideritic ironstone fragments.

3520 - 3530 Shale - dark grey, dark brownish-grey, silty, chunky, hard, with trace of sideritic ironstone.

SAMPLE DESCRIPTIONS (cont'd)

3530 - 3540 Siltstone - medium brownish-grey, sandy, medium hard, with stringer of sandstone, light grey, very fine grained, silty, quartzose, very well cemented, silt, tight.

3540 - 3550 Trip sample - Shale - dark grey, silty, chunky, hard, some pyrite nodules, with many interbeds of above siltstone, with trace of above sandstone.

3550 - 3560 Shale - dark grey, very silty in part, chunky, hard, with many interbeds of above siltstone, trace quartzite and light green shale.

3560 - 3570 Siltstone - medium brownish-grey, medium grey, sandy, very argillaceous, with many interbeds of shale, dark grey, silty, chunky, medium hard, trace pyrite, sideritic ironstone, calcite, and sandstone.

3570 - 3580 Siltstone - medium brownish-grey, sandy, as above.

3580 - 3590 Shale - dark grey, silty, chunky, hard, trace pyrite, with many interbeds of siltstone, medium grey, very argillaceous, medium hard.

3590 - 3600 Siltstone - medium brownish-grey, sandy, very argillaceous, hard, with some interbeds of shale, dark grey to dark brownish-grey, silty, with trace of pyrite, ironstone and sandstone.

3600 - 3610 Siltstone - medium brownish-grey, sandy, slightly carbon flecked, medium hard, with trace of light grey sandstone.

3610 - 3620 Siltstone - medium brownish-grey, sandy, medium hard, with many interbeds of shale, dark grey, silty, chunky, hard, with common dark brown sideritic ironstone, some white to light grey quartzite fragments, trace light grey and black chert granules, trace pale green shale.

3620 - 3630 Shale - dark grey to dark brownish-grey, silty, chunky, medium hard, with thin interbeds of siltstone, as above, and thin interbeds of ironstone, dark brown, sideritic, very hard, with trace of white quartzite and pale green shale.

SAMPLE DESCRIPTIONS (cont'd)

3630 - 3640 Shale - dark grey to dark brownish-grey, silty, chunky, medium hard, with thin interbeds of above siltstone, and thin interbeds of ironstone, as above, and stringer of sandstone, light grey, very fine grained, quartzose, very well cemented, trace limy, tight, trace calcite.

3640 - 3650 Shale - dark grey to blackish-grey, silty, chunky, hard, trace slickensides, with interbeds of ironstone, dark brown, sideritic, hard, fractured.

3650 - 3660 Shale - dark grey, slightly silty, chunky to platy, hard, with interbeds of ironstone, dark brown, sideritic, hard, common pyrite nodules.

3660 - 3670 Shale - dark grey, slightly micromicaceous, chunky to splintery, hard, with trace of ironstone, as above.

3670 - 3680 Shale - dark grey, slightly micromicaceous, platy to splintery, medium hard, with thin interbeds of siltstone, medium grey, sandy, argillaceous, hard.

3680 - 3690 Shale - dark grey, slightly micromicaceous, slightly silty to sandy, chunky to platy, medium hard, with common interbeds of siltstone, medium grey, sandy, hard, with traces of white quartzite, pale green pyritic shale, and light grey sandstone.

3690 - 3700 Shale - dark grey, slightly micromicaceous, platy to splintery, hard, with thin interbeds of siltstone, medium brownish-grey, sandy.

3700 - 3710 Shale - dark grey, as above, with many interbeds of siltstone, medium grey, medium brownish-grey, sandy, argillaceous, hard.

3710 - 3720 Shale - dark grey to blackish-grey, slightly micromicaceous, platy to splintery, hard, with many interbeds of siltstone, as above, and stringer of sandstone, light grey, very fine grained, quartzose, very well cemented, silt, slightly limy, tight, hard.

3720 - 3730 Siltstone - medium grey, medium brownish-grey, sandy, very argillaceous, hard, slightly pyritic, with many interbeds of shale, dark grey, as above, trace brown ironstone.

## SAMPLE DESCRIPTIONS (cont'd)

3730 - 3740 Siltstone - medium brownish-grey, very sandy in part, trace carbon flecked, hard, with some interbeds of above shale.

3740 - 3750 Siltstone - medium brownish-grey, sandy, trace carbon flecked, hard, with thin interbeds of dark grey shale.

3750 - 3760 Siltstone - medium brownish-grey, sandy, as above, with thin interbeds of sandstone, light to medium grey, some dirty, very fine grained, quartzose, very well cemented, silty, tight, and common interbeds of shale, dark grey, silty, chunky, medium hard.

3760 - 3770 Siltstone - medium to dark brownish-grey, sandy, as above, with thin interbeds of sandstone, light grey, as above, and common interbeds of shale, dark grey, as above.

3770 - 3780 Shale - dark grey, silty in part, chunky, medium hard, with stringer of sandstone, light grey, as above.

3780 - 3790 Shale - dark grey to blackish-grey, silty, chunky, medium hard, trace pyrite.

3790 - 3800 Shale - dark grey, silty, as above, some pyrite nodules, with thin interbeds of siltstone, medium to dark grey, very argillaceous, hard.

3800 - 3810 Shale - dark grey to dark greyish-brown, silty, chunky, medium hard, trace quartzite fragments.

3810 - 3820 Shale - dark grey, slightly micromicaceous, slightly silty, chunky, medium hard, trace pyrite.

3820 - 3830 Shale - dark grey, slightly silty, as above, common pyrite nodules.

3830 - 3840 Shale - dark grey, slightly micromicaceous, slightly silty to silty, chunky, medium hard, trace pyrite.

3840 - 3850 Shale - dark grey, slightly micromicaceous, chunky, medium hard, with stringer of sandstone, light to medium buffish-grey, very fine grained, silty, slightly dirty, quartzose, very well cemented, siliceous, tight, hard, one black chert pebble.

SAMPLE DESCRIPTIONS (cont'd)

3850 - 3860 Siltstone - light to medium grey, generally clean, quartzose, sandy, hard, with common pyrite nodules, with thin interbeds of shale, dark grey, as above.

3860 - 3870 Shale - dark grey, chunky, medium hard, with some pyrite, and common interbeds of siltstone, light to medium grey, quartzose, sandy, hard.

3870 - 3880 Shale - dark grey, chunky, medium hard, with common pyrite nodules, with stringer of above siltstone.

3880 - 3890 Shale - blackish-grey, slightly micromicaceous, chunky, medium hard, traces of siltstone, sideritic ironstone, pyrite, quartzite, black chert pebble.

3890 - 3900 Shale - blackish-grey, slightly micromicaceous, chunky, medium hard, with stringer of siltstone, dark brownish-grey, very argillaceous, traces of coarse loose quartz grains with one black chert pebble.

3900 - 3910 Sandstone - light buffish-grey, very fine grained, silty, clean, quartzose, trace carbon flecked, well sorted, well cemented, silty, tight.

3910 - 3915 Circulated sample - Sandstone - buff to light buffish-grey, very fine grained, occasionally fine grained, clean, quartzose, trace carbon flecked, well sorted, subrounded, well cemented, silt, tight.

3915 - 3920 Sandstone - light buffish-grey, very fine to fine grained, clean, quartzose, trace carbon flecked, well sorted, well cemented, silt, tight.

3920 - 3925 Sandstone - light buffish-grey to light grey, very fine grained, clean, quartzose, carbon flecked, with occasional coaly parting, rare speck of glauconite, very well cemented, silt, tight, with some medium brown sideritic ironstone fragments.

3925 - 3930 Sandstone - light grey, very fine grained, clean, quartzose, trace carbon flecked, very well cemented, silt, tight.

3930 - 3935 Sandstone - light grey, very fine grained, clean, quartzose, carbon flecked, trace glauconite, with some coaly fragments, well cemented, silt, tight, trace fractures filled with calcite.

## SAMPLE DESCRIPTIONS (cont'd)

| | |
|---|---|
| 3935 - 3940 | Sandstone - light grey, very fine grained, (grading in part to siltstone), quartzose, trace carbon flecked, very well cemented, silt, tight, with thin interbeds of shale, dark grey, silty in part, chunky, medium hard, with common sideritic ironstone fragments. |
| 3940 - 3945 | Sandstone - light grey, very fine grained to silty, quartzose, trace carbon flecked, very well cemented, silt, tight, with thin interbeds of shale, dark grey. |
| 3945 - 3950 | Shale - dark grey, slightly micromicaceous, silty, chunky, medium hard, trace pyrite, with many interbeds of above sandstone. |
| 3950 - 3960 | Trip sample - Shale - dark grey to blackish-grey, micromicaceous, chunky to splintery, medium hard, with stringer of sandstone, light grey, very fine grained, clean, quartzose, trace carbon flecked, very well sorted, well cemented, silt, tight. |
| 3960 - 3970 | Sandstone - light grey, very fine grained, silty, quartzose, trace carbon flecked with occasional carbonaceous partings, as above, with thin interbeds of shale, dark grey, silty, trace carbon flecked, chunky, medium hard, trace pyrite nodules. |
| 3970 - 3980 | Siltstone - light grey, clean, quartzose, sandy, trace carbon flecked, hard, with many interbeds of shale, dark grey, silty, chunky, medium hard. |
| 3980 - 3990 | Siltstone - medium brownish-grey, very sandy, carbon flecked, hard, with thin interbeds of shale, dark grey, as above. |
| 3990 - 4000 | Shale - dark grey, silty, slightly micromicaceous, trace carbon flecked, chunky, medium hard, with many interbeds of siltstone, light to medium grey, quartzose, very sandy, trace carbon flecked, hard. |
| 4000 - 4010 | Shale - dark grey, micromicaceous, slightly silty, trace carbon flecked, chunky, medium hard, common sideritic fragments, with thin interbeds of above siltstone. |
| 4010 - 4020 | Shale - dark grey micromicaceous, slightly silty, chunky, medium hard, with trace of above siltstone. |

## SAMPLE DESCRIPTIONS (cont'd)

4020 - 4030 Shale - dark grey to dark brownish-grey, silty, chunky, medium hard.

4030 - 4040 Shale - dark grey, silty, chunky, medium hard.

4040 - 4050 Shale - dark grey, silty, chunky, medium hard, trace pyrite.

4050 - 4060 Sandstone - light buffish-grey to light grey, occasionally mottled brown and black, very fine to fine grained, quartzose, slightly carbon flecked, some coaly fragments and partings, trace glauconitic, well sorted, well cemented, silt, tight, trace fractures, some chips of white clayey material. (Drilling rate of 18 minutes per foot. Initial gas kick of 28 units at 4057 feet. Gas kick continuing to increase to 40 units at 4060 feet.)

4060 - 4065 Sandstone - light buff, fine grained, quartzose, trace glauconitic, trace carbon flecked, some shaley and carbonaceous partings, well cemented, silt, tight to trace porosity. (Gas reading 80 units.)

4065 - 4070 Sandstone - light buffish-grey to light grey, very fine to fine grained, quartzose, trace carbon flecked, trace glauconitic, some carbonaceous partings, well cemented, silt, tight, with some chips of white clayey material. (Gas reading 110 units.)

4070 - 4075 Sandstone - light buffish-grey, very fine to fine grained, quartzose, trace glauconitic, trace carbon flecked, trace argillaceous partings, well sorted, fair to well cemented, silt, tight to very poor porosity, trace fractures. (Gas reading 122 units.)

4075 - 4080 Sandstone - light buffish-grey to light grey, very fine to fine grained, quartzose, trace carbon flecked, some carbonaceous shale partings, fair to well cemented, silt, tight to very poor porosity, common chips of white clayey material. (Gas reading 122 units.)

4080 - 4085 Sandstone - light buffish-grey, very fine to fine grained, trace carbon flecked, common carbonaceous shaly partings, well cemented, silt, tight, trace porosity, trace fractures, some chips of white clayey material, one dark grey chert pebble fragment. (Gas reading 125 units.)

## SAMPLE DESCRIPTIONS (cont'd)

NOTE: Found weak filament in gas detector - gas readings from 4060-85 are false and should be in range of an estimated 30 units. Gas detector under repair from 4085 to 4095 feet.

4085 - 4090 Trip sample - Sandstone - light grey, very fine grained, quartzose, carbon flecked, some carbonaceous partings, well cemented, silt and slightly siliceous, tight, with interbeds of shale, dark grey to blackish-grey, chunky, medium hard, with trace of white clay fragments.

4090 - 4095 Sandstone - light buffish-grey to light grey, very fine to fine grained, quartzose, trace carbon flecked, trace glauconitic, well sorted, fair to well cemented, silt, very poor porosity, trace white clay fragments. (Gas readings 5 units.)

4095 - 4100 Sandstone - light grey, very fine grained, quartzose, slightly pyritic, trace carbon flecked, trace glauconitic, very well cemented, silty, tight, trace closed fractures, trace white clay. (Gas readings -0- units.)

4100 - 4110 Sandstone - light grey, very fine grained, quartzose, trace carbon flecked, trace carbonaceous partings, very well cemented, silt, tight, trace white clay fragments.

4110 - 4120 Sandstone - light grey, very fine grained, quartzose, as above, tight, with common black carbonaceous shale partings and interbeds, trace white clay fragments.

4120 - 4130 Sandstone - light grey to dirty brownish-grey, very fine grained, quartzose, carbon flecked, some carbonaceous shale partings, well cemented, silt, slightly limy, tight, some white clay fragments.

4130 - 4140 Shale - black, carbonaceous, micromicaceous, chunky, medium hard, with many interbeds of siltstone, medium brownish-grey, to medium greyish-brown, quartzose, sandy, hard, trace white clay fragments.

4140 - 4150 Sandstone - light grey to light brownish-grey, very fine grained, quartzose, trace carbon flecked, very well cemented, silty, slightly limy, tight, with some interbeds of carbonaceous shale, some white clay fragments.

## SAMPLE DESCRIPTIONS (cont'd)

4150 - 4160 Sandstone - light buffish-grey, very fine grained, quartzose, trace carbon flecked, common argillaceous partings, very well cemented, silt, tight, with thin interbeds of shale, dark grey, some white clay fragments.

4160 - 4170 Shale - blackish-grey micromicaceous, slightly carbonaceous, some silty, chunky, hard, with many interbeds of sandstone, light buffish-grey to medium grey, dirty, as above, common small fragments of white calcite, some white clay fragments.

4170 - 4180 Trip sample - Siltstone - light to medium grey, quartzose, sandy, hard, with many interbeds of shale, dark grey, as above, some white clay fragments.

4180 - 4190 Siltstone - medium greyish-brown, sandy, argillaceous, hard, with some white clay fragments.

4190 - 4200 Siltstone - medium brown, sandy, argillaceous, hard, with many interbeds of ironstone, medium brown, sideritic, hard, with some fragments of white quartzite, white clay, and trace green shale.

4200 - 4210 Shale - blackish-grey to dark grey, carbonaceous in part, silty in part, chunky, hard, with thin interbeds of above siltstone, some white clay fragments.

4210 - 4220 Shale - blackish-grey, slightly carbonaceous, very silty in part, chunky, medium hard, with thin interbeds of siltstone, medium brownish-grey.

4220 - 4230 Shale - blackish-grey, as above, with stringer of sandstone, light buffish-grey to light grey, very fine to fine grained, quartzose, well cemented, silt, tight to trace porosity, trace quartzite fragments.

4230 - 4240 Trip sample - Shale - dark grey, some blackish-grey, silty, chunky, medium hard.

4240 - 4250 Shale - dark grey, silty, as above, with common interbeds of siltstone, medium to dark greyish-brown, very argillaceous, hard.

## SAMPLE DESCRIPTIONS (cont'd)

4250 - 4260 Siltstone - medium to dark greyish-brown, very argillaceous, hard, with many interbeds of shale, dark grey, very silty, as above.

4260 - 4270 Shale - blackish-grey, micromicaceous, some silty, chunky, medium hard, with some interbeds of siltstone, dark greyish-brown, very argillaceous, hard.

4270 - 4280 Shale - blackish-grey, as above.

4280 - 4290 Shale - blackish-grey, slightly micromicaceous, silty, chunky, medium hard, with stringer of above siltstone.

4290 - 4300 Shale - dark grey to blackish-grey, silty in part, slightly micromicaceous, chunky, medium hard.

4300 - 4310 Shale - blackish-grey, slightly micromicaceous, slightly silty, chunky, medium hard.

4310 - 4320 Shale - blackish-grey, as above.

4320 - 4330 Shale - blackish-grey, slightly micromicacecus, slightly silty, chunky, medium hard.

4330 - 4340 Shale - dark grey to dark brownish-grey, as abcve.

4340 - 4350 Shale - blackish-grey, as above, trace pyrite.

4350 - 4360 Shale - dark brownish-grey, slightly silty, chunky, medium hard, trace pale green shale and quartzite fragments.

4360 - 4370 Shale - blackish-grey to dark grey, chunky, medium hard.

4370 - 4380 Shale - blackish-grey, as above, some loose coarse sand grains.

4380 - 4390 Shale - dark grey to blackish-grey, slightly micro-micaceous, chunky, medium hard, trace pyrite nodules.

4390 - 4400 Sandstone - medium brownish-grey, very fine grained, silty, dirty, quartzose, argillaceous, common bright glauconite, very well cemented, silt-argillaceous, tight, with many interbeds of above shale.

## SAMPLE DESCRIPTIONS (cont'd)

| | |
|---|---|
| 4400 - 4410 | Sandstone - light to medium grey, very fine grained, silty, quartzose, trace carbon flecked, trace glauconitic, well cemented, silt, very slightly limy, tight, with thin interbeds of above shale. |
| 4410 - 4420 | Siltstone - medium grey, quartzose, sandy, argillaceous, hard. |
| 4420 - 4430 | Siltstone - medium grey, quartzose, sandy, argillaceous, medium hard, with thin interbeds of above shale. |
| 4430 - 4440 | Siltstone - medium grey, as above, hard, with many interbeds of shale, dark grey, silty, chunky, medium hard, with trace of white quartzite fragments. |
| 4440 - 4450 | Shale - dark grey, slightly silty, chunky, medium hard, trace pyrite, with stringer of above siltstone. |
| 4450 - 4460 | Shale - dark grey, some blackish-grey, silty, chunky, medium hard, slightly pyritic. |
| 4460 - 4470 | Shale - dark grey, slightly silty, as above, trace pyrite. |
| 4470 - 4480 | Shale - dark grey, slightly silty, as above, with many interbeds of siltstone, medium grey, sandy, argillaceous, hard. |
| 4480 - 4490 | Shale - dark grey, silty, occasionally sandy, chunky, medium hard, with some light and dark grey chert pebble fragments, with stringer of sandstone, medium brownish-grey, fine grained, dirty, quartzose, very argillaceous, tight. |
| 4490 - 4500 | Shale - dark grey, very silty, as above, with many interbeds of siltstone, medium grey, sandy, argillaceous, hard, and thin interbeds of sandstone, medium grey, very fine to fine grained, slightly salt and pepper, very well cemented, limy in part, silty, tight, with trace of light and dark grey chert granules. |
| 4500 - 4510 | Siltstone - medium to dark grey, very argillaceous, hard, with thin interbeds of shale, dark grey, as above, and stringer of sandstone, trace dark grey chert. |

## SAMPLE DESCRIPTIONS (cont'd)

4510 - 4520 Siltstone - medium to dark grey, as above, common pyritic, hard, with some interbeds of shale, dark grey, silty.

4520 - 4530 Shale - dark grey, silty, occasionally sandy, chunky, medium hard, with many interbeds of siltstone, medium brownish-grey, sandy, argillaceous, hard, trace pyritic nodules.

4530 - 4540 Shale - dark grey, slightly silty, chunky, medium hard.

4540 - 4550 Shale - dark grey, slightly micromicaceous, silty, chunky, medium hard, with stringer of above siltstone.

4550 - 4560 Shale - dark grey, as above, with stringer of sandstone, light grey, very fine to fine grained, slightly salt and pepper, well cemented, silt, tight, fractured and filled with calcite, and stringer of above siltstone.

4560 - 4570 No sample - found hole to be 10 feet deeper than pipe tally. Correction made.

4570 - 4580 Trip sample - Siltstone - dark grey, sandy, argillaceous, medium hard, with some interbeds of shale, dark grey, as above, trace of sideritic ironstone, and pyrite.

4580 - 4590 Shale - dark grey, silty, chunky, medium hard, trace sideritic ironstone and pyrite.

4590 - 4600 Shale - dark grey, as above, some sandy, chunky, medium hard, with trace of pyrite, light grey sandstone and white quartzite.

4600 - 4610 Shale - dark grey, silty, commonly slightly sandy, chunky, medium hard, trace pyrite, with thin interbeds of sandstone, medium to dark brownish-grey, fine to medium grained, dirty, quartzose, shaly, well cemented, very argillaceous, tight.

4610 - 4620 Sandstone - medium to dark grey, very fine to medium grained, dirty, quartzose to very slightly salt and pepper, trace glauconitic, shaly, well cemented, very argillaceous, tight, medium hard, with thin interbeds of shale, as above.

## SAMPLE DESCRIPTIONS (cont'd)

4620 - 4630 Siltstone - dark grey, sandy, very argillaceous, medium hard, with some interbeds of above sandstone, medium to dark grey, as above.

4630 - 4640 Shale - dark grey, silty, common sandy, chunky, medium hard, with thin interbeds of sandstone, medium brownish-grey, very fine to medium grained, quartzose, shaly, well cemented, very argillaceous, tight.

4640 - 4650 Shale - medium grey, micro-micaceous, blocky, sandy, slightly pyritic, with some interbedded sandstone, brownish-grey, fine to very fine, fair sorted sub-round quartz grains, very argillaceous, slightly calcareous, tight.

4650 - 4660 Shale - as above, with interbedded sandstone, grey to brownish-grey, fine to very fine, subround well sorted quartz with minor chert? and glauconitic grains, siliceous cement, argillaceous, slightly calcareous, hard, tight.

4660 - 4670 Shale - as above, with minor sandstone, brownish-grey to grey, very fine to fine, fair sorted quartz grains, argillaceous, slightly calcareous, tight.

4670 - 4680 Shale - medium grey, micromicaceous, blocky, sandy, slightly pyritic with a trace of sandstone, brownish-grey, very fine to fine, fair sorted quartz grains, argillaceous, slightly calcareous, tight.

4680 - 4690 Shale - as above, with a trace of sandstone as above.

4690 - 4700 Shale - medium grey, blocky to fissile, sandy to very sandy, micromicaceous, grading to a trace of sandstone, brownish-grey, fair sorted, subangular quartz with minor chert? grains, very argillaceous, tight.

4700 - 4710 Shale - as above, with a trace of sandstone, as above.

4710 - 4720 Shale - as above, with a trace of sandstone, as above, with calcite filled hairline fractures.

4720 - 4730 Shale - medium grey to brownish-grey, blocky, micro-micaceous, sandy, grading to sandstone, brownish-grey to grey, very fine, well sorted quartz grains, very argillaceous, calcareous, hard, tight.

## SAMPLE DESCRIPTIONS (cont'd)

| DEPTH (Units Gas) | |
|---|---|
| 4730 - 4740 | Shale - as above, grading to sandstone, brownish-grey to grey, very fine to fine, slightly calcareous, trace glauconitic, very argillaceous, tight. |
| 4740 - 4750 | Shale - medium to dark grey, blocky to fissile, sandy to silty, micromicaceous, with laminations of sandstone, grey, fine, argillaceous, fair sorted subround quartz grains, slightly calcareous, slightly glauconitic, tight. |
| 4750 - 4760 | Shale - medium to dark grey, micromicaceous, blocky to fissile, some silty with a trace of sandstone, brownish-grey, very fine, argillaceous, slightly calcareous, hard, tight. |
| 4760 - 4770 | Shale - medium grey, blocky to fissile, micro-micaceous, some sandy to silty, with minor thin laminations of sandstone, as above. |
| 4770 - 4780 | Shale - as above, with traces of sandstone, as above, some glauconitic. |
| 4780 - 4790 | Shale - medium grey, blocky to fissile, micro-micaceous, silty to sandy, with sandstone, grey to brownish-grey, very fine to fine, slightly calcareous, subangular to subround, fair sorted quartz grains, argillaceous, tight. |
| 4790 - 4800 | Siltstone - grey-brown, very argillaceous, slightly calcareous, with shale as above and a trace of sandstone, brown, very fine to fine, subround quartz grains, very argillaceous, glauconitic, tight. |
| 4800 - 4810 | Siltstone - as above, grading to shale, as above, with a trace of sandstone, as above. |
| 4810 - 4820 (0) | Shale - medium to dark grey, blocky to fissile, micromicaceous, silty, carbonaceous in part, with laminations of siltstone, greyish-brown, very argillaceous, slightly calcareous, and minor sand-stone, dark brown to brownish-grey, very fine to fine, very argillaceous, slightly calcareous, poorly sorted subangular quartz grains, hard, tight. |

## SAMPLE DESCRIPTIONS (cont'd)

| DEPTH (Units Gas) | |
|---|---|
| 4820 - 4830 (7½) | Shale - as above, with thin laminations of siltstone, as above. (Trip Gas) |
| 4830 - 4840 (1) | Shale - as above, with laminations of siltstone, as above. |
| 4840 - 4850 (0) | Shale - as above, with laminations of sandstone, dark brown to grey-brown, very fine, very argillaceous, calcareous, hard, tight. |
| 4850 - 4860 (0) | Shale - dark grey, fissile to blocky, micromicaceous, silty, carbonaceous in part, with a trace of sandstone, as above. |
| 4860 - 4870 (0) | Shale - as above. |
| 4870 - 4880 (0) | Shale - dark grey to medium grey, silty to sandy, micromicaceous, fissile to blocky, carbonacecus in part. |
| 4880 - 4890 (0) | Shale - dark grey, fissile, silty to sandy, micromicaceous, carbonaceous in part. |
| 4890 - 4900 (0) | Shale - dark to medium grey, fissile, micromicaceous, carbonaceous in part. |
| 4900 - 4910 (0) | Shale - medium to dark grey, slightly fissile, micromicaceous, with dark brown, dense siderite (nodules?). |
| 4910 - 4920 (0) | Shale - dark to medium grey, fissile, micromicaceous, carbonaceous in part. |
| 4920 - 4930 (1) | Shale - as above. (Changed shakers, sample contained abundant fragments of cement and loose round quartz and chert grains.) |
| 4930 - 4940 (2) | Shale - dark grey, with brown streak, carbonaceous, fissile, micromicaceous. |
| 4940 - 4950 (2) | Shale - dark to medium grey, fissile, carbonaceous in part, micromicaceous, with sandstone, light to dark brown, fine, subround, fair sorted quartz grains, very argillaceous, tight. |

## SAMPLE DESCRIPTIONS (cont'd)

| DEPTH (Units Gas) | |
|---|---|
| 4950 - 4960 (1) | Sandstone - tan, medium to fine, subangular, fair sorted, quartz grains with a trace of intergranular kaolinite, slightly friable, poor porosity, no stain of fluorescence. |
| 4960 - 4970 (1) | Sandstone - fine to medium, as above, with minor shale as above. |
| 4970 - 4975 (0) | Sandstone - as above, with minor shale as above (cavings?). |
| 4975 - 4980 (0) | Sandstone - tan, fine to medium, fair sorted, sub-angular quartz grains, siliceous cement, semi-friable, poor porosity, no stain or fluorescence, with minor shale, medium grey, fissile, micromicaceous. |
| 4980 - 4990 (0) | Sandstone - tan, fine, well sorted, subangular quartz grains, siliceous cement, semi-friable, poor porosity, no stain or fluorescence. |
| 4990 - 5000 (0) | Sandstone - as above. |
| 5000 - 5010 (0) | Sandstone - as above, with traces of white clay and minor shale, as above. |
| 5010 - 5020 (0) | Sandstone - as above, with some shale as above (cavings?, trip sample). |
| 5020 - 5030 (0) | Sandstone - tan, fine, well sorted, subangular quartz grains, siliceous cement, well cemented, trace poor porosity, no stain or fluorescence. |
| 5030 - 5040 (0) | Sandstone - as above, poor porosity, no stain or fluorescence. |
| 5040 - 5050 (0) | Sandstone - as above, trace kaolinitic, trace poor porosity, no stain or fluorescence. |
| 5050 - 5060 (0) | Sandstone - as above, trace shaly, some kaolinitic, trace poor porosity, no stain or fluorescence. |
| 5060 - 5070 (0) | Sandstone - light brown to brown, fine well sorted, quartz grains, shaly in part, slightly calcareous, hard, tight, with shale, medium grey, fissile to blocky, micromicaceous, silty. |

## SAMPLE DESCRIPTIONS (cont'd)

| DEPTH (Units Gas) | |
|---|---|
| 5070 - 5080 (0) | Shale - medium grey, silty to sandy, fissile, micromicaceous, with interbedded sandstone, brown, fine to very fine, fair sorted subangular quartz grains, very argillaceous, slightly calcareous, hard, tight. |
| 5080 - 5090 (0) | Shale - as above, grading to sandstone, brown, very fine, very argillaceous, slightly calcareous, tight. |
| 5090 - 5100 (0) | Sandstone - brown, very fine to fine, very argillaceous, slightly calcareous, tight, with some shale, brownish-grey, blocky, silty to sandy, slightly calcareous. |
| 5100 - 5110 (0) | Shale - as above, with minor sandstone, as above. |
| 5110 - 5120 (0) | Shale - as above, with minor sandstone, tan to brown, fine to very fine, slightly calcareous, subangular, well sorted quartz grains, argillaceous, tight, trace fluorescence and light oil stain. |
| 5120 - 5130 (0) | Shale - dark to medium grey, blocky to fissile, micromicaceous, silty to sandy, with trace sandstone, dark brown, very fine, slightly calcareous, very argillaceous, tight. |
| 5130 - 5140 (0) | Shale - medium to brownish-grey, blocky to fissile, micromicaceous, silty to sandy, with a trace of sandstone, brown, very fine to fine, very argillaceous, slightly calcareous, tight. |
| 5140 - 5150 (0) | Sandstone - brown, very fine, very argillaceous, slightly calcareous, tight, with shale as above. |
| 5150 - 5160 (0) | Sandstone - tan, very fine, slightly calcareous, some argillaceous, tight, with shale, medium grey, blocky to fissile, micro-micaceous, sandy to silty. |
| 5160 - 5170 (0) | Sandstone - light brown, very fine to fine, subangular, fair sorted quartz grains, siliceous cement, hard, tight, with a trace of coarse, round, black chert grains in pyrite cement, some shale, medium grey, as above, slightly pyritic. |

## SAMPLE DESCRIPTIONS (cont'd)

| DEPTH (Units Gas) | |
|---|---|
| 5170 - 5180 (0) | Sandstone - light brown, very fine to fine, fair sorted, subangular quartz grains, trace glauconitic and carbonaceous, siliceous cement, argillaceous and kaolinitic in part, hard, tight, slightly calcareous in part. |
| 5180 - 5190 (0) | Sandstone - light brown to tan, very fine, well sorted quartz grains, glauconitic in part, slightly calcareous, argillaceous in part, tight, some shale as above (cavings?, trip sample). |
| 5190 - 5200 (0) | Sandstone - tan to light brown, very fine to fine, slightly calcareous, argillaceous in part, well sorted, subangular quartz grains, trace poor porosity, no stain of fluorescence. Abundant shale as above (cavings?, trip sample). |
| 5200 - 5210 (0) | Sandstone - tan, very fine, slightly calcareous, pyritic, well sorted quartz grains, tight. |
| 5210 - 5220 (0) | Sandstone - light brown, very fine to fine, slightly calcareous, well sorted, subangular quartz grains with a few coarse, light and dark grey, rounded chert grains, some pyrite, tight. |
| 5220 - 5230 (0) | Sandstone - greenish-grey to salt and pepper, very fine, calcareous cement, well sorted, subangular quartz grains, abundant glauconite and minor chert grains, hard, tight. |
| 5230 - 5240 (0) | Siltstone - grey, slightly calcareous, argillaceous, grading to sandstone as above, grey to salt and pepper, trace of poor porosity, no stain or fluorescence. |
| 5240 - 5250 (0) | Siltstone - grey, argillaceous in part, siliceous, pyritic, hard, with some sand stone as above, tight. |
| 5250 - 5260 (0) | Siltstone - as above, with shale, dark brownish-grey, carbonaceous, sandy, fissile. |
| 5260 - 5270 (0) | Sandstone - salt and pepper, very fine, slightly calcareous in part, subangular, well sorted quartz and minor chert grains, trace glauconitic, tight, some siltstone as above. |

## SAMPLE DESCRIPTIONS (cont'd)

| DEPTH (Units Gas) | |
|---|---|
| 5270 - 5280 (0) | Siltstone - grey, argillaceous, micromicaceous, sandy in part, with some sandstone, salt and pepper, slightly calcareous, glauconitic in part, subangular, well sorted, very fine quartz and minor chert grains, tight. |
| 5280 - 5290 (0) | Siltstone - as above, very argillaceous with some sandstone as above, tight. |
| 5290 - 5300 (0) | Sandstone - light tannish-grey, fine to very coarse, poorly sorted, angular to round quartz, chert, dolomite and limestone grains with a few light and dark chert pebble fragments, clear, black, orange, white and tan grains, dolomitic cement, hard, tight. |
| 5300 - 5310 (0) | Sandstone - grey, very fine, subangular, well sorted quartz and minor chert grains, dolomitic cement, hard, tight, with some sandstone, as above. |
| 5310 - 5320 (0) | Shale - medium grey, blocky to fissile, sandy in part, with dark brown siderite (nodules?), and sandstone, grey to tan, very fine to medium, angular, well sorted, varicoloured, quartz, chert and dolomite grains, dolomitic, glauconitic in part, hard, tight. |
| 5320 - 5330 (0) | Shale - medium grey, blocky to fissile, with a trace of siderite and sandstone, as above. |
| 5330 - 5340 (0) | Conglomerate - dark grey, angular, chert and dolomite pebbles, dolomitic cement, microcrystalline to very fine crystalline dolomite, hard, tight, with shale as above. |
| 5340 - 5350 (0) | Conglomerate - pebbles of dark to light grey chert in white dolomitic cement, hard, tight. |
| 5350 - 5360 (0) | Dolomite - light to dark brown, microcrystalline, some with coarse pyrite cubes, white dolomite crystal filled fractures and rare vug, tight, with a trace of conglomerate as above. (Drilled interval may be dolomite boulders.) |
| 5360 - 5370 (0) | Sandstone - brownish-grey, fine to very coarse (microconglomerate), angular to round, poorly sorted quartz, chert and minor dolomite grains and pebbles, dolomitic cement, hard, tight, with some dark red, blocky shale. |

## SAMPLE DESCRIPTIONS (cont'd)

| DEPTH (Units Gas) | |
|---|---|
| 5370 - 5380 (0) | Sandstone - as above, with an increase in red shale as above. |
| 5380 - 5385 (0) | Conglomerate - dark grey to brown, angular, poor sorted dolomite and some chert pebbles, dolomitic cement, trace poor intergranular porosity, trace intercrystalline porosity in dolomite crystals lining pebble faces, no stain or fluorescence. |
| 5385 - 5390 (0) | Conglomerate - as above, trace of intercrystalline porosity in dolomite crystals lining pebbles, some sandstone, brownish-grey, very fine, dolomitic cement, hard, tight. |
| 5390 - 5400 (0) | Sandstone - brownish-grey, very fine, dolomitic cement, few coarse chert grains, tight, with some conglomerate, dark and light grey angular fragments of chert and dolomite with white dolomite crystal cement, with a trace of intercrystalline porosity, no stain or fluorescence, and some shale, dark red, blocky. (Poor sample, abundant cavings.) |
| 5400 - 5410 (0) | Shale - dark red to brown, blocky, silty, some samdstone, light brown, fine to medium, subround, fair sorted quartz and chert grains, dolomitic, hard, tight, trace of conglomerate, as above, tight. |
| 5410 - 5420 (0) | Conglomerate - dark and light, angular to subround chert with some dolomite pebbles, white dolomite cement, no visible porosity. |
| 5420 - 5430 (0) | Conglomerate - light and dark chert fragments, few rounded faces, white dolomite cement, no visible porosity. |
| 5430 - 5440 (0) | Conglomerate - as above, with some shale,dark red, blocky. |
| 5440 - 5450 (0) | Conglomerate - as above, with an increase in shale as above. |
| 5450 - 5460 (0) | Shale and conglomerate - as above. |
| 5460 - 5470 (0) | Shale - dark red, silty to sandy, calcareous in part, some conglomerate as above, some limestone, salmon, microcrystalline, argillaceous, tight. |

## SAMPLE DESCRIPTIONS (cont'd)

| DEPTH (Units Gas) | |
|---|---|
| 5470 - 5480 (0) | Shale - dark red, silty to sandy, calcareous in part, with minor limestone inclusions, salmon coloured, microcrystalline, argillaceous, tight, some conglomerate, as above. |
| 5480 - 5490 (0) | Shale - dark red, silty, calcareous in part, with salmon coloured, microcrystalline limestone inclusions, and stringers. |
| 5490 - 5500 (0) | Conglomerate - dark and light grey and tan, rounded to angular chert pebbles, calcareous cement, no visible porosity, some red shale, as above. |
| 5500 - 5510 (0) | Conglomerate - as above, no visible porosity. |
| 5510 - 5520 (0) | Conglomerate - dark and light grey, tan and red, rounded to angular chert pebbles, no visible porosity, shale, dark red, silty, calcareous in part. |
| 5520 - 5530 (0) | Conglomerate - as above, shale, dark red, silty to sandy, calcareous in part. |
| 5530 - 5540 (0) | Conglomerate - as above, some shale as above, some limestone, tan to buff, very fine crystalline, tight. |
| 5540 - 5550 (0) | Conglomerate - as above, some dolomite, buff, very fine crystalline, tight, trace red shale as above, trace shale, green,waxy. |
| 5550 - 5560 (0) | Conglomerate - red to dark and light grey chert pebbles, round to angular, calcareous cement, shale, dark red, calcareous to siliceous in part, sandy, trace dolomite, buff, very fine crystalline, tight. |
| 5560 - 5570 (0) | Conglomerate - as above, shale as above, trace dolomite as above. |
| 5570 - 5580 (0) | Conglomerate - red to dark and light grey chert pebbles, angular to round, calcareous and red siliceous clay cement, shale, dark red, sandy, with fine to coarse chert grains and some inclusions of limestone, salmon, argillaceous, tight. |

## SAMPLE DESCRIPTIONS (cont'd)

| DEPTH (Units Gas) | |
|---|---|
| 5580 - 5590 (0) | Conglomerate - red to dark grey chert, and light brown limestone pebbles, angular, with red shale and calcareous cement, shale, dark red, calcareous and siliceous, with coarse chert grains. |
| 5590 - 5600 (0) | Conglomerate - as above, with some shale as above. |
| 5600 - 5610 (0) | Conglomerate - dark grey to brown to red chert and light brown limestone pebbles, no visible porosity, shale, as above. |
| 5610 - 5620 (0) | Conglomerate - dark to light grey to red chert and light brown limestone pebbles, angular, red, sandy shale and calcareous cement, no visible porosity. |
| 5620 - 5630 (0) | Conglomerate - as above. |
| 5630 - 5640 (0) | Conglomerate - as above. |
| 5640 - 5650 (0) | Conglomerate - as above, with red to green sandy, calcareous shale matrix, no visible porosity. |
| 5650 - 5660 (0) | Conglomerate - as above, angular to round pebbles. |
| 5660 - 5670 (0) | Conglomerate - varicoloured, angular to round chert and minor dolomite pebbles, with red sandy shale cement, no visible porosity. |
| 5670 - 5680 (0) | Conglomerate - as above. |
| 5680 - 5690 (0) | Conglomerate - as above. |
| 5690 - 5700 (0) | Conglomerate - as above. |
| 5700 - 5710 (0) | Conglomerate - as above. |
| 5710 - 5720 (0) | Conglomerate - red to dark grey angular chert pebbles with abundant dark red shale, calcareous, very sandy, coarse, angular quartz and chert grains as matrix filler, no visible porosity. |

## SAMPLE DESCRIPTIONS (cont'd)

| DEPTH (Units Gas) | |
|---|---|
| 5720 - 5730 (0) | Conglomerate - dark to light grey to red, angular to round, chert pebbles cemented with red, sandy, calcareous shale, and white calcite crystals, no visible porosity, some shale, dark red, with a trace of green, calcareous in part, sandy, with coarse to fine, angular to round chert, quartz and minor limestone grains. |
| 5730 - 5740 (0) | Conglomerate - as above, no visible porosity. |
| 5740 - 5750 | Conglomerate - composed of small pebbles of abundant black chert, some light tan limestone fragments, trace green shale fragments, in a red shale matrix, with common white calcite infill. |
| 5750 - 5760 | Conglomerate - as above, with abundant calcite fragments. |
| 5760 - 5770 | Conglomerate - composed of small pebbles of abundant black chert, some light tan lithographic limestone, trace light grey and green chert, some calcite in a silty red shale matrix. |
| 5770 - 5780 | Conglomerate - as above, common light grey chert. |
| 5780 - 5790 | Conglomerate - composed of small pebbles of abundant black chert, some light to dark grey chert, trace green shale fragments, common calcite fragments in a red shale matrix. |
| 5790 - 5800 | Conglomerate - as above, with common light to dark grey chert and common black chert pebbles, trace green chert, trace white limestone, some calcite fragments, in a red shale matrix. |
| 5800 - 5810 | Conglomerate - composed of pebbles of abundant black to dark grey chert, some white to light grey chert, trace green shale and quartzite fragments, trace calcite, in a red shale matrix. |
| 5810 - 5820 | Conglomerate - as above, with common fragments of dark grey shale. |
| 5820 - 5830 | Conglomerate - composed of pebbles of chert - light to dark grey, some black, occasional green shale fragments, trace limestone fragments, common calcite, in a red shale matrix. |

## SAMPLE DESCRIPTIONS (cont'd)

5830 - 5840 Conglomerate - as above.

5840 - 5850 Conglomerate - composed of pebbles of chert, light to dark grey, common black, some red chert, some light tan limestone, trace green shale, common calcite, in a red shale matrix.

5850 - 5860 Conglomerate - composed of pebbles of abundant dark grey chert, some black chert, some light to medium grey chert, some red to pink chert, occasional light grey limestone, common calcite in a red shale matrix.

5860 - 5870 Conglomerate - as above, with interbeds of shale, red, silty, very limy, chunky, hard.

5870 - 5880 Shale - red, as above, very limy in part, with thin interbeds of conglomerate, as above.

5880 - 5890 Conglomerate - composed of pebbles of abundant dark grey to black chert, some light to medium grey chert, trace red chert, common calcite, in a red shale matrix.

5890 - 5900 Conglomerate - as above.

5900 - 5910 Conglomerate - composed of pebbles of common dark grey to black chert, some light grey chert, trace red chert, some green shale, some calcite, in a red shale matrix.

5910 - 5920 Conglomerate - as above, with minor green shale matrix.

5920 - 5930 Conglomerate - composed of pebbles of abundant dark grey to black chert, some green shale, trace green and red chert, trace limestone, some calcite, in a predominately red with minor green shale matrix.

5930 - 5940 Conglomerate - as above, with matrix composed of red, green and light grey shale.

5940 - 5950 Conglomerate - composed of small pebbles of abundant dark grey to black chert, common pale green shale, some light to medium grey chert, trace pink chert, some calcite, in a matrix predominately of green shale, with minor red shale.

## SAMPLE DESCRIPTIONS (cont'd)

5950 - 5960 Conglomerate - composed of pebbles of light to medium grey to dark grey chert, some green shale, trace light tan limestone, trace red chert, some calcite, in a pale green to light grey shale matrix.

5960 - 5970 Conglomerate - as above, with some red shale matrix.

5970 - 5980 Conglomerate - composed of pebbles of common dark grey chert, some light grey chert, some light grey to medium grey limestone, some pale greenish-grey shale, trace green shale, some calcite, in a red and greenish-grey shale matrix.

5980 - 5990 Conglomerate - composed of pebbles of common dark grey to black chert, some white to light grey chert, some light to medium grey limestone, some pale green shale, some calcite, in a red shale matrix.

5990 - 6000 Conglomerate - as above, light grey chert and limestone increasing.

6000 - 6010 Conglomerate - composed of pebbles of light to dark grey chert, some limestone, some pale green shale, some calcite, in a matrix of coarse grained sandstone, composed of chert and red shale fragments.

6010 - 6020 Conglomerate - composed of pebbles and cobbles of limestone, mottled light and dark grey, some light tan and medium grey, crypto-x-lline, common light grey chert, some pale green shale.

6020 - 6030 Conglomerate - composed of pebbles of abundant limestone, light to dark grey, mottled in part, some light grey chert, some black chert, some pale green shale, some calcite, slightly pyritic in part, in a limy and calcitic matrix.

6030 - 6040 Sandstone - light grey, very fine grained, silty, calcarenite with some to many quartz grains, commonly finely pyritic, well cemented, very limy, tight, with many pebbles of limestone, light grey to tan, light to dark grey chert, some pale green shale.

6040 - 6050 Conglomerate - composed of pebbles of limestone, light to medium grey, crypto-x-lline, trace chert, common calcite, trace pale green shale.

## SAMPLE DESCRIPTIONS (cont'd)

6050 - 6060 Limestone - mottled light and dark grey, some light grey, trace light tan, crypto-x-lline, no visible porosity, common calcite (fracture fill), some medium grey chert.

6060 - 6070 Limestone - light grey, some medium to dark grey, slightly mottled, crypto-x-lline, slightly argillaceous, no visible porosity, with some calcite filled fractures.

6070 - 6080 Limestone - slightly mottled dark and light grey, crypto-x-lline, trace light grey chert, argillaceous, no visible porosity.

6080 - 6090 Limestone - dark grey, slightly mottled light grey, some light grey, crypto-x-lline,argillaceous, no visible porosity, with some calcite.

6090 - 6100 Limestone - mottled light and medium grey, common light grey, common calcite filled fractures, argillaceous, no visible porosity.

6100 - 6110 Limestone - mottled light and medium grey, as above.

6110 - 6120 Limestone - mottled light and medium grey, argillaceous, some calcite filled fractures, no visible porosity.

6120 - 6130 Limestone - mottled light and medium grey, argillaceous, as above, no visible porosity.

6130 - 6140 Trip sample - Limestone - light grey, some mottled light and medium grey, crypto-x-lline, slightly argillaceous, no visible porosity, trace black chert.

6140 - 6150 Limestone - mottled light and medium grey, common light grey, crypto-x-lline, argillaceous, no visible porosity.

6150 - 6160 Limestone - medium grey, some light grey, crypto-x-lline, argillaceous, slightly siliceous in part, some light grey chert, common calcite (fracture fill), no visible porosity.

6160 - 6170 Limestone - medium grey, slightly mottled light grey, some light grey, crypto-x-lline, argillaceous, some calcite (fracture fill), no visible porosity.

SAMPLE DESCRIPTIONS (cont'd)

6170 - 6180 Limestone - medium grey, some light grey, crypto-x-lline, as above.

6180 - 6190 Limestone - medium grey, some light grey, crypto-x-lline, argillaceous, no visible porosity, common calcite, (fracture fill), no visible porosity, with thin interbeds of shale, black, non-calcareous, chunky, hard.

6190 - 6200 Limestone - medium grey, slightly mottled light grey, some light grey, crypt-x-lline, argillaceous, some calcite (fracture fill), no visible porosity, with trace black chert.

6200 - 6210 Chert - light to dark grey, some greyish-tan and slightly mottled light grey, (silicified limestone), very hard.

6210 - 6220 Limestone - light to medium grey, crypto-x-lline, argillaceous, no visible porosity, with common interbeds of dark grey chert.

6220 - 6230 Chert - dark grey to black, some medium grey, trace light grey, (silicified limestone), some calcite filled fractures, very hard, with thin interbeds of limestone, as above.

6230 - 6240 Chert - dark grey to black, some fractured and infilled with calcite, very hard, with stringer of above limestone.

6240 - 6250 Chert - dark grey to black, fractured, as above, with thin interbeds of medium grey argillaceous limestone.

6250 - 6260 Limestone - medium grey to blackish-grey, crypto-x-lline, argillaceous, shaly, no visible porosity, some calcite (fracture fill), with stringer of chert, dark grey, some medium grey, very hard.

6260 - 6270 Limestone - light to medium grey, some dark grey to black, crypto-x-lline, argillaceous, shaly, some fractured and infilled with calcite, no visible porosity, with thin interbeds of chert, medium grey to black, fractured and filled with calcite, very hard.

6270 - 6280 Limestone - black, some medium grey, crypto-x-lline, argillaceous, shaly, some calcite (fracture fill), no visible porosity, with trace chert.

## SAMPLE DESCRIPTIONS (cont'd)

6280 - 6290 Shale - dark grey to black, very limy, chunky, brittle, hard, with thin interbeds of limestone, medium grey, crypto-x-lline, argillaceous, very slightly pyritic, no visible porosity, with trace of chert.

6290 - 6300 Trip sample - Shale - blackish-grey, very limy, chunky, hard, with thin interbeds of limestone, medium grey, crypto-x-lline, argillaceous, no visible porosity.

6300 - 6310 Shale - blackish-grey, very limy, as above, trace fractured.

6310 - 6320 Shale - blackish-grey, very limy, trace pyritic, some calcite (fracture fill), chunky, hard, with stringer of limestone, medium grey, as above.

6320 - 6327 Circulated sample - Shale - blackish-grey, very limy, as above.

6327 - 6330 Trip sample - Shale - blackish-grey, very limy, chunky, hard, with common calcite (fracture fill).

6330 - 6340 Shale - dark grey, very limy, chunky, hard, trace slickensides, some calcite (fracture fill).

6340 - 6350 Shale - blackish-grey, very limy, as above, slightly pyritic, some calcite (fracture fill).

6350 - 6360 Shale - black to blackish-grey, very limy, chunky, hard, trace pyritic, some calcite (fracture fill).

6360 - 6370 Shale - black, very limy, as above, some pyritic, common calcite (fracture fill), trace light grey chert.

6370 - 6380 Shale - blackish-grey, very limy, chunky, hard, common calcite (fracture fill), trace pyrite, trace slickensides.

6380 - 6390 Shale - black, some speckled light grey, very limy, as above, some calcite (fracture fill).

6390 - 6400 Shale - black, very limy, some mottled light grey and grading to limestone, common calcite (fracture fill), trace pyrite.

## SAMPLE DESCRIPTIONS (cont'd)

| | |
|---|---|
| 6400 - 6410 | Shale - dark grey, very limy, as above, trace pyrite, trace calcite (fracture fill). |
| 6410 - 6420 | Shale - blackish-grey, very limy, chunky, hard, trace pyrite, some calcite (fracture fill). |
| 6420 - 6430 | Shale - black, very limy, some mottled light grey, trace pyrite, some calcite (fracture fill). |
| 6430 - 6440 | Shale - blackish-grey to dark grey, very limy, chunky, hard, with common calcite (fracture fill). |
| 6440 - 6450 | Shale - dark grey, very limy, as above, some calcite (fracture fill). |
| 6450 - 6460 | Shale - dark grey, very limy, chunky, medium hard, with some calcite filled fractures, trace pyrite. |
| 6460 - 6470 | Shale - medium to dark grey, very limy, some finely speckled light grey and grading in part to limestone, trace calcite filled fractures. |
| 6470 - 6480 | Shale - blackish-grey, very limy, trace pyrite, chunky, hard, some calcite filled fractures, with thin interbeds of limestone, light grey, some dark grey, crypto-x-lline, very argillaceous, no visible porosity. |
| 6480 - 6490 | Shale - blackish-grey, very limy, as above, trace pyrite, trace light grey chert, with trace calcite filled fractures. |
| 6490 - 6500 | Shale - dark grey, very limy, trace pyritic, trace fractures filled with calcite. |
| 6500 - 6510 | Shale - blackish-grey, very limy, chunky, hard, trace pyrite, trace fractures filled with calcite. |
| 6510 - 6520 | Shale - dark grey to blackish-grey, as above, with thin interbeds of limestone, light grey mottled dark grey in part, micro-x-lline, very argillaceous, no visible porosity. |
| 6520 - 6530 | Limestone - light grey, mottled dark in part, micro-x-lline, argillaceous, no visible porosity, with many interbeds of shale, blackish-grey, very limy, as above, with some calcite (fracture fill). |

SAMPLE DESCRIPTIONS (cont'd)

6530 - 6540 Limestone - mottled light and dark grey, some dark grey, crypto-x-lline, very argillaceous, shaly in part, no visible porosity, some calcite (fracture fill), with thin interbeds of shale, blackish-grey, very limy, as above.

6540 - 6550 Shale - dark grey to blackish-grey, very limy, chunky, hard, with some calcite (fracture fill).

6550 - 6560 Shale - dark grey, very limy, as above, trace pyrite, some calcite (fracture fill), with thin interbeds of limestone, light grey, some mottled light and dark grey, crypto-x-lline, argillaceous, no visible porosity.

6560 - 6570 Shale - dark grey, very limy, as above, some calcite, (fracture fill), with very thin interbeds of above limestone.

6570 - 6580 Shale - dark grey, very limy in part, chunky, hard, with some calcite (fracture fill), stringer of above limestone.

6580 - 6590 Shale - dark grey, some medium grey, very limy, chunky, hard, with some calcite (fracture fill).

6590 - 6600 Shale - dark grey, very limy, as above, trace pyrite, trace calcite (fracture fill).

6600 - 6610 Shale - dark grey, very limy, some calcite (fracture fill).

6610 - 6620 Shale - dark grey, very limy, as above, some calcite (fracture fill).

6620 - 6630 Shale - dark grey, very limy, chunky, hard, with some calcite (fracture fill).

6630 - 6640 Chert - blackish-grey, (replaced limestone), very hard, some calcite (fracture fill) and many interbeds of shale, dark grey, very limy, as above, and limestone, medium grey, crypto-x-lline, very argillaceous, no visible porosity.

6640 - 6650 Shale - dark grey to black, very limy, chunky, hard, with common calcite (fracture fill), with some black chert, as above.

SAMPLE DESCRIPTIONS (cont'd)

| | |
|---|---|
| 6650 - 6660 | Shale - dark grey to black, very limy, chunky, hard, with some calcite (fracture fill). |
| 6660 - 6670 | Shale - black, very limy, as above, with common calcite (fracture fill). |
| 6670 - 6680 | Shale - black, very limy, chunky, hard, with common calcite (fracture fill). |
| 6680 - 6690 | Shale - black, very limy, as above, with some calcite (fracture fill), and many interbeds of limestone, light grey, occasionally black, crypto-x-lline, very argillaceous, no visible porosity. |
| 6690 - 6700 | Shale - dark grey to black, very limy, chunky, hard, with some calcite (fracture fill) and interbeds of limestone, mottled light and dark grey, some dark grey, very argillaceous, shaly, no visible porosity. |
| 6700 - 6710 | Shale - dark grey, very limy, as above, trace pyrite, some calcite (fracture fill), with stringer of above limestone. |
| 6710 - 6720 | Shale - dark grey to black, very limy, slightly pyritic, chunky, hard, grading to a very argillaceous limestone, some calcite (fracture fill), trace black chert. |
| 6720 - 6730 | Limestone - dark grey to black, very argillaceous, shaly, no visible porosity, with some calcite (fracture fill), with thin interbeds of shale, dark grey, as above. |
| 6730 - 6740 | Limestone - mottled light and dark grey, very argillaceous, shaly, no visible porosity, some calcite (fracture fill), with trace of light grey and dark grey chert. |
| 6740 - 6745 | Circulated sample - Limestone - light grey, some mottled light and dark grey, crypto-x-lline to micro-x-lline, very argillaceous, some marly, no visible porosity, with many interbeds of shale, dark grey, very limy, chunky, hard, some calcite (fracture fill). |

BJ BORG WARNER

TESTING REPORT

# DRILL-STEM TEST DATA

| | | | |
|---|---|---|---|
| Well Name | UNION AKLAVIK | Test No. | 1 |
| Well Number | F-38 | Zone Tested | SAND |
| Company | UNION OIL OF CANADA LTD. | Interval | 4975 - 4950 |
| Comp. Rep. | J. HARRIS / B. MCINTOSH | Tester BUDVARSON | Date MAY 10, 1973 |

Type of Test DUAL BOTTOM HOLE RFS Tool No.

Preflow 10 mins. ISI 65 mins. Flow 124 mins. FSI 134 mins.

| | IN REC. No. 1232 | OUT REC. No. 2659 | REC. No. |
|---|---|---|---|
| DEPTH | 6100 RANGE 12 HR. CLOCK | 6300 RANGE 24 HR. CLOCK | RANGE HR. CLOCK |
| Initial Hydro Mud Press | 4933 | 4968 | |
| Initial Shut-In Press | 2751 | 2778 | |
| Initial Flow Press | 2319 | 2337 | |
| Final Flow Press | 594 | 639 | |
| Final Shut-In Press | 1612 | 1633 | |
| Final Hydro Mud Press | 2317 | 2336 | |
| | 2735 | [illegible]3 | |

Mud Drop NIL
Viscosity 72
Top Packer Depth 4944
Drill Pipe Size 4" 3.5 IF
Surface Choke Size CLOSED
Anchor Size 4.750 OD
Cushion Amount

Fluid Loss
Temperature °F 146
Bottom Packer Depth 4950
Wt. 13.50 Drill Collar I.D. 2.875
Bottom Choke Size 0.5
Rat Hole Size
Type

Mud Weight 10.7
Net Pay Tested
Total Depth 4975
Ft. Run 530
Main Hole Size 8.5
Feet of Rat Hole
Rubber Size 7.500

Fluid Recovery Total Feet 3497
Recovered 270 Feet of WATER CUT DRILLING MUD
Recovered 1600 Feet of MUDDY WATER
Recovered 1627 Feet of WATER (5500 PPM CHLORIDES)
Recovered Feet of
Recovered Feet of

Gas Recovery How Measured Riser size:

| | | | | | | |
|---|---|---|---|---|---|---|
| mins. | Temp. °F | Press Rdg. | psi | Orifice Size | = | MCF/Day |
| mins. | Temp. °F | Press Rdg. | psi | Orifice Size | = | MCF/Day |
| mins. | Temp. °F | Press Rdg. | psi | Orifice Size | = | MCF/Day |
| mins. | Temp. °F | Press Rdg. | psi | Orifice Size | = | MCF/Day |
| mins. | Temp. °F | Press Rdg. | psi | Orifice Size | = | MCF/Day |
| mins. | Temp. °F | Press Rdg. | psi | Orifice Size | = | MCF/Day |

Bleed Off Time for Drill Pipe

REMARKS:

WEAK BLOW ON PREFLOW INCREASING TO GOOD BLOW. GOOD BLOW ON INITIAL FLOW. REMAINING CONSTANT THROUGHOUT FLOW PERIOD.

A Core Lab Gas Cont. No.

Chem - Geo. Lab Gas Cont. No.

BJ BORG WARNER

# TESTING REPORT

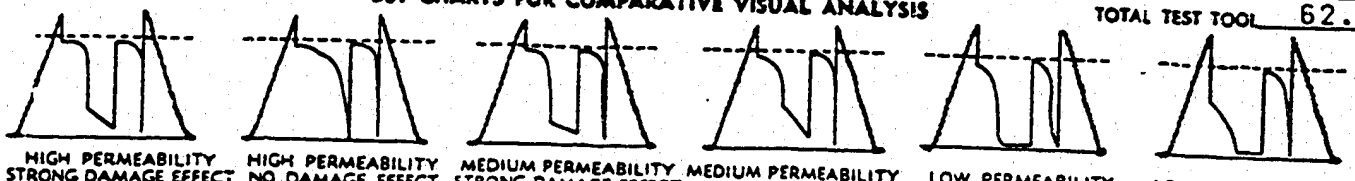
WEIGHT INDICATER READING

PRIOR TO SETTING PACKERS

AFTER PULL PACKERS LOOSE

| | | ID | OD | LENGTH | |
|---|---|---|---|---|---|
| | 4S LANDING SUB | | | | |
| | 4S CHAMBER | | | | |
| | ~~XXXXXXX~~ P.O. SUB | | | 1.00 | |
| | CO SUB | | | 1.00 | |
| | SHUT IN TOOL | | 4¾ | 5.20 | |
| | R.F.S. No. | 2¼ | 4¾ | | |
| | R.F.S. No. | 2¼ | 4¾ | | |
| | HYDRAULIC TOOL | | 4¾ | 7.15 | |
| | JARS LEE | 1 | 4¾ | 5.50 | |
| | RECORDER No. 1232 | 2¼ | 4¾ | 5.00 | DEPTH 4933 |
| | RECORDER No. | 2¼ | 4¾ | | DEPTH |
| | SAFETY JOINT | 2 11/16 | 4¾ | 1.75 | |
| | BY PASS SUB | 1 5/32 | 4¾ | | |
| 1. | PACKER DEPTH 4944 | | | | |
| | PACKER | 1 OR ⅞ | | 6.00 | |
| 2. | PACKER DEPTH 4950 | | | | |
| | PACKER | 1 or ⅞ | | 5.00 | TOOL ABOVE INTERVAL 37.60 |
| | ANCHOR—SPECIFY | 2½ | | 1.00 | |
| | PERFS | | | 6.00 | |
| | SLOTTED | | | 10.00 | |
| | BLANK OFF OR BY PASS SUB | 1 5/32 | 4¾ | | |
| | RECORDER No. 2659 | 2¼ | 4¾ | 5.00 | DEPTH 4968 |
| 3. | PACKER DEPTH | | | | |
| | PACKER | 1 OR ⅞ | | | TOTAL INTERVAL 25.00 |
| 4. | PACKER DEPTH | | | | |
| | PACKER | 1 OR ⅞ | | | |
| | ANCHOR—SPECIFY | 2½ | | | |
| | RECORDER No | 2¼ | 4¾ | | DEPTH |
| TC | DEPTH 4975 | | | | |
| | BULLNOSE | 2¾ | 4¾ | 3.00 | TOTAL TAIL PIPE |
| | | | | | TOTAL TEST TOOL 62.60 |

DST CHARTS FOR COMPARATIVE VISUAL ANALYSIS



B

HIGH PERMEABILITY STRONG DAMAGE EFFECT

HIGH PERMEABILITY NO DAMAGE EFFECT

MEDIUM PERMEABILITY STRONG DAMAGE EFFECT

MEDIUM PERMEABILITY NO DAMAGE EFFECT

LOW PERMEABILITY STRONG DAMAGE EFFECT

LOW PERMEABILITY NO DAMAGE EFFECT

BJ BORG WARNER

TESTING REPORT
PAGE 1

WELL NAME: UNION AKLAVIK
WELL LOCATION: F-38
FORMATION: SAND

RFC NO. 2659
DST NO. 1
DEPTH 4968

TIME - PRESSURE INCREMENTS

| REMARKS | TIME MIN. | PRESSURE PSIG | T+DELTA(T)/ DELTA(T) |
|---|---|---|---|
| RUN IN HOLE | 0. | 0. | |
| | 147.0 | 2778.0 | |
| INITIAL HYDRO PRESSURE | 178.0 | 2778.0 | |
| INITIAL PREFLOW PRESSURE | 0. | 477.4 | |
| FINAL PREFLOW PRESSURE | 10.0 | 591.9 | |
| START INITIAL SHUT-IN | 0. | 591.9 | |
| | 5.0 | 2030.4 | 3.00 |
| | 10.0 | 2293.9 | 2.00 |
| | 15.0 | 2313.1 | 1.67 |
| | 20.0 | 2321.1 | 1.50 |
| | 25.0 | 2330.7 | 1.40 |
| | 30.0 | 2333.9 | 1.33 |
| | 40.0 | 2333.9 | 1.25 |
| | 50.0 | 2335.5 | 1.20 |
| | 60.0 | 2337.1 | 1.17 |
| INITIAL SHUT-IN PRESSURE | 65.0 | 2337.1 | 1.15 |
| START FLOW PERIOD | 0. | 2337.1 | |
| INITIAL FLOW PRESSURE | 1.0 | 638.7 | |
| | 5.0 | 704.8 | |
| | 10.0 | 812.9 | |
| | 20.0 | 888.7 | |
| | 30.0 | 972.6 | |
| | 40.0 | 1068.5 | |
| | 50.0 | 1156.1 | |
| | 60.0 | 1234.1 | |
| | 70.0 | 1308.9 | |
| | 80.0 | 1377.4 | |
| | 90.0 | 1444.3 | |

WELL NAME: UNION AKLAVIK
WELL LOCATION: F-38
FORMATION: SAND

REC NO. 2659
DST NO. 1
DEPTH 4968

## TIME - PRESSURE INCREMENTS

| REMARKS | TIME MIN. | PRESSURE PSIG | T+DELTA(T)/ DELTA(T) |
|---|---|---|---|
| | 100.0 | 1503.2 | |
| | 110.0 | 1559.0 | |
| FINAL FLOW PRESSURE | 124.0 | 1633.8 | |
| START FINAL SHUT-IN | 0. | 1633.8 | |
| | 5.0 | 2266.8 | 27.80 |
| | 10.0 | 2293.9 | 14.40 |
| | 15.0 | 2303.5 | 9.93 |
| | 20.0 | 2311.5 | 7.70 |
| | 25.0 | 2316.3 | 6.36 |
| | 30.0 | 2317.9 | 5.47 |
| | 40.0 | 2321.1 | 4.35 |
| | 50.0 | 2324.3 | 3.68 |
| | 60.0 | 2329.1 | 3.23 |
| | 70.0 | 2330.7 | 2.91 |
| | 80.0 | 2330.7 | 2.68 |
| | 90.0 | 2332.3 | 2.49 |
| | 100.0 | 2332.3 | 2.34 |
| | 110.0 | 2333.9 | 2.22 |
| | 120.0 | 2333.9 | 2.12 |
| FINAL SHUT-IN PRESSURE | 134.0 | 2335.5 | 2.00 |
| RUN OUT OF HOLE | 0. | 2335.5 | |
| FINAL HYDRO PRESSURE | 1.0 | 2742.8 | |
| | 10.0 | 2742.8 | |
| OUT OF HOLE | 173.0 | 0. | |

WELL NAME: UNION AKLAVIK
WELL LOCATION: F-38
FORMATION: SAND
RECOVERY TYPE USED IN CALCULATIONS: WATER

REC NO. 2659
DST NO. 1
DEPTH 4968
INTERVAL 4950 - 4975

## SUMMARY OF CALCULATIONS

### 1 FIRST SHUT-IN

| | |
|---|---|
| EXTRAPOLATED FORMATION PRESSURE | 2343.3 PSIG |
| SLOPE OF EXTRAPOLATED LINE | 97.76 PSI/CYCLE |
| ROOT MEAN SQUARE DEVIATION OF FITTED LINE | 0.18 PSI |
| NUMBER OF POINTS IN SHUT-IN | 11 |
| NUMBER OF POINTS USED FOR EXTRAPOLATION | 4 |

### 2 SECOND SHUT-IN

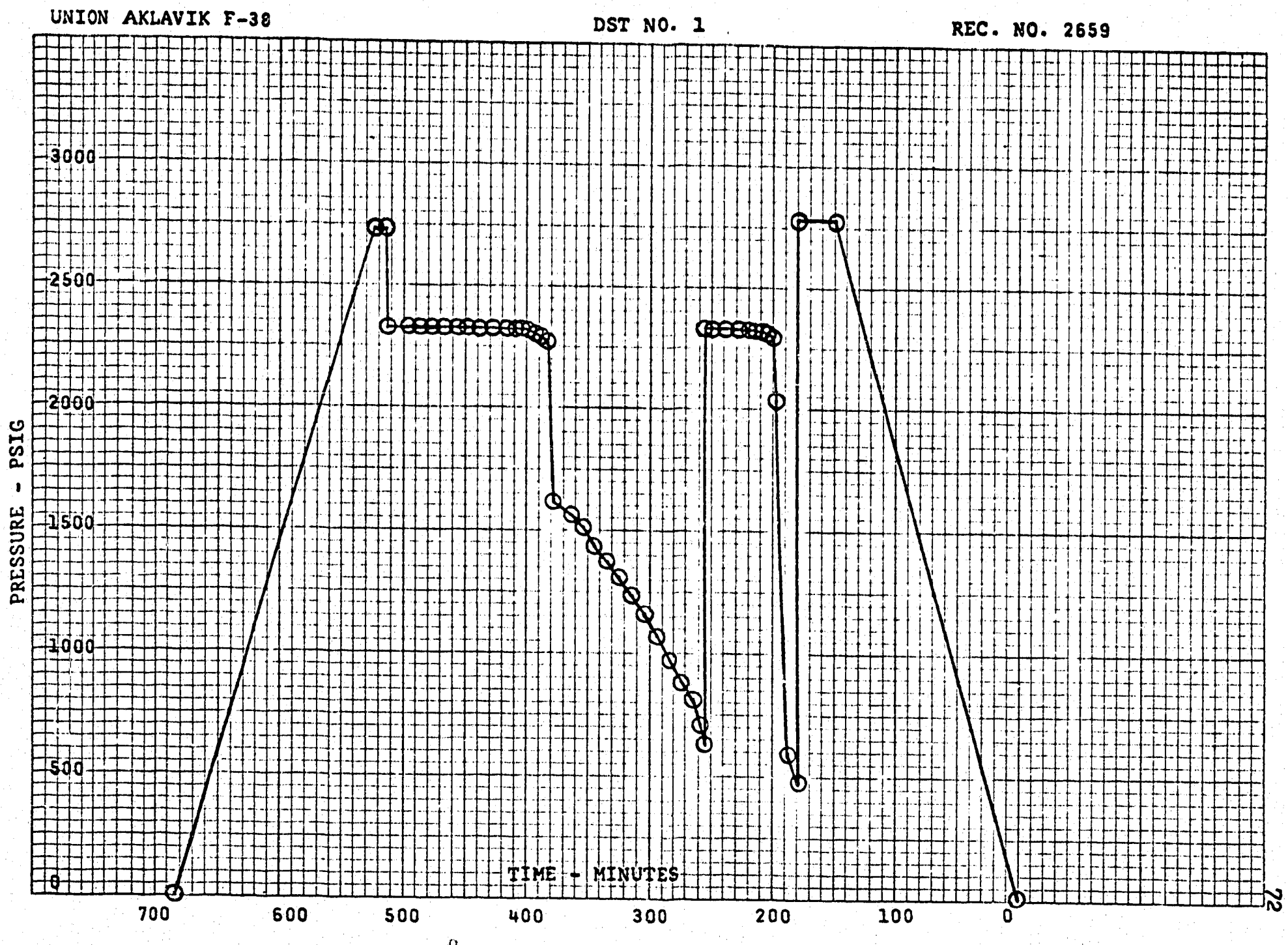
| | |
|---|---|
| EXTRAPOLATED FORMATION PRESSURE | 2343.5 PSIG |
| SLOPE OF EXTRAPOLATED LINE | 28.54 PSI/CYCLE |
| ROOT MEAN SQUARE DEVIATION OF FITTED LINE | 0.44 PSI |
| NUMBER OF POINTS IN SHUT-IN | 17 |
| NUMBER OF POINTS USED FOR EXTRAPOLATION | 8 |
| DIFFERENCE (2ND-1ST EXTRAPOLATION) | 0.1 PSI |

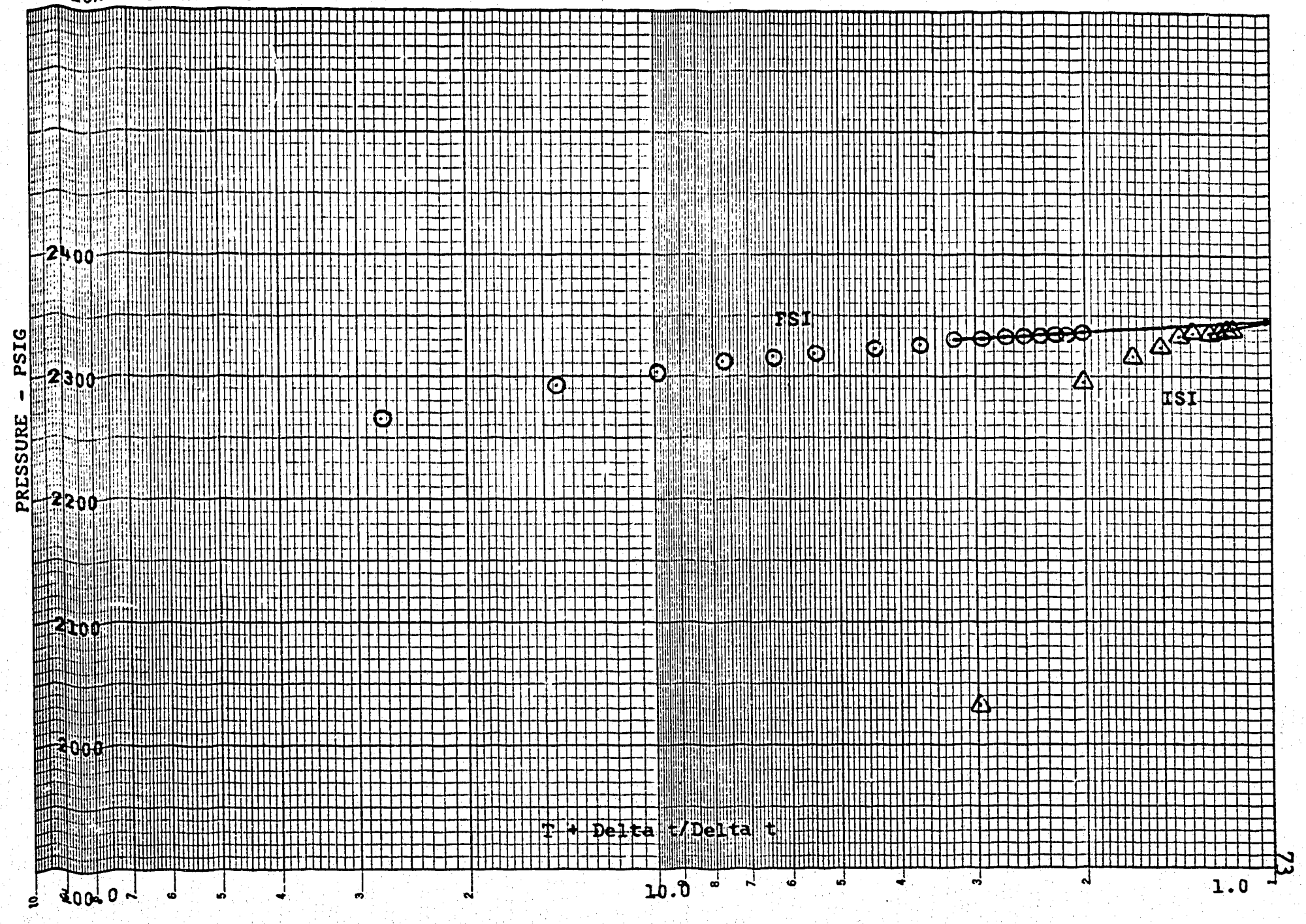
### 3 RESERVOIR AND FLUID PROPERTIES

| | |
|---|---|
| NET PAY | 25.00 FT |
| RESERVOIR POROSITY | 15.00 PERCENT |
| PRODUCTION RATE | 260.9 BPD |
| FORMATION VOLUME FACTOR | 1.000 RB/STB |
| FLUID VISCOSITY | 0.480 C.P. |
| TOTAL COMPRESSIBILITY X 10-6 | 7.000 /PSI |
| RESERVOIR TEMPERATURE | 146.0 F |
| FINAL FLOWING PRESSURE | 1633.8 PSIG |
| TOTAL FLOW TIME | 134.0 MIN |

### 4 CALCULATION RESULTS

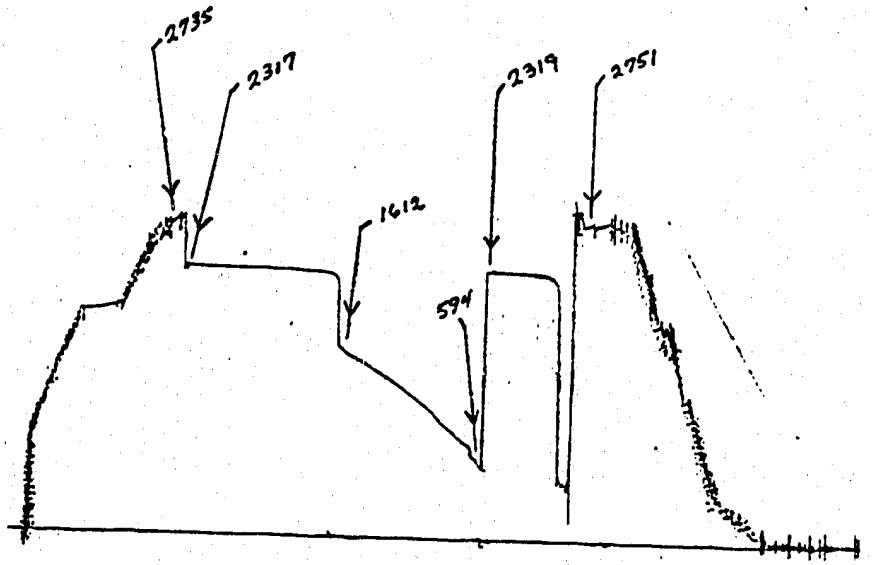
| | |
|---|---|
| ESTIMATED DAMAGE RATIO | 4.31 |
| PERMEABILITY THICKNESS | 712.9 MD FT |
| PERMEABILITY | 28.52 MD |
| SKIN FACTOR | 21.97 |
| APPROXIMATE DRAINAGE RADIUS | 364.0 FT |
| PRODUCTIVITY INDEX | 0.368 BPD/PSI |
| PRODUCTION WITH DAMAGE REMOVED | 1123.6 BPD |


UNION AKLAVIK F-38
DST NO. 1
REC. NO. 2659
PRESSURE - PSIG
3000
2500
2000
1500
1000
500
0
TIME - MINUTES
700
600
500
400
300
200
100
0
72

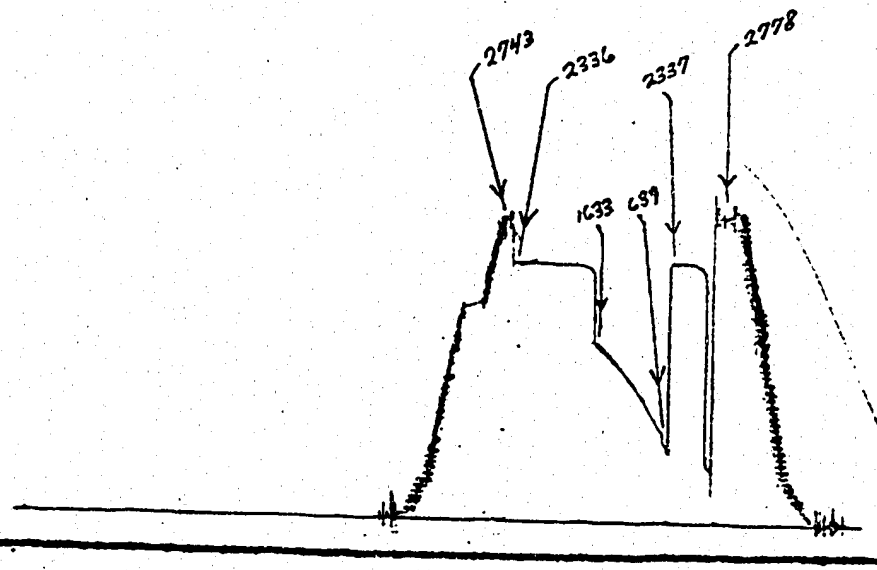

UNION AKLAVIK F-38
DST NO. 1
P* = 2343.5 PSIG
PRESSURE - PSIG
2400
2300
2200
2100
2000
FSI
ISI
T + Delta t/Delta t
10.0
1.0

# DST RECORDER CHARTS

UNION AKLAVIK F-38
DST NO. 1
INISIDE REC. NO. 1232




UNION AKLAVIK F-38
DST NO. 1
OUTSIDE REC. NO. 2559



# DRILL-STEM TEST DATA

| | | | |
|---|---|---|---|
| Well Name | UNION AKLAVIK | Test No. | 2 |
| Well Number | F-38 | Zone Tested | LIMESTONE |
| Company | UNION OIL CO. OF CANADA LTD. | Interval | 6060 - 6327 |
| Comp. Rep. | B. MCINTOSH / B. MCRAE | Tester | BUDVARSON |
| | | Date | JUNE 3, 1973 |

Type of Test: DUAL BOTTOM HOLE — RFS Tool No. 51

Preflow 6 mins. ISI 45 mins. Flow 30 mins. FSI 60 mins.

| | IN REC. No. 1232 | OUT REC. No. 2659 | REC. No. |
|---|---|---|---|
| | 6100 RANGE 12 HR. CLOCK | 6300 RANGE 24 HR. CLOCK | RANGE HR. CLOCK |
| DEPTH | 6043 | 6119 | |
| Initial Hydro Mud Press | 3096 | 3141 | |
| Initial Shut-In Press | 2400 | 2438 | |
| Initial Flow Press | 2400 | 2438 | |
| Final Flow Press | 27 | 75 | |
| Final Shut-In Press | 2442 | 2481 | |
| Final Hydro Mud Press | 3115 | 3161 | |

Mud Drop NIL
Viscosity 65
Top Packer Depth
Drill Pipe Size 4" 3.5 IF
Surface Choke Size CLOSED
Anchor Size 4.75 O.D.
Cushion Amount

Fluid Loss 10.0
Temperature °F 148
Bottom Packer Depth 6060
Wt. 13.30 Drill Collar I.D. 2.875
Bottom Choke Size 0.5
Rat Hole Size
Type

Mud Weight 9.9
Net Pay Tested
Total Depth 6327
Ft. Run 270
Main Hole Size 8.5
Feet of Rat Hole
Rubber Size 7.5 X 2

Fluid Recovery Total Feet 45

Recovered Feet of
Recovered 45 Feet of SLIGHTLY GAS CUT DRILLING MUD
Recovered Feet of
Recovered Feet of
Recovered Feet of

Gas Recovery — How Measured — Riser size:

| | | | | | | |
|---|---|---|---|---|---|---|
| mins. | Temp. °F | Press Rdg. | psi | Orifice Size | = | MCF/Day |
| mins. | Temp. °F | Press Rdg. | psi | Orifice Size | = | MCF/Day |
| mins. | Temp. °F | Press Rdg. | psi | Orifice Size | = | MCF/Day |
| mins. | Temp. °F | Press Rdg. | psi | Orifice Size | = | MCF/Day |
| mins. | Temp. °F | Press Rdg. | psi | Orifice Size | = | MCF/Day |
| mins. | Temp. °F | Press Rdg. | psi | Orifice Size | = | MCF/Day |

Bleed Off Time for Drill Pipe

REMARKS:

VERY WEAK AIR BLOW ON PREFLOW. NO BLOW ON FLOW PERIOD. RESET TOOL.
DECLARED A MISRUN - TOOL PLUGGED ON FLOW PERIOD.

A Core Lab Gas Cont. No.

Chem - Geo. Lab Gas Cont. No.

BJ BORG-WARNER

# TESTING REPORT

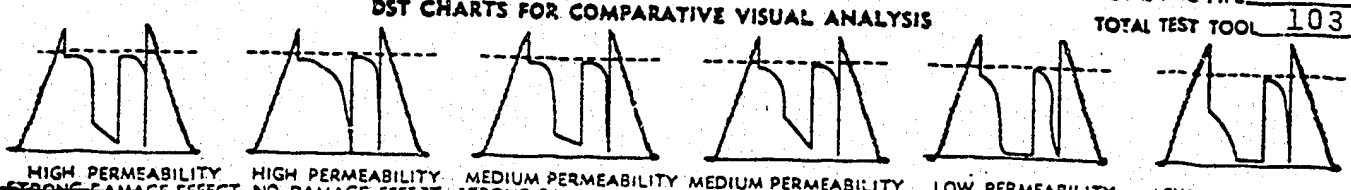
WEIGHT INDICATER READING

PRIOR TO SETTING PACKERS

AFTER PULL PACKERS LOOSE

| | ID | OD | LENGTH | |
|---|---|---|---|---|
| 4S LANDING SUB | | | | |
| 4S CHAMRER | | | | |
| P.O. SUB (370' ABOVE TOOL) | | | 1.00 | |
| CO SUB | | | 1.00 | |
| SHUT IN TOOL | | 4¾ | 5.20 | |
| R.F.S. No. 51 | 2¼ | 4¾ | 3.35 | |
| R.F.S. No. | 2¼ | 4¾ | | |
| HYDRAULIC TOOL | | 4¾ | 7.15 | |
| JARS LEE | 1 | 4¾ | 5.50 | |
| RECORDER No. 1232 | 2¼ | 4¾ | 5.00 | DEPTH 6043 |
| RECORDER No. | 2¼ | 4¾ | | DEPTH |
| SAFETY JOINT | 2 11/16 | 4¾ | 1.75 | |
| BY PASS SUB | 1 5/32 | 4¾ | | |
| 1. PACKER DEPTH 6054 PACKER | 1 OR ⅞ | | 6.00 | |
| 2. PACKER DEPTH 6060 PACKER | 1 or ⅞ | | 5.00 | TOOL ABOVE INTERVAL 40.95 |
| ANCHOR—SPECIFY | 2½ | | 1.00 | |
| SLOTS | | | 10.00 | |
| PERFS | | | 47.00 | |
| BLANK OFF OR BY PASS SUB | 1 5/32 | 4¾ | | |
| RECORDER No. 2659 | 2¼ | 4¾ | 1.00 | DEPTH 6119 |
| | | | | |
| | | | | |
| 3. PACKER DEPTH PACKER | 1 OR ⅞ | | | TOTAL INTERVAL 267.00 |
| 4. PACKER DEPTH PACKER | 1 OR ⅞ | | | |
| ANCHOR—SPECIFY | 2½ | | | |
| | | | | |
| | | | | |
| RECORDER No | 2¼ | 4¾ | | DEPTH |
| DRILL COLLARS | | | 263.00 | |
| C.O.SUB | | | 1.00 | |
| | | | | |
| TOP DEPTH 6327 BULLNOSE | 2¼ | 4¾ | 3.00 | TOTAL TAIL PIPE 267 |
| | | | | TOTAL TEST TOOL 103.95 |

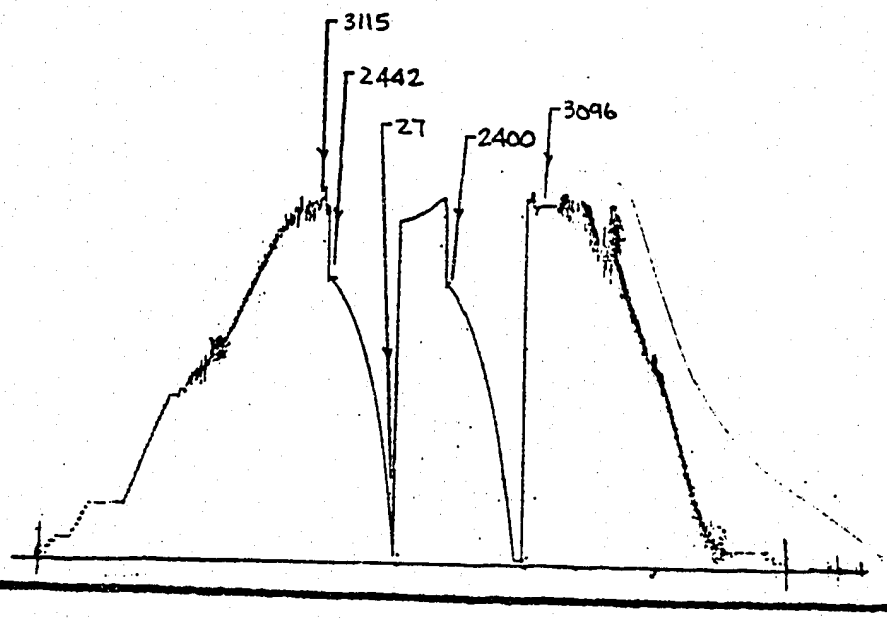
DST CHARTS FOR COMPARATIVE VISUAL ANALYSIS



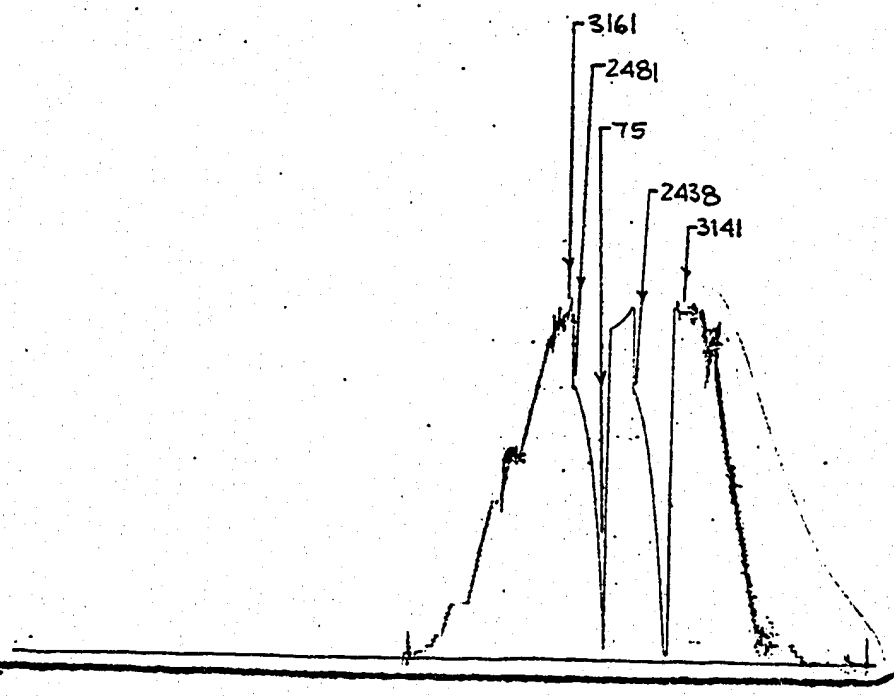
HIGH PERMEABILITY STRONG DAMAGE EFFECT | HIGH PERMEABILITY NO DAMAGE EFFECT | MEDIUM PERMEABILITY STRONG DAMAGE EFFECT | MEDIUM PERMEABILITY NO DAMAGE EFFECT | LOW PERMEABILITY STRONG DAMAGE EFFECT | LOW PERMEABILITY NO DAMAGE EFFECT

# DST RECORDER CHARTS

UNION AKLAVIK F-38
DST NO. 2
INSIDE REC. NO. 1232




UNION AKLAVIK F-38
DST NO. 2
OUTSIDE REC. NO. 2659



# CORE LABORATORIES – CANADA LTD.

PETROLEUM RESERVOIR ENGINEERING

## WATER ANALYSIS

78

File 7021-3805 Page 1 of 1

Company Union Oil Company of Canada Limited

Well Union Aklavik F-38 K.B. ____ Grd. 23'

Location 68° 07'15.00 N.L. 135° 09'11.00 W.L. Field Aklavik Area Province ____

Formation ____ Interval ____

Sampled from DST #1 (Top of Tool) by ____

Date sampled May 10/73 Date analysed June 6/73 Analyst L. Kinsella

Recovery ____

____ Mud type ____ Water cushion ____

Resistivity 0.562 Ohm-meters @ 80 °F

Specific gravity 1.0068 @ 60°F

pH 8.2 $H_2S$ Absent

Refractive Index 1.3336 @ 72°F

Total Solids:

Calculated 10,637 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3853 | 53 | 23 | Trace | Abs. | - | - | 5038 | 1103 | 567 | 0 | 0 |

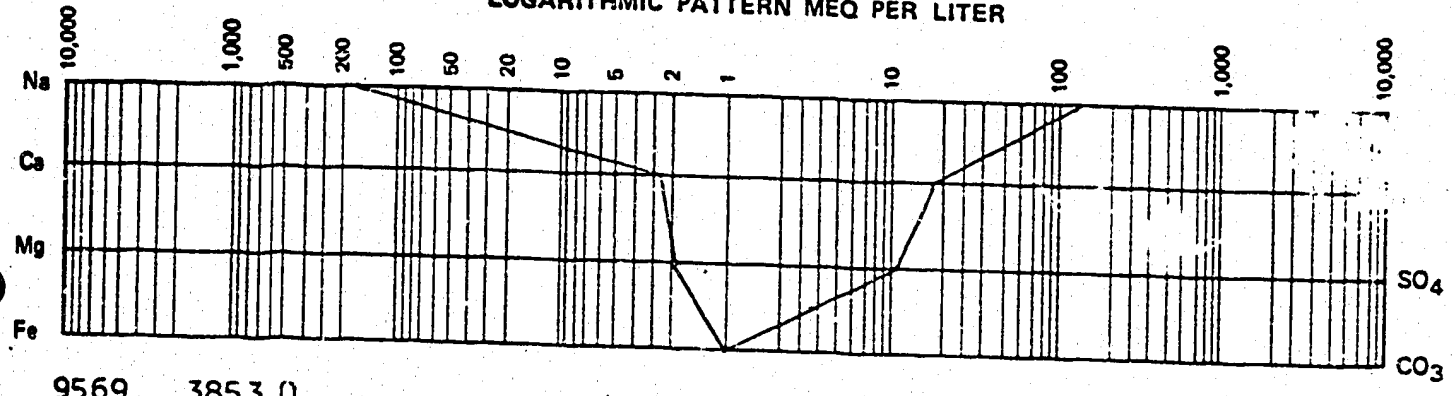
### PER CENT CALCULATED SOLIDS

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 36.2 | .5 | .2 | Trace | Abs. | - | - | 47.4 | 10.4 | 5.3 | .0 | .0 |

### MEQ PER LITER

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 167.5 | 2.6 | 1.9 | Trace | Abs. | - | - | 142.1 | 18.1 | 11.8 | .0 | .0 |

### LOGARITHMIC PATTERN MEQ PER LITER




9569. 3853.0

# DEVIATION RECORD

| DEPTH | ANGLE |
|---|---|
| 70 | 0 |
| 100 | ½ |
| 225 | ¼ |
| 343 | 0 |
| 402 | ¼ |
| 458 | ⅛ |
| 500 | ¼ |
| 608 | 0 |
| 703 | 0 |
| 830 | ¼ |
| 923 | ½ |
| 986 | ½ |
| 1047 | ⅜ |
| 1111 | ¼ |
| 1174 | ½ |
| 1237 | ⅜ |
| 1301 | ⅞ |
| 1333 | ½ |
| 1360 | ½ |
| 1396 | ⅛ |
| 1427 | 1¼ |
| 1456 | ⅞ |
| 1489 | 1 |

| DEPTH | ANGLE |
|---|---|
| 1514 | 1 |
| 1551 | ¾ |
| 1582 | 1 |
| 1614 | 1 |
| 1640 | 1 |
| 1670 | 1 |
| 1710 | ¾ |
| 1740 | ¾ |
| 1770 | ¾ |
| 1801 | ⅞ |
| 1832 | ½ |
| 1870 | ½ |
| 1900 | ½ |
| 1927 | ¼ |
| 1987 | ⅜ |
| 2018 | ⅜ |
| 2049 | ¾ |
| 2080 | ⅜ |
| 2120 | ½ |
| 2142 | ½ |
| 2174 | ⅛ |
| 2210 | ¾ |
| 2228 | ⅛ |

# DEVIATION RECORD

| DEPTH | ANGLE |
|---|---|
| 2237 | 1/8 |
| 2300 | 1/2 |
| 2335 | 5/8 |
| 2350 | 7/8 |
| 2363 | 7/8 |
| 2400 | 7/8 |
| 2430 | 7/8 |
| 2460 | 1 |
| 2490 | 1 |
| 2525 | 1 1/8 |
| 2555 | 7/8 |
| 2595 | 3/4 |
| 2616 | 7/8 |
| 2647 | 1 1/2 |
| 2680 | 1 |
| 2710 | 7/8 |
| 2760 | 7/8 |
| 2774 | 1 |
| 2810 | 1 1/2 |
| 2870 | 1 1/2 |
| 2935 | 1 1/2 |
| 3004 | 2 |
| 3040 | 1 1/2 |

| DEPTH | ANGLE |
|---|---|
| 3070 | 1 1/8 |
| 3107 | 1 |
| 3130 | 1 |
| 3145 | 1 1/8 |
| 3260 | 1 1/2 |
| 3290 | 1 5/8 |
| 3320 | 1 7/8 |
| 3350 | 1 1/2 |
| 3366 | 2 |
| 3390 | 1 3/4 |
| 3422 | 1 1/2 |
| 3448 | 1 3/4 |
| 3485 | 1 7/8 |
| 3520 | 1 7/8 |
| 3543 | 1 7/8 |
| 3580 | 2 1/8 |
| 3610 | 2 |
| 3645 | 2 1/4 |
| 3674 | 2 1/4 |
| 3705 | 2 1/4 |
| 3740 | 2 1/8 |
| 3770 | 2 1/8 |
| 3800 | 2 1/8 |

# DEVIATION RECORD

| DEPTH | ANGLE | DEPTH | ANGLE |
|---|---|---|---|
| 3835 | 2 1/8 | 4548 | 3 1/2 |
| 3860 | 2 1/8 | 4568 | 3 1/8 |
| 3890 | 2 1/8 | 4620 | 3 1/8 |
| 3925 | 2 3/4 | 4652 | 3 1/8 |
| 3954 | 2 1/4 | 4683 | 3 1/8 |
| 3990 | 2 1/4 | 4714 | 3 1/8 |
| 4020 | 2 1/2 | 4746 | 3 1/2 |
| 4085 | 2 7/8 | 4777 | 3 1/8 |
| 4123 | 3 | 4809 | 3 |
| 4145 | 3 | 4840 | 3 1/8 |
| 4178 | 3 1/2 | 4870 | 3 1/2 |
| 4206 | 3 | 4902 | 3 1/2 |
| 4233 | 3 | 4935 | 4 |
| 4269 | 3 | 4973 | 3 3/4 |
| 4301 | 3 1/8 | 4998 | 4 |
| 4327 | 3 | 5031 | 3 7/8 |
| 4360 | 3 | 5065 | 4 |
| 4393 | 3 | 5095 | 4 |
| 4423 | 3 | 5116 | 4 |
| 4442 | 3 1/8 | 5155 | 4 3/4 |
| 4453 | 3 | 5199 | 4 1/2 |
| 4485 | 3 | 5248 | 4 3/4 |
| 4529 | 3 1/4 | 5311 | 4 7/8 |

# DEVIATION RECORD

| DEPTH | ANGLE |
|---|---|
| 5394 | 4 7/8 |
| 5466 | 5 1/4 |
| 5660 | 5 1/2 |
| 5624 | 5 1/4 |
| 5718 | 6 |
| 5743 | 6 |
| 5795 | 6 1/8 |
| 5874 | 6 1/2 |
| 5937 | 7 |
| 5974 | 7 3/4 |
| 6008 | 7 1/2 |
| 6039 | 7 1/2 |
| 6103 | 8 |
| 6135 | 8 |
| 6165 | 8 |
| 6238 | 8 |
| 6299 | 8 |
| 6325 | 7 3/4 |
| 6386 | 7 3/4 |
| 6458 | 8 3/4 |
| 6507 | 8 1/8 |
| 6634 | 9 1/2 |
| 6727 | 9 7/8 |
| 6745 | 10 |

## MUD PROPERTIES

| DATE | DEPTH | WEIGHT | VIS | W.L. | P.V. | Y.P. | TEMPERATURE | BACKGROUND GAS |
|---|---|---|---|---|---|---|---|---|
| March 17 | 60 | 10.1 | 100 | 12.0 | 45 | 20 | 65 | -0- |
| March 18 | 375 | 10.3 | 75 | 14.2 | 30 | 30 | 58 | -0- |
| March 19 | 500 | 10.0 | 48 | 12.0 | 12 | 17 | 58 | -0- |
| March 20 | 505 | 10.0 | 54 | 12.2 | -- | -- | -- | -0- |
| March 21 | 505 | 10.0 | 57 | 12.6 | -- | -- | -- | --- |
| March 22 | 505 | ---- | -- | ---- | -- | -- | -- | --- |
| March 23 | 505 | 9.6 | 50 | 14.0 | 18 | 14 | 85 | -0- |
| March 24 | 830 | 9.1 | 30 | 10.0 | 3 | 4 | 60 | -0- |
| March 25 | 1032 | 9.6 | 40 | 8.0 | 16 | 8 | 77 | 1 |
| March 26 | 1194 | 9.7 | 45 | 7.9 | 18 | 7 | 72 | 2 |
| March 27 | 1396 | 9.7 | 38 | 9.8 | 13 | 7 | 77 | 2 |
| March 28 | 1497 | 10.1 | 53 | 9.2 | 25 | 17 | 77 | 2 |
| March 29 | 1620 | 9.8 | 58 | 7.2 | 20 | 35 | 90 | 1 |
| March 30 | 1714 | 10.4 | 67 | 7.2 | 33 | 17 | 87 | 1 |
| March 31 | 1863 | 10.5 | 70 | 8.4 | 28 | 20 | 90 | 1 |
| April 1 | 2001 | 10.2 | 79 | 8.4 | 31 | 26 | 97 | 1 |
| April 2 | 2075 | 10.0 | 88 | 10.8 | 31 | 28 | 82 | 1 |
| April 3 | 2206 | 9.5 | 80 | 11.0 | 22 | 24 | 80 | 1 |
| April 4 | 2309 | 10.8 | 42 | 11.2 | 21 | 13 | 75 | 1 |
| April 5 | 2392 | 9.8 | 47 | 10.2 | 22 | 11 | 65 | 1 |
| April 6 | 2526 | 10.1 | 46 | 12.0 | 27 | 9 | 75 | 1 |
| April 7 | 2672 | 10.0 | 50 | 9.5 | 18 | 11 | 75 | 1 |
| April 8 | 2749 | 10.0 | 65 | 10.0 | 24 | 18 | 75 | 1 |

## MUD PROPERTIES

| DATE | DEPTH | WEIGHT | VIS | W.L. | P.V. | Y.P. | TEMPERATURE | BACKGROUND GAS |
|---|---|---|---|---|---|---|---|---|
| April 9 | 2760 | ---- | -- | ---- | -- | -- | -- | - |
| April 10 | 2760 | ---- | -- | ---- | -- | -- | -- | - |
| April 11 | 2873 | 9.7 | 37 | 12.0 | 11 | 3 | 80 | 0 |
| April 12 | 3010 | 9.6 | 34 | ---- | 11 | 3 | 82 | 2 |
| April 13 | 3080 | 10.3 | 60 | 14.0 | 18 | 34 | 60 | 2 |
| April 14 | 3262 | 10.2 | 62 | 7.6 | 24 | 27 | 70 | 0 |
| April 15 | 3354 | 10.2 | 53 | 7.6 | 27 | 23 | 88 | 0 |
| April 16 | 3410 | 10.2 | 45 | 8.4 | 20 | 11 | 76 | 0 |
| April 17 | 3462 | 10.2 | 58 | 7.6 | 30 | 23 | 79 | 0 |
| April 18 | 3537 | 10.1 | 58 | 7.8 | 28 | 26 | 86 | 0 |
| April 19 | 3597 | 10.3 | 53 | 8.0 | 26 | 24 | 85 | 0 |
| April 20 | 3676 | 10.3 | 48 | 8.4 | 24 | 17 | 89 | 1 |
| April 21 | 3747 | 10.3 | 57 | 8.0 | 30 | 30 | 87 | 0 |
| April 22 | 3847 | 10.3 | 55 | 7.8 | 30 | 25 | 87 | 0 |
| April 23 | 3925 | 10.3 | 57 | 8.4 | 31 | 29 | 85 | 0 |
| April 24 | 3954 | 10.3 | 57 | 8.4 | 30 | 30 | 85 | 0 |
| April 25 | 3956 | 10.2 | 50 | 8.0 | 28 | 24 | 76 | 0 |
| April 26 | 4031 | 10.1 | 50 | 8.0 | 26 | 20 | 83 | 0 |
| April 27 | 4085 | 10.8 | 70 | 8.2 | 37 | 38 | 83 | 125 |
| April 28 | 4170 | 10.5 | 55 | 8.0 | 26 | 18 | 83 | 0 |
| April 29 | 4213 | 10.5 | 56 | 9.5 | 24 | 19 | 85 | 0 |
| April 30 | 4275 | 10.6 | 52 | 8.6 | 27 | 18 | 87 | 0 |
| May 1 | 4330 | 10.6 | 54 | 8.6 | 27 | 18 | 87 | 0 |

## MUD PROPERTIES

| DATE | DEPTH | WEIGHT | VIS | W.L. | P.V. | Y.P. | TEMPERATURE | BACKGROUND GAS |
|---|---|---|---|---|---|---|---|---|
| May 2 | 4436 | 10.7 | 70 | 8.2 | 32 | 25 | 85 | 0 |
| May 3 | 4513 | 10.8 | 65 | 8.6 | 31 | 24 | 80 | 0 |
| May 4 | 4568 | 10.7 | 49 | 9.6 | 30 | 20 | 84 | 0 |
| May 5 | 4650 | 10.5 | 60 | 10.0 | 24 | 17 | 85 | 0 |
| May 6 | 4727 | 10.5 | 62 | 8.8 | 30 | 20 | 85 | 0 |
| May 7 | 4784 | 10.6 | 83 | 8.0 | 33 | 29 | 70 | 0 |
| May 8 | 4849 | 10.6 | 62 | 8.4 | 28 | 18 | 85 | 1 |
| May 9 | 4956 | 10.5 | 66 | 8.0 | 29 | 21 | 75 | 2 |
| May 10 | 4975 | 10.7 | 72 | 8.2 | 33 | 29 | 75 | 0 |
| May 11 | 5012 | 10.5 | 52 | 8.0 | 24 | 18 | 75 | 0 |
| May 12 | 5066 | 10.5 | 76 | 8.0 | 31 | 30 | 85 | 0 |
| May 13 | 5086 | 10.5 | 72 | 8.0 | 35 | 32 | 83 | 0 |
| May 14 | 5156 | 10.7 | 67 | 8.4 | 33 | 29 | 87 | 0 |
| May 15 | 5188 | 10.6 | 60 | 8.2 | 32 | 27 | 90 | 0 |
| May 16 | 5222 | 10.6 | 67 | 8.2 | 31 | 29 | 86 | 0 |
| May 17 | 5276 | 10.1 | 72 | 8.8 | 33 | 31 | 88 | 0 |
| May 18 | 5323 | 10.0 | 65 | 8.0 | 29 | 25 | 80 | 0 |
| May 19 | 5381 | 9.8 | 54 | 8.8 | 27 | 21 | 91 | 0 |
| May 20 | 5429 | 9.9 | 90 | 8.0 | 40 | 40 | 92 | 0 |
| May 21 | 5522 | 9.9 | 70 | 8.8 | 34 | 39 | 90 | 0 |
| May 22 | 5657 | 9.9 | 70 | 8.4 | 35 | 40 | 91 | 0 |
| May 23 | 5743 | 10.0 | 63 | 8.4 | 26 | 29 | 94 | 0 |
| May 24 | 5743 | 9.9 | 75 | 9.0 | 35 | 35 | 94 | 0 |

## MUD PROPERTIES

| DATE | DEPTH | WEIGHT | VIS | W.L. | P.V. | Y.P. | TEMPERATURE | BACKGROUND GAS |
|---|---|---|---|---|---|---|---|---|
| May 25 | 5744 | 9.9 | 70 | 9.0 | 35 | 35 | 94 | 0 |
| May 26 | 5799 | 9.9 | 54 | 9.5 | 24 | 21 | 92 | 0 |
| May 27 | 5862 | 9.9 | 55 | 9.2 | 20 | 12 | 95 | 0 |
| May 28 | 5941 | 9.7 | 47 | 11.0 | 16 | 11 | 95 | 0 |
| May 29 | 5987 | 9.8 | 57 | 9.8 | 20 | 15 | 93 | 0 |
| May 30 | 6070 | 9.8 | 65 | 10.0 | 24 | 32 | 92 | 0 |
| May 31 | 6135 | 9.9 | 65 | 9.6 | 22 | 23 | 92 | 0 |
| June 1 | 6200 | 9.9 | 60 | 10.0 | 21 | 23 | 92 | 0 |
| June 2 | 6293 | 9.9 | 60 | 10.8 | 24 | 21 | 93 | 0 |
| June 3 | 6327 | 9.9 | 60 | 8.0 | 25 | 24 | 90 | 0 |
| June 4 | 6345 | 9.8 | 58 | 8.8 | 25 | 21 | 88 | 0 |
| June 5 | 6446 | 9.9 | 50 | 9.6 | 21 | 19 | 93 | 0 |
| June 6 | 6562 | 9.8 | 50 | 9.6 | 18 | 16 | 95 | 0 |
| June 7 | 6702 | 9.8 | 55 | 9.8 | 22 | 26 | 97 | 0 |
| June 8 | 6745 | 9.9 | 63 | 9.8 | 26 | 23 | 96 | 0 |

## BIT RECORD

| NO. | SIZE | TYPE | DEPTH OUT | FOOT-AGE | HOURS | BIT COND. T. | B. | G. | W.O.B. | RPM | PP |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1A | 12¼ | DTJ | 500 | 500 | 28¼ | 1 | 1 | I | 12,000 | 90 | 350 |
| 2A | 17½ | Reamer | 505 | 505 | 16¾ | Good | | | --- | 65 | 400 |
| 1 | 12¼ | DT | 923 | 418 | 17¾ | 4 | 2 | I | 10,000 | 65 | 800 |
| 2 | 12¼ | M4N | 1111 | 118 | 24¾ | 2 | 1 | I | 10,000 | 70 | 850 |
| 1ARR | 12¼ | DT | 1427 | 316 | 37 | 4 | 1 | I | 10,000 | 100 | 800 |
| 3 | 12¼ | DT | 1685 | 258 | 46¼ | 3 | 1 | I | 8,000 | 110 | 850 |
| 4 | 12¼ | DS | 2018 | 333 | 50¾ | 3 | 1 | I | 40,000 | 60 | 1250 |
| 5 | 12¼ | DS | 2228 | 210 | 35¾ | 5 | 2 | I | 40,000 | 35 | 1100 |
| 6 | 12¼ | DMN | 2350 | 122 | 26¼ | 4 | 3 | I | 40,000 | 35 | 1100 |
| 2RR | 12¼ | M4N | 2471 | 121 | 15½ | 4 | 3 | I | 30,000 | 55 | 1100 |
| 7 | 12¼ | DS | 2722 | 252 | 39½ | 3 | 2 | I | 40,000 | 25 | 1400 |
| 8 | 12¼ | DMN | 2760 | 38 | 15 | 2 | 2 | I | 40,000 | 40 | 1300 |
| 9 | 8½ | M4NG | 3005 | 345 | 31½ | 4 | 6 | I | 20,000 | 60 | 1150 |
| 10 | 8½ | DSJ | 3270 | 265 | 33½ | 6 | 8 | I | 35,000 | 40 | 1250 |
| 11 | 8½ | M44N | 3366 | 96 | 19½ | 6 | 2 | I | 20,000 | 65 | 1400 |
| 12 | 8½ | DMJ | 3448 | 112 | 28 | 5 | 5 | I | 25,000 | 35 | 1300 |
| 13 | 8½ | DSJ | 3543 | 95 | 31 | 7 | 4 | I | 30,000 | 35 | 1350 |
| 14 | 8½ | DMJ | 3690 | 147 | 41½ | 6 | 5 | I | 35,000 | 35 | 1300 |
| 15 | 8½ | DSJ | 3892 | 202 | 48 | 7 | 7 | I | 30,000 | 35 | 1300 |
| 16 | 8½ | DSJ | 3954 | 62 | 15¾ | 8 | 4 | I | 35,000 | 35 | 1300 |
| 17 | 8½ | DMJ | 4085 | 131 | 38¾ | 8 | 4 | I | 35,000 | 35 | 1300 |
| 18 | 8½ | DMJ | 4178 | 93 | 26¼ | 6 | 3 | I | 35,000 | 35 | 1300 |
| 19 | 8½ | DMJ | 4233 | 52 | 21 | 6 | 3 | I | 35,000 | 30 | 1300 |

## BIT RECORD

| NO. | SIZE | TYPE | DEPTH OUT | FOOT-AGE | HOURS | BIT COND. T. | B. | G. | W.O.B. | RPM | PP |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20 | 8½ | DSJ | 4327 | 94 | 25½ | 5 | 6 | I | 35,000 | 30 | 1300 |
| 21 | 8½ | M44N | 4442 | 115 | 25¼ | 7 | 3 | 2 | 22,000 | 70 | 1300 |
| 22 | 8½ | M4NG | 4529 | 87 | 19¾ | 5 | 4 | I | 20,000 | 60 | 1300 |
| 23 | 8½ | M44L | 4568 | 39 | 11¾ | 2 | 1 | I | 18,000 | 75 | 1300 |
| 24 | 8½ | M44N | 4727 | 159 | 39¾ | 2 | 1 | I | 20,000 | 65 | 1300 |
| 25 | 8½ | M44N | 4819 | 92 | 32¼ | 3 | 3 | I | 15,000 | 82 | 1300 |
| 26 | 8½ | DSJ | 4975 | 156 | 38¾ | 6 | 6 | I | 40,000 | 30 | 1300 |
| 27 | 8½ | DMJ | 5015 | 40 | 12¾ | 5 | 3 | 0 | 40,000 | 50 | 1300 |
| 28 | 8½ | XDR | 5067 | 52 | 17 | 6 | 3 | 0 | 40,000 | 45 | 1300 |
| 29 | 8½ | XD7 | 5081 | 14 | 6½ | 5 | 1 | I | 40,000 | 45 | 1300 |
| 30 | 8½ | DMJ | 5116 | 35 | 11¼ | 4 | 2 | I | 40,000 | 55 | 1300 |
| 31 | 8½ | M44N | 5167 | 51 | 13 | 8 | 3 | I | 35,000 | 50 | 1300 |
| 32 | 8½ | M44L | 5188 | 21 | 10¼ | 8 | 2 | I | 35,000 | 50 | 1300 |
| 33 | 8½ | DMJ | 5199 | 11 | 5½ | 4 | 2 | I | 40,000 | 40 | 1300 |
| 34 | 8½ | 4JS | 5394 | 195 | 82¼ | 2 | 3 | I | 33,000 | 24 | 1300 |
| 35 | 8½ | M88 | 5743 | 349 | 78½ | 8 | 8 | 0 | 36,000 | 45 | 1300 |
| 36 | 8½ | H77C | 5743 | Reaming | | 3 | 1 | 0 | | | |
| 37 | 8½ | H77C | 5799 | 64 | 19 | 6 | 3 | 0 | 35,000 | 40 | 1300 |
| 38 | 8½ | M88 | 5974 | 175 | 56¼ | 4 | 4 | I | 40,000 | 35 | 1300 |
| 39 | 8½ | 4JS | 6135 | 161 | 45½ | 4 | 4 | I | 28,000 | 40 | 1300 |
| 40 | 8½ | S88 | 6299 | 164 | 44½ | 8 | 4 | I | 30,000 | 40 | 1300 |
| 41 | 8½ | 4JS | 6327 | 28 | 8 | 1 | 1 | I | 30,000 | 40 | 1300 |
| 41RR | 8½ | 4JS | 6507 | 180 | 38½ | 3 | 5 | I | 45,000 | 40 | 1300 |
| 42 | 8½ | 4JS | 6745 | 238 | 43¼ | 7 | 5 | I | 45,000 | 40 | 1300 |

## DAILY DRILLING RECORD

| DATE | DEPTH | PROGRESS | OPERATION | DAYS | REMARKS |
|---|---|---|---|---|---|
| March 17 | 60 | 60 | Drilling | 1 | Spudded Union Aklavik F 38 March 17, 1973, at 6:00 A.M. |
| March 18 | 375 | 315 | Drilling | 2 | Drilling 12¼" hole. |
| March 19 | 500 | 125 | Rig to run hole opener. | 3 | Drilling 12¼" hole. |
| March 20 | 505 | 5 | Rig to run casing. | 4 | Opened hole to 17½". |
| March 21 | 505 | 0 | W.O.C. | 5 | Ran 15 jts of 13⅜"; KS; 68#; U.S.S. casing. Landed at 505 K.B. Cemented with 900 sxs cement plus 3% $CaCl_2$. Good returns. |
| March 22 | 505 | 0 | Installing BOP's. | 6 | |
| March 23 | 505 | 0 | Drilling out shoe. | 7 | Pressure tested BOP's. |
| March 24 | 830 | 335 | Drilling | 8 | Drilling 12¼" hole. |
| March 25 | 1032 | 202 | Drilling | 9 | Drilling 12¼" hole. |
| March 26 | 1194 | 162 | Drilling | 10 | Drilling 12¼" hole. |
| March 27 | 1396 | 202 | Drilling | 11 | Drilling 12¼" hole. |
| March 28 | 1497 | 101 | Drilling | 12 | Drilling 12¼" hole. |
| March 29 | 1620 | 123 | Drilling | 13 | Drilling 12¼" hole. |
| March 30 | 1714 | 94 | Drilling | 14 | Drilling 12¼" hole. Ream 600 ft. bridges and fill. |
| March 31 | 1863 | 149 | Drilling | 15 | Drilling 12¼" hole. |
| April 1 | 2001 | 138 | Drilling | 16 | Drilling 12¼" hole. |
| April 2 | 2075 | 74 | Drilling | 17 | Lost 7¾ hrs. waiting on repairs. |

## DAILY DRILLING RECORD

| DATE | DEPTH | PROGRESS | OPERATION | DAYS | REMARKS |
|---|---|---|---|---|---|
| April 3 | 2206 | 131 | Drilling | 18 | Drilling 12¼" hole. |
| April 4 | 2309 | 103 | Drilling | 19 | Drilling 12¼" hole. |
| April 5 | 2392 | 83 | Drilling | 20 | Drilling 12¼" hole. |
| April 6 | 2526 | 134 | Drilling | 21 | Drilling 12¼" hole. |
| April 7 | 2672 | 146 | Drilling | 22 | Drilling 12¼" hole. |
| April 8 | 2749 | 77 | Drilling | 23 | Strapped pipe. Found hole 2 ft. deeper. |
| April 9 | 2760 | 11 | W.O.C. | 24 | Ran 9⅝"; KS;40# casing to 2760 feet. Cemented with 1300 sxs. |
| April 10 | 2760 | -0- | Running in hole. | 25 | |
| April 11 | 2873 | 113 | Drilling | 26 | Drilling 8½" hole. |
| April 12 | 3010 | 137 | Drilling | 27 | First trip gas 13 units at 3005 feet. |
| April 13 | 3080 | 70 | Drilling | 28 | Trip gas 7 units. |
| April 14 | 3262 | 182 | Drilling | 29 | Drilling 8½" hole. |
| April 15 | 3354 | 92 | Drilling | 30 | No trip gas. |
| April 16 | 3410 | 56 | Drilling | 31 | Drilling 8½" hole. |
| April 17 | 3462 | 52 | Drilling | 32 | Trip gas 2 units. |
| April 18 | 3537 | 75 | Drilling | 33 | Drilling 8½" hole. |
| April 19 | 3597 | 60 | Drilling | 34 | Drilling 8½" hole. |
| April 20 | 3676 | 79 | Drilling | 35 | Drilling 8½" hole. |
| April 21 | 3747 | 71 | Drilling | 36 | Drilling 8½" hole. |
| April 22 | 3847 | 100 | Drilling | 37 | Drilling 8½" hole. |
| April 23 | 3925 | 78 | Circulating sample. | 38 | Drilling 8½" hole. |

## DAILY DRILLING RECORD

| DATE | DEPTH | PROGRESS | OPERATION | DAYS | REMARKS |
|---|---|---|---|---|---|
| April 24 | 3954 | 29 | Waiting on rig repairs. | 39 | Generator panel down. |
| April 25 | 3956 | 2 | Drilling | 40 | Strap pipe.No correction. No trip gas. |
| April 26 | 4031 | 75 | Drilling | 41 | Drilling 8½" hole. |
| April 27 | 4085 | 54 | Tripping | 42 | Fracture gas 125 units. |
| April 28 | 4170 | 85 | Drilling | 43 | Drilling 8½" hole. |
| April 29 | 4213 | 43 | Drilling | 44 | Drilling 8½" hole. |
| April 30 | 4275 | 62 | Drilling | 45 | Drilling 8½" hole. |
| May 1 | 4330 | 55 | Drilling | 46 | Drilling 8½" hole. |
| May 2 | 4436 | 106 | Drilling | 47 | Drilling 8½" hole. |
| May 3 | 4513 | 77 | Drilling | 48 | Drilling 8½" hole. |
| May 4 | 4568 | 55 | Drilling | 49 | Drilling 8½" hole. |
| May 5 | 4650 | 82 | Drilling | 50 | Found hole 10 ft. deeper. Correction made. |
| May 6 | 4727 | 77 | Tripping | 51 | Drilling 8½" hole. |
| May 7 | 4784 | 57 | Drilling | 52 | Drilling 8½" hole. |
| May 8 | 4849 | 65 | Drilling | 53 | Drilling 8½" hole. |
| May 9 | 4956 | 107 | Drilling | 54 | Drilling 8½" hole. |
| May 10 | 4975 | 19 | Testing | 55 | DST #1, 4950-4975 |
| May 11 | 5012 | 37 | Drilling | 56 | Drilling 8½" hole. |
| May 12 | 5066 | 54 | Drilling | 57 | Drilling 8½" hole. |
| May 13 | 5086 | 20 | Drilling | 58 | Drilling 8½" hole. |
| May 14 | 5156 | 70 | Drilling | 59 | Drilling 8½" hole. |
| May 15 | 5188 | 32 | Tripping | 60 | Drilling 8½" hole. |

## DAILY DRILLING RECORD

| DATE | DEPTH | PROGRESS | OPERATION | DAYS | REMARKS |
|---|---|---|---|---|---|
| May 16 | 5222 | 34 | Drilling | 61 | Drilling 8½" hole. |
| May 17 | 5276 | 54 | Drilling | 62 | Drilling 8½" hole. |
| May 18 | 5323 | 47 | Drilling | 63 | Drilling 8½" hole. |
| May 19 | 5381 | 58 | Drilling | 64 | Drilling 8½" hole. |
| May 20 | 5429 | 48 | Drilling | 65 | Drilling 8½" hole. |
| May 21 | 5522 | 93 | Drilling | 66 | Drilling 8½" hole. |
| May 22 | 5657 | 135 | Drilling | 67 | Drilling 8½" hole. |
| May 23 | 5743 | 86 | Fishing | 68 | Fishing for cone. |
| May 24 | 5743 | -0- | Fishing | 69 | Hole badly under guage. |
| May 25 | 5744 | 1 | Drilling | 70 | Recovered one cone and many bearings. |
| May 26 | 5799 | 55 | Tripping | 71 | Drilling 8½" hole. |
| May 27 | 5862 | 63 | Drilling | 72 | Drilling 8½" hole. |
| May 28 | 5941 | 79 | Drilling | 73 | Drilling 8½" hole. |
| May 29 | 5987 | 46 | Drilling | 74 | Strap pipe. No correction. |
| May 30 | 6070 | 83 | Drilling | 75 | Drilling 8½" hole. |
| May 31 | 6135 | 65 | Drilling | 76 | Inspect drill collars. |
| June 1 | 6200 | 65 | Drilling | 77 | Drilling 8½" hole. |
| June 2 | 6293 | 93 | Drilling | 78 | Drilling 8½" hole. |
| June 3 | 6327 | 34 | Preparing to test formation | 79 | Making up testing tools for DST #2. |
| June 4 | 6345 | 18 | Drilling | 80 | DST #2, 6060 to 6327. |
| June 5 | 6446 | 101 | Drilling | 81 | Drilling 8½" hole. |
| June 6 | 6562 | 116 | Drilling | 82 | Drilling 8½" hole. |
| June 7 | 6702 | 140 | Drilling | 83 | Drilling 8½" hole. |
| June 8 | 6745 | 43 | Logging | 84 | Ran BHC Sonic & DIL. |

UNION OIL COMPANY OF CANADA LIMITED

UNION AKLAVIK F-38

JUNE 11/73

| DEPTH | DRIFT ANGLE | TRUE BEARING | HORIZ FOOTAGE | TRUE VERT DEPTH | DEPARTURE E=+,W=- | LATITUDE N=+,S=- | COORDINATES E=+,W=- | COORDINATES N=+,S=- |
|---|---|---|---|---|---|---|---|---|
| LAST READING | 2838 | | | | | | | |
| 2838 | .0 | 360 | .00 | 2838.00 | .00 | .00 | .00 | .00 |
| 2858 | .0 | 360 | .00 | 2858.00 | .00 | .00 | .00 | .00 |
| 2878 | .0 | 360 | .00 | 2878.00 | .00 | .00 | .00 | .00 |
| 2898 | .3 | 180 | .10 | 2898.00 | -.00 | -.10 | -.00 | -.10 |
| 2918 | .3 | 171 | .10 | 2918.00 | .02 | -.10 | .02 | -.21 |
| 2938 | .4 | 175 | .14 | 2938.00 | .01 | -.14 | .03 | -.35 |
| 2958 | .7 | 174 | .24 | 2958.00 | .03 | -.24 | .05 | -.59 |
| 2978 | .9 | 174 | .31 | 2978.00 | .03 | -.31 | .09 | -.90 |
| 3018 | 1.2 | 180 | .84 | 3017.99 | -.00 | -.84 | .09 | -1.74 |
| 3038 | 1.5 | 177 | .52 | 3037.98 | .03 | -.52 | .11 | -2.26 |
| 3058 | 1.6 | 176 | .56 | 3057.97 | .04 | -.56 | .15 | -2.82 |
| 3078 | 1.7 | 178 | .59 | 3077.96 | .02 | -.59 | .17 | -3.41 |
| 3098 | 1.5 | 177 | .52 | 3097.96 | .03 | -.52 | .20 | -3.94 |
| 3118 | 1.4 | 184 | .49 | 3117.95 | -.03 | -.49 | .17 | -4.42 |
| 3138 | 1.5 | 184 | .52 | 3137.94 | -.04 | -.52 | .13 | -4.95 |
| 3158 | 1.4 | 186 | .49 | 3157.94 | -.05 | -.49 | .08 | -5.43 |
| 3178 | 1.1 | 191 | .38 | 3177.93 | -.07 | -.38 | .01 | -5.81 |
| 3198 | 1.1 | 201 | .38 | 3197.93 | -.14 | -.36 | -.13 | -6.17 |
| 3218 | 1.2 | 211 | .42 | 3217.93 | -.22 | -.36 | -.35 | -6.53 |
| 3238 | .7 | 229 | .24 | 3237.92 | -.18 | -.16 | -.53 | -6.69 |
| 3258 | .6 | 251 | .21 | 3257.92 | -.20 | -.07 | -.73 | -6.75 |
| 3278 | .6 | 270 | .21 | 3277.92 | -.21 | .00 | -.94 | -6.75 |
| 3298 | .9 | 277 | .31 | 3297.92 | -.31 | .04 | -1.25 | -6.72 |
| 3318 | 1.0 | 279 | .35 | 3317.92 | -.34 | .05 | -1.60 | -6.66 |
| 3338 | 1.2 | 279 | .42 | 3337.91 | -.41 | .07 | -2.01 | -6.60 |
| 3358 | 1.3 | 276 | .45 | 3357.91 | -.45 | .05 | -2.46 | -6.55 |
| 3398 | 1.2 | 272 | .84 | 3397.90 | -.84 | .03 | -3.30 | -6.52 |
| 3438 | 1.0 | 265 | .70 | 3437.89 | -.70 | -.06 | -3.99 | -6.58 |
| 3458 | .9 | 254 | .31 | 3457.89 | -.30 | -.09 | -4.29 | -6.67 |
| 3478 | .9 | 251 | .31 | 3477.89 | -.30 | -.10 | -4.59 | -6.77 |
| 3498 | .8 | 248 | .28 | 3497.88 | -.26 | -.10 | -4.85 | -6.87 |
| 3518 | .8 | 245 | .28 | 3517.88 | -.25 | -.12 | -5.10 | -6.99 |
| 3538 | .8 | 239 | .28 | 3537.88 | -.24 | -.14 | -5.34 | -7.14 |
| 3558 | .7 | 238 | .24 | 3557.88 | -.21 | -.13 | -5.55 | -7.27 |
| 3578 | .6 | 234 | .21 | 3577.88 | -.17 | -.12 | -5.72 | -7.39 |
| 3598 | .6 | 219 | .21 | 3597.88 | -.13 | -.16 | -5.85 | -7.55 |
| 3618 | .6 | 215 | .21 | 3617.88 | -.12 | -.17 | -5.97 | -7.72 |
| 3638 | .8 | 212 | .28 | 3637.87 | -.15 | -.24 | -6.12 | -7.96 |
| 3658 | .9 | 215 | .31 | 3657.87 | -.18 | -.26 | -6.30 | -8.22 |

GEODIGIT

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 3678 | 1.0 | 213 | .35 | 3677.87 | -.19 | -.29 | -6.49 | -8.51 |
| 3698 | 1.2 | 210 | .42 | 3697.86 | -.21 | -.36 | -6.70 | -8.87 |
| 3718 | 1.3 | 210 | .45 | 3717.86 | -.23 | -.39 | -6.93 | -9.27 |
| 3738 | 1.4 | 211 | .49 | 3737.85 | -.25 | -.42 | -7.18 | -9.68 |
| 3758 | 1.6 | 203 | .56 | 3757.85 | -.22 | -.51 | -7.40 | -10.20 |
| 3778 | 1.7 | 199 | .59 | 3777.84 | -.19 | -.56 | -7.59 | -10.76 |
| 3798 | 1.7 | 199 | .59 | 3797.83 | -.19 | -.56 | -7.78 | -11.32 |
| 3818 | 1.7 | 199 | .59 | 3817.82 | -.19 | -.56 | -7.98 | -11.88 |
| 3838 | 1.7 | 192 | .59 | 3837.81 | -.12 | -.58 | -8.10 | -12.46 |
| 3858 | 1.5 | 204 | .52 | 3857.80 | -.21 | -.48 | -8.31 | -12.94 |
| 3878 | 1.4 | 214 | .49 | 3877.80 | -.27 | -.41 | -8.59 | -13.34 |
| 3898 | 1.8 | 224 | .63 | 3897.79 | -.44 | -.46 | -9.02 | -13.80 |
| 3918 | 1.7 | 219 | .59 | 3917.78 | -.37 | -.46 | -9.40 | -14.26 |
| 3938 | 1.6 | 224 | .56 | 3937.77 | -.39 | -.40 | -9.78 | -14.66 |
| 3958 | 1.6 | 227 | .56 | 3957.76 | -.41 | -.38 | -10.19 | -15.04 |
| 3978 | 1.3 | 232 | .45 | 3977.76 | -.36 | -.28 | -10.55 | -15.32 |
| 3998 | 1.2 | 241 | .42 | 3997.75 | -.37 | -.20 | -10.92 | -15.52 |
| 4018 | 1.2 | 244 | .42 | 4017.75 | -.38 | -.18 | -11.29 | -15.71 |
| 4038 | 1.6 | 243 | .56 | 4037.74 | -.50 | -.25 | -11.79 | -15.96 |
| 4058 | 1.9 | 243 | .66 | 4057.73 | -.59 | -.30 | -12.38 | -16.26 |
| 4078 | 2.0 | 239 | .70 | 4077.72 | -.60 | -.36 | -12.98 | -16.62 |
| 4098 | 2.2 | 240 | .77 | 4097.70 | -.66 | -.38 | -13.64 | -17.00 |
| 4118 | 2.3 | 238 | .80 | 4117.69 | -.68 | -.43 | -14.32 | -17.43 |
| 4138 | 2.4 | 238 | .84 | 4137.67 | -.71 | -.44 | -15.03 | -17.87 |
| 4158 | 2.6 | 236 | .91 | 4157.65 | -.75 | -.51 | -15.79 | -18.38 |
| 4178 | 2.6 | 233 | .91 | 4177.63 | -.72 | -.55 | -16.51 | -18.93 |
| 4198 | 2.7 | 234 | .94 | 4197.61 | -.76 | -.55 | -17.27 | -19.48 |
| 4218 | 2.7 | 234 | .94 | 4217.58 | -.76 | -.55 | -18.04 | -20.03 |
| 4238 | 2.7 | 233 | .94 | 4237.56 | -.75 | -.57 | -18.79 | -20.60 |
| 4258 | 2.7 | 233 | .94 | 4257.54 | -.75 | -.57 | -19.54 | -21.17 |
| 4278 | 2.6 | 230 | .91 | 4277.52 | -.70 | -.58 | -20.24 | -21.75 |
| 4318 | 2.8 | 227 | 1.95 | 4317.47 | -1.43 | -1.33 | -21.66 | -23.08 |
| 4338 | 2.9 | 225 | 1.01 | 4337.45 | -.72 | -.72 | -22.38 | -23.80 |
| 4358 | 3.0 | 218 | 1.05 | 4357.42 | -.64 | -.82 | -23.02 | -24.62 |
| 4378 | 3.1 | 224 | 1.08 | 4377.39 | -.75 | -.78 | -23.78 | -25.40 |
| 4398 | 3.1 | 222 | 1.08 | 4397.36 | -.72 | -.80 | -24.50 | -26.21 |
| 4418 | 3.2 | 224 | 1.12 | 4417.33 | -.78 | -.80 | -25.27 | -27.01 |
| 4438 | 3.2 | 223 | 1.12 | 4437.30 | -.76 | -.82 | -26.04 | -27.83 |
| 4478 | 3.3 | 223 | 2.30 | 4477.23 | -1.57 | -1.68 | -27.61 | -29.51 |
| 4498 | 3.5 | 226 | 1.22 | 4497.19 | -.88 | -.85 | -28.48 | -30.36 |
| 4518 | 3.3 | 223 | 1.15 | 4517.16 | -.79 | -.84 | -29.27 | -31.20 |
| 4538 | 3.1 | 226 | 1.08 | 4537.13 | -.78 | -.75 | -30.05 | -31.95 |
| 4558 | 3.0 | 230 | 1.05 | 4557.10 | -.80 | -.67 | -30.85 | -32.62 |
| 4578 | 3.2 | 225 | 1.12 | 4577.07 | -.79 | -.79 | -31.64 | -33.41 |
| 4598 | 3.3 | 224 | 1.15 | 4597.04 | -.80 | -.83 | -32.44 | -34.24 |
| 4618 | 3.1 | 224 | 1.08 | 4617.01 | -.75 | -.78 | -33.19 | -35.02 |
| 4638 | 3.2 | 222 | 1.12 | 4636.98 | -.75 | -.83 | -33.94 | -35.85 |
| 4658 | 3.1 | 228 | 1.08 | 4656.95 | -.80 | -.72 | -34.74 | -36.57 |
| 4678 | 3.2 | 222 | 1.12 | 4676.92 | -.75 | -.83 | -35.49 | -37.40 |
| 4698 | 3.1 | 223 | 1.08 | 4696.89 | -.74 | -.79 | -36.23 | -38.19 |
| 4718 | 3.1 | 216 | 1.08 | 4716.86 | -.64 | -.88 | -36.86 | -39.07 |
| 4738 | 3.1 | 218 | 1.08 | 4736.83 | -.67 | -.85 | -37.53 | -39.92 |
| 4758 | 3.2 | 222 | 1.12 | 4756.80 | -.75 | -.83 | -38.27 | -40.75 |
| 4778 | 3.2 | 222 | 1.12 | 4776.77 | -.75 | -.83 | -39.02 | -41.58 |

GEODIGIT

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 4798 | 3.2 | 220 | 1.12 | 4796.74 | -.72 | -.86 | -39.74 | -42.44 |
| 4818 | 3.2 | 224 | 1.12 | 4816.71 | -.78 | -.80 | -40.51 | -43.24 |
| 4838 | 3.4 | 225 | 1.19 | 4836.67 | -.84 | -.84 | -41.35 | -44.08 |
| 4858 | 3.3 | 217 | 1.15 | 4856.64 | -.69 | -.92 | -42.05 | -45.00 |
| 4878 | 3.5 | 219 | 1.22 | 4876.60 | -.77 | -.95 | -42.81 | -45.95 |
| 4898 | 3.6 | 217 | 1.26 | 4896.56 | -.76 | -1.00 | -43.57 | -46.95 |
| 4918 | 3.7 | 219 | 1.29 | 4916.52 | -.81 | -1.00 | -44.38 | -47.95 |
| 4936 | 3.4 | 205 | 1.07 | 4934.49 | -.45 | -.97 | -44.83 | -48.92 |
| 4956 | 3.5 | 218 | 1.22 | 4954.45 | -.75 | -.96 | -45.59 | -49.88 |
| 4976 | 3.2 | 234 | 1.12 | 4974.42 | -.90 | -.66 | -46.49 | -50.54 |
| 5016 | 3.8 | 218 | 2.65 | 5014.33 | -1.63 | -2.09 | -48.12 | -52.63 |
| 5036 | 3.9 | 207 | 1.36 | 5034.29 | -.62 | -1.21 | -48.74 | -53.84 |
| 5056 | 4.1 | 208 | 1.43 | 5054.23 | -.67 | -1.26 | -49.41 | -55.10 |
| 5076 | 4.2 | 207 | 1.46 | 5074.18 | -.66 | -1.31 | -50.07 | -56.41 |
| 5096 | 4.3 | 210 | 1.50 | 5094.12 | -.75 | -1.30 | -50.82 | -57.70 |
| 5116 | 4.4 | 208 | 1.53 | 5114.06 | -.72 | -1.35 | -51.54 | -59.06 |
| 5136 | 4.6 | 213 | 1.60 | 5134.00 | -.87 | -1.35 | -52.42 | -60.40 |
| 5156 | 4.6 | 214 | 1.60 | 5153.94 | -.90 | -1.38 | -53.32 | -61.73 |
| 5176 | 4.7 | 213 | 1.64 | 5173.87 | -.89 | -1.37 | -54.21 | -63.11 |
| 5196 | 4.8 | 218 | 1.67 | 5193.80 | -1.03 | -1.32 | -55.24 | -64.43 |
| 5216 | 4.7 | 218 | 1.64 | 5213.73 | -1.01 | -1.29 | -56.25 | -65.72 |
| 5236 | 4.9 | 215 | 1.71 | 5233.66 | -.98 | -1.40 | -57.23 | -67.12 |
| 5256 | 4.8 | 211 | 1.67 | 5253.59 | -.86 | -1.43 | -58.09 | -68.55 |
| 5276 | 5.0 | 217 | 1.74 | 5273.51 | -1.05 | -1.39 | -59.14 | -69.95 |
| 5316 | 4.8 | 222 | 3.35 | 5313.37 | -2.24 | -2.49 | -61.38 | -72.43 |
| 5336 | 4.7 | 217 | 1.64 | 5333.30 | -.99 | -1.31 | -62.36 | -73.74 |
| 5356 | 4.9 | 232 | 1.71 | 5353.23 | -1.35 | -1.05 | -63.71 | -74.79 |
| 5376 | 4.9 | 237 | 1.71 | 5373.16 | -1.43 | -.93 | -65.14 | -75.72 |
| 5396 | 5.2 | 229 | 1.81 | 5393.08 | -1.37 | -1.19 | -66.51 | -76.91 |
| 5416 | 5.1 | 220 | 1.78 | 5413.00 | -1.14 | -1.36 | -67.65 | -78.27 |
| 5436 | 5.2 | 220 | 1.81 | 5432.91 | -1.17 | -1.39 | -68.82 | -79.66 |
| 5456 | 5.3 | 221 | 1.85 | 5452.83 | -1.21 | -1.39 | -70.03 | -81.06 |
| 5476 | 5.3 | 220 | 1.85 | 5472.74 | -1.19 | -1.42 | -71.22 | -82.47 |
| 5496 | 5.4 | 219 | 1.88 | 5492.65 | -1.18 | -1.46 | -72.40 | -83.94 |
| 5516 | 5.4 | 219 | 1.88 | 5512.57 | -1.18 | -1.46 | -73.59 | -85.40 |
| 5536 | 5.4 | 220 | 1.88 | 5532.48 | -1.21 | -1.44 | -74.80 | -86.84 |
| 5556 | 5.5 | 217 | 1.92 | 5552.39 | -1.15 | -1.53 | -75.95 | -88.37 |
| 5576 | 5.5 | 217 | 1.92 | 5572.29 | -1.15 | -1.53 | -77.10 | -89.90 |
| 5596 | 5.4 | 216 | 1.88 | 5592.20 | -1.11 | -1.52 | -78.21 | -91.42 |
| 5616 | 5.4 | 215 | 1.88 | 5612.12 | -1.08 | -1.54 | -79.29 | -92.97 |
| 5636 | 5.6 | 217 | 1.95 | 5632.02 | -1.17 | -1.56 | -80.46 | -94.52 |
| 5656 | 5.7 | 218 | 1.99 | 5651.92 | -1.22 | -1.57 | -81.69 | -96.09 |
| 5676 | 5.8 | 219 | 2.02 | 5671.82 | -1.27 | -1.57 | -82.96 | -97.66 |
| 5716 | 5.9 | 218 | 4.11 | 5711.61 | -2.53 | -3.24 | -85.49 | -100.90 |
| 5736 | 6.1 | 216 | 2.13 | 5731.49 | -1.25 | -1.72 | -86.74 | -102.62 |
| 5756 | 6.2 | 225 | 2.16 | 5751.38 | -1.53 | -1.53 | -88.27 | -104.15 |
| 5776 | 6.3 | 219 | 2.19 | 5771.26 | -1.38 | -1.71 | -89.65 | -105.85 |
| 5796 | 6.5 | 220 | 2.26 | 5791.13 | -1.46 | -1.73 | -91.10 | -107.59 |
| 5816 | 6.6 | 219 | 2.30 | 5810.99 | -1.45 | -1.79 | -92.55 | -109.37 |
| 5836 | 6.7 | 219 | 2.33 | 5830.86 | -1.47 | -1.81 | -94.02 | -111.19 |
| 5856 | 6.9 | 219 | 2.40 | 5850.71 | -1.51 | -1.87 | -95.53 | -113.05 |
| 5876 | 7.1 | 216 | 2.47 | 5870.56 | -1.45 | -2.00 | -96.98 | -115.05 |
| 5896 | 7.2 | 218 | 2.51 | 5890.40 | -1.54 | -1.98 | -98.53 | -117.03 |
| 5916 | 7.4 | 216 | 2.58 | 5910.24 | -1.51 | -2.08 | -100.04 | -119.11 |

GEODIGIT

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 5936 | 7.6 | 205 | 2.65 | 5930.06 | -1.12 | -2.40 | -101.16 | -121.51 |
| 5956 | 7.8 | 202 | 2.71 | 5949.88 | -1.02 | -2.52 | -102.18 | -124.03 |
| 5976 | 7.9 | 201 | 2.75 | 5969.69 | -.99 | -2.57 | -103.16 | -126.59 |
| 5996 | 7.8 | 201 | 2.71 | 5989.50 | -.97 | -2.53 | -104.13 | -129.13 |
| 6016 | 7.7 | 205 | 2.68 | 6009.32 | -1.13 | -2.43 | -105.27 | -131.56 |
| 6036 | 7.6 | 204 | 2.65 | 6029.14 | -1.08 | -2.42 | -106.34 | -133.97 |
| 6056 | 7.6 | 203 | 2.65 | 6048.97 | -1.03 | -2.43 | -107.38 | -136.41 |
| 6076 | 7.2 | 209 | 2.51 | 6068.81 | -1.22 | -2.19 | -108.59 | -138.60 |
| 6096 | 7.2 | 205 | 2.51 | 6088.65 | -1.06 | -2.27 | -109.65 | -140.87 |
| 6116 | 7.2 | 214 | 2.51 | 6108.50 | -1.40 | -2.08 | -111.05 | -142.95 |
| 6136 | 7.4 | 232 | 2.58 | 6128.33 | -2.03 | -1.59 | -113.08 | -144.54 |
| 6156 | 7.6 | 227 | 2.65 | 6148.15 | -1.93 | -1.80 | -115.02 | -146.34 |
| 6176 | 7.7 | 213 | 2.68 | 6167.97 | -1.46 | -2.25 | -116.48 | -148.59 |
| 6196 | 7.6 | 205 | 2.65 | 6187.80 | -1.12 | -2.40 | -117.59 | -150.99 |
| 6216 | 7.2 | 206 | 2.51 | 6207.64 | -1.10 | -2.25 | -118.69 | -153.24 |
| 6276 | 7.5 | 230 | 7.83 | 6267.13 | -6.00 | -5.03 | -124.69 | -158.27 |
| 6296 | 7.8 | 226 | 2.71 | 6286.94 | -1.95 | -1.89 | -126.65 | -160.16 |
| 6316 | 7.9 | 206 | 2.75 | 6306.75 | -1.21 | -2.47 | -127.85 | -162.63 |
| 6336 | 7.9 | 210 | 2.75 | 6326.56 | -1.37 | -2.38 | -129.22 | -165.01 |
| 6356 | 7.7 | 218 | 2.68 | 6346.38 | -1.65 | -2.11 | -130.87 | -167.12 |
| 6396 | 7.5 | 228 | 5.22 | 6386.04 | -3.88 | -3.49 | -134.75 | -170.61 |
| 6436 | 7.4 | 240 | 5.15 | 6425.71 | -4.46 | -2.58 | -139.22 | -173.19 |
| 6456 | 7.4 | 242 | 2.58 | 6445.54 | -2.27 | -1.21 | -141.49 | -174.40 |
| 6476 | 7.8 | 241 | 2.71 | 6465.35 | -2.37 | -1.32 | -143.86 | -175.72 |
| 6496 | 8.1 | 240 | 2.82 | 6485.15 | -2.44 | -1.41 | -146.30 | -177.12 |
| 6516 | 8.3 | 228 | 2.89 | 6504.95 | -2.15 | -1.93 | -148.45 | -179.06 |
| 6536 | 8.4 | 237 | 2.92 | 6524.73 | -2.45 | -1.59 | -150.90 | -180.65 |
| 6556 | 8.4 | 235 | 2.92 | 6544.52 | -2.39 | -1.68 | -153.29 | -182.32 |
| 6576 | 8.6 | 254 | 2.99 | 6564.29 | -2.87 | -.83 | -156.17 | -183.15 |
| 6596 | 8.8 | 241 | 3.06 | 6584.06 | -2.68 | -1.48 | -158.85 | -184.63 |
| 6616 | 8.8 | 233 | 3.06 | 6603.82 | -2.44 | -1.84 | -161.29 | -186.47 |
| 6636 | 8.5 | 235 | 2.96 | 6623.60 | -2.42 | -1.70 | -163.71 | -188.17 |
| 6656 | 8.7 | 251 | 3.03 | 6643.37 | -2.86 | -.98 | -166.57 | -189.15 |
| 6676 | 8.9 | 254 | 3.09 | 6663.13 | -2.97 | -.85 | -169.54 | -190.01 |
| 6736 | 9.3 | 235 | 9.70 | 6722.34 | -7.94 | -5.56 | -177.49 | -195.57 |

DRIFT DISTANCE= 264.10 FEET
AZM OF DRIFT = 222 DEGREES

SCALE= 30. FEET/IN.
XMAX= .00 XMIN= -177.00
YMAX= .00 YMIN= -195.00

GEODIGIT

# DAILY DRILLING REPORT

REPORT NO. _____ DATE June 12/73

OPERATOR: Union Oil Canada Co Ltd

LEASE: Union Aklavik I-38

SEC. LINE: I-38 FIELD OR DIST.: Aklavik COUNTY: Canada STATE: N.W.T.

CONTRACTOR: S & T Drilling (Western) Co. Ltd. RIG NO.: 1E

DRILL PIPE STRING: NO. _____ SIZE _____ TOOL JOINT O.D. _____ TYPE THD. _____

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry D Armstrong

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | | | |
| 2. | | | |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| TEAR DOWN | 8 | 8 | |
| DRILLING ACTUAL | | | |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | | |
| LUBRICATE RIG | | | |
| DEVIATION SURVEY | | | |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| [illegible]G | | | |
| [illegible] LINE [illegible]ING | | | |
| [illegible]ING CASING & [illegible]MENTING | | | |
| [illegible]ING ON [illegible]ENT | | | |
| [illegible]LL STEM TEST | | | |
| [illegible]HER | | | |
| [illegible]SHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTAL | 8 | | |

## TIME SUMMARY (OFFICE USE ONLY)

| | |
|---|---|
| DAY WORK | |
| HRS. W/DP | |
| HRS. WO/DP | |
| HRS. STANDBY | |
| TOTAL DAY WORK | |

## WIRE LINE RECORD

REEL NO. _____

NO. OF LINES _____ SIZE _____

FEET SLIPPED _____

FEET CUT OFF _____

PRESENT LENGTH _____

TON MI. OR TRIPS SINCE LAST CUT _____

CUMULATIVE TON MI. OR TRIPS _____

NO. OF DAYS FROM SPUD _____

CUMULATIVE ROTATING HRS. _____

## MORNING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| | STANDS D.P. | FT. |
| | SINGLES D.P. | FT. |
| | D.C. I.D. O.D. | FT. |
| | D.C. I.D. O.D. | FT. |
| | STB. BODY O.D. | FT. |
| | STB. BODY O.D. | FT. |
| | RMR. BODY O.D. | FT. |
| | SUBS O.D. | FT. |
| | BIT OR C.B. | FT. |
| | | FT. |
| | KELLY DOWN | FT. |
| | TOTAL | FT. |
| WT. OF STRING | | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | |
| SIZE | |
| MFG. | |
| TYPE | |
| NOZZLE NO. | |
| NOZZLE SIZE | |
| SER. NO. | |
| DEPTH OUT | |
| DEPTH IN | |
| TOTAL FTG. | |
| TOTAL HR. RUN | |
| COND. OF BIT | |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | |
|---|---|
| TIME | |
| WEIGHT | |
| VISC.–SEC | |
| W.L.–C.C. | |
| FL.TR. CK. | |
| PH | |
| SD. CONT. % | |
| PRESSURE GRADIENT | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER: R Brundige

**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'EL–P COM'D–C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 6 | 8 | | TEAR OUT Rig |
| | | | PLACE 5 SACK CEMENT PLUG IN TOP OF CSG & WELD ON COVER & WELL LOCATION PLATE |

## DAY TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| | STANDS D.P. | FT. |
| | SINGLES D.P. | FT. |
| | D.C. I.D. O.D. | FT. |
| | D.C. I.D. O.D. | FT. |
| | STB. BODY O.D. | FT. |
| | STB. BODY O.D. | FT. |
| | RMR. BODY O.D. | FT. |
| | SUBS O.D. | FT. |
| | BIT OR C.B. | FT. |
| | | FT. |
| | KELLY DOWN | FT. |
| | TOTAL | FT. |
| WT. OF STRING | | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | |
| SIZE | |
| MFG. | |
| TYPE | |
| NOZZLE NO. | |
| NOZZLE SIZE | |
| SER. NO. | |
| DEPTH OUT | |
| DEPTH IN | |
| TOTAL FTG. | |
| TOTAL HR. RUN | |
| COND. OF BIT | |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | |
|---|---|
| TIME | |
| WEIGHT | |
| VISC.–SEC | |
| W.L.–C.C. | |
| FL.TR. CK. | |
| PH | |
| SD. CONT. % | |
| PRESSURE GRADIENT | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER: C. Hopkins

**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'EL–P COM'D–C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8:00 | 4:00 | 8 | TEAR OUT Rig |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| | STANDS D.P. | FT. |
| | SINGLES D.P. | FT. |
| | D.C. I.D. O.D. | FT. |
| | D.C. I.D. O.D. | FT. |
| | STB. BODY O.D. | FT. |
| | STB. BODY O.D. | FT. |
| | RMR. BODY O.D. | FT. |
| | SUBS O.D. | FT. |
| | BIT OR C.B. | FT. |
| | | FT. |
| | KELLY DOWN | FT. |
| | TOTAL | FT. |
| WT. OF STRING | | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | |
| SIZE | |
| MFG. | |
| TYPE | |
| NOZZLE NO. | |
| NOZZLE SIZE | |
| SER. NO. | |
| DEPTH OUT | |
| DEPTH IN | |
| TOTAL FTG. | |
| TOTAL HR. RUN | |
| COND. OF BIT | |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | |
|---|---|
| TIME | |
| WEIGHT | |
| VISC.–SEC | |
| W.L.–C.C. | |
| FL.TR. CK | |
| PH | |
| SD. CONT. % | |
| PRESSURE GRADIENT | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. 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 | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4:00 | | | TEAR OUT Rig |

## DRILLING CREW PAYROLL DATA

DATE June 12 '73

WELL NAME & NO. Union Aklavik I-38

COMPANY Union Oil Co Ltd

TOOL PUSHER Barry D Armstrong RIG NO. 1E

MORNING TOUR 8 P.M. 8 A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R Brundige | 12 |
| DRKMAN | | M McLaughlin | 12 |
| MTRMAN | | P Marren | 12 |
| FIREMAN | | | |
| FLRMAN | | D Marsh | 12 |
| FLRMAN | | E Bowers | 12 |
| FLRMAN | | | |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

DAY TOUR _____ A.M. _____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. Hopkins | 12 |
| DRKMAN | | H. Klein | 12 |
| MTRMAN | | T. Langlois | 12 |
| FIREMAN | | | |
| FLRMAN | | B. Albreton | 12 |
| FLRMAN | | R. Hewko | 12 |
| FLRMAN | | | |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR _____ P.M. _____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 86 DATE June 11/73

OPERATOR: Union Oil Canada Co Ltd.

LEASE: Union Aklavik F-38

WELL NO. F-38 FIELD OR DIST. Aklavik COUNTY Canada STATE N.W.T.

CONTRACTOR: S & T Drilling (Western) Co. Ltd. RIG NO. 11E

DRILL PIPE STRING: NO. 2 SIZE 4 TOOL JOINT O.D. 5 TYPE THD 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: A. Foster

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry D. Armstrong

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | OAT | K350 | 14 |
| 2. | OAT | K350 | 14 |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| | | | | | | | |

**TIME DISTRIBUTION—HOURS**

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | | | |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | | |
| LUBRICATE RIG | | | |
| DEVIATION SURVEY | | | |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| [illegible]G | | | |
| [illegible] LINE [illegible]ING | | | |
| [illegible]NING CASING [illegible]MENTING | | | |
| [illegible]TING ON [illegible]MENT | 6 | | |
| [illegible]LL STEM TEST | | | |
| [illegible]THER | | | |
| [illegible]ISHING | | | |
| COMPLETION WORK: A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| 2. ADDITIONAL | | | |
| TALS | | | |

**TIME SUMMARY (OFFICE USE ONLY)**

| | |
|---|---|
| DAY WORK | |
| HRS. W/DP | |
| HRS. WO/DP | |
| HRS. STANDBY | |
| TOTAL DAY WORK | |

**WIRE LINE RECORD**

REEL NO.

NO. OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

| NO. | DRILLING ASSEMBLY AT END OF TOUR | | FT. |
|---|---|---|---|
| | STANDS D.P. | | FT. |
| | SINGLES D.P. | | FT. |
| | D.C. I.D. O.D. | | FT. |
| | D.C. I.D. O.D. | | FT. |
| | STB. BODY O.D. | | FT. |
| | STB. BODY O.D. | | FT. |
| | RMR. BODY O.D. | | FT. |
| | SUBS O.D. | | FT. |
| | BIT OR C.B. | | FT. |
| | | | FT. |
| | KELLY DOWN | | FT. |
| | TOTAL | | FT. |
| | WT. OF STRING | | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | |
| SIZE | |
| MFG. | |
| TYPE | |
| NOZZLE NO. | |
| NOZZLE SIZE | |
| SER. NO. | |
| DEPTH OUT | |
| DEPTH IN | |
| TOTAL FTG. | |
| TOTAL HR. RUN | |
| COND. OF BIT | |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | |
|---|---|
| TIME | |
| WEIGHT | |
| VISC.-SEC | |
| W.L.-C.C. | |
| FL TR. CK. | |
| PH | |
| SD. CONT. % | |
| PRESSURE GRADIENT | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R Brundige

**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 EL-P CON'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 00 | 6 00 | 6 | Circ. |
| 6 00 | 6 30 | ½ | Fish Plug. |
| 6 30 | 8 00 | 1½ | Lay down D.P. |

5

## DAY TOUR

| NO. | DRILLING ASSEMBLY AT END OF TOUR | | FT. |
|---|---|---|---|
| | STANDS D.P. | | FT. |
| | SINGLES D.P. | | FT. |
| | D.C. I.D. O.D. | | FT. |
| | D.C. I.D. O.D. | | FT. |
| | STB. BODY O.D. | | FT. |
| | STB. BODY O.D. | | FT. |
| | RMR. BODY O.D. | | FT. |
| | SUBS O.D. | | FT. |
| | BIT OR C.B. | | FT. |
| | | | FT. |
| | KELLY DOWN | | FT. |
| | TOTAL | | FT. |
| | WT. OF STRING | | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | |
| SIZE | |
| MFG. | |
| TYPE | |
| NOZZLE NO. | |
| NOZZLE SIZE | |
| SER. NO. | |
| DEPTH OUT | |
| DEPTH IN | |
| TOTAL FTG. | |
| TOTAL HR. RUN | |
| COND. OF BIT | |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | |
|---|---|
| TIME | |
| WEIGHT | |
| VISC.-SEC | |
| W.L.-C.C. | |
| FL TR. CK. | |
| PH | |
| SD. CONT. % | |
| PRESSURE GRADIENT | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER C. Hopkins

**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 EL-P CON'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8 00 | 8 15 | ¼ | Lay Down D.P. |
| 8 15 | 4 00 | 7¾ | Tear Out B.O.P.'s, V Pumps |

## EVENING TOUR

| NO. | DRILLING ASSEMBLY AT END OF TOUR | | FT. |
|---|---|---|---|
| | STANDS D.P. | | FT. |
| | SINGLES D.P. | | FT. |
| | D.C. I.D. O.D. | | FT. |
| | D.C. I.D. O.D. | | FT. |
| | STB. BODY O.D. | | FT. |
| | STB. BODY O.D. | | FT. |
| | RMR. BODY O.D. | | FT. |
| | SUBS O.D. | | FT. |
| | BIT OR C.B. | | FT. |
| | | | FT. |
| | KELLY DOWN | | FT. |
| | TOTAL | | FT. |
| | WT. OF STRING | | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | |
| SIZE | |
| MFG. | |
| TYPE | |
| NOZZLE NO. | |
| NOZZLE SIZE | |
| SER. NO. | |
| DEPTH OUT | |
| DEPTH IN | |
| TOTAL FTG. | |
| TOTAL HR. RUN | |
| COND. OF BIT | |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | |
|---|---|
| TIME | |
| WEIGHT | |
| VISC.-SEC | |
| W.L.-C.C. | |
| FL TR. CK. | |
| PH | |
| SD. CONT. % | |
| PRESSURE GRADIENT | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PAR.-P EL-P CON'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4 00 | 12 | 8 | Clean Cellar To Cut Csg. & Tear Out |
| | | | Rig Released @ 5 00 P.M. |

**DRILLING CREW PAYROLL DATA**

DATE June 11/73

WELL NAME & NO. Union Aklavik F-38

COMPANY Union Oil Co Ltd.

TOOL PUSHER Barry D Armstrong RIG NO.

MORNING TOUR 12 P.M. 8 A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | A Brundige | 12 |
| DRKMAN | | M McLaughlin | 12 |
| MTRMAN | | P Marken | 12 |
| FIREMAN | | | |
| FLRMAN | | D Marsh | 12 |
| FLRMAN | | E Nowers | 12 |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST-TIME ACCIDENT

DAY TOUR A.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. Hopkins | 12 |
| DRKMAN | | H. Kleen | 12 |
| MTRMAN | | J. Langlois | 12 |
| FIREMAN | | | |
| FLRMAN | | B. Albertson | 12 |
| FLRMAN | | R. Hewko | 12 |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST-TIME ACCIDENT

EVENING TOUR P.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST-TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 83 — DATE June 10/73

OPERATOR: Union Oil Canada Co Ltd.

LEASE: Union Aklavik F-38

WELL NO. F-38 — FIELD OR DIST. Aklavik — COUNTY Canada — STATE N.W.T.

CONTRACTOR: S & T Drilling (Western) Co. Ltd. — RIG NO. 1E

DRILL PIPE STRING: NO. 2, SIZE 4 — TOOL JOINT O.D. 5 — TYPE THD 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry J. Armstrong

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NAT | K 380 | 14 |
| 2. | NAT | K 380 | 14 |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | Mann. | 40 lbs | 67 | 2765 | 2776 | 2760 | CEMENTED w/1500 sks |
| | | | | | | | Oil mud & cement. |

## TIME DISTRIBUTION — HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | | | |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | ½ | 1 | |
| TRIPS | | 11½ | 1/2 |
| LUBRICATE RIG | | | |
| DEVIATION SURVEY | | | |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| [illegible] | | | |
| [illegible] LINE CASING | | | |
| RUNNING CASING & CEMENTING | | 1½ | 1/2 |
| SETTING ON CEMENT | | 4½ | 6 |
| DRILL STEM TEST | | | |
| OTHER [illegible] | | | 1 |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | | | 8 8 |

## TIME SUMMARY (OFFICE USE ONLY)

| | |
|---|---|
| DAY WORK | |
| HRS. W/DP | |
| HRS. WO/DP | |
| HRS. STANDBY | |
| TOTAL DAY WORK | |

## WIRE LINE RECORD

| | |
|---|---|
| REEL NO. | |
| NO. OF LINES | SIZE |
| FEET SLIPPED | |
| FEET CUT OFF | |
| PRESENT LENGTH | |
| TON MI. OR TRIPS SINCE LAST CUT | |
| CUMULATIVE TON MI. OR TRIPS | |
| NO. OF DAYS FROM SPUD | |
| CUMULATIVE ROTATING HRS. | |

## MORNING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | FT. |
|---|---|---|
| 71 | STANDS D.P. | |
| 1 | SINGLES D.P. | |
| | D.C. I.D. O.D. | |
| | D.C. I.D. O.D. | |
| | STB. BODY O.D. | |
| | STB. BODY O.D. | |
| | RMR. BODY O.D. | |
| | SUBS O.D. | |
| | BIT OR C.B. | |
| | | |
| | KELLY DOWN | |
| | TOTAL | |
| WT. OF STRING | 98 m. | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | |
| SIZE | |
| MFG. | |
| TYPE | |
| NOZZLE NO. | |
| NOZZLE SIZE | |
| SER. NO. | |
| DEPTH OUT | |
| DEPTH IN | |
| TOTAL FTG. | |
| TOTAL HR. RUN | |
| COND. OF BIT | |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | |
|---|---|
| TIME | |
| WEIGHT | |
| VISC.-SEC | |
| W.L.-C.C. | |
| FLTR. CK. | |
| PH | |
| SD. CONT. % | |
| PRESSURE GRADIENT | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER B Brundige

**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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 900 | 5½ | | 3½ | 48 | S |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

| TIME LOG FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 00 | 2 30 | 2½ | LAYDOWN D.C. REAMERS & STABILIZERS |
| 2 30 | 6 15 | 3¾ | RUN IN HOLE & PICK UP 21 |
| 6 15 | 8 00 | 1¾ | CIRC. |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | FT. |
|---|---|---|
| | STANDS D.P. | |
| | SINGLES D.P. | |
| | D.C. I.D. O.D. | |
| | D.C. I.D. O.D. | |
| | STB. BODY O.D. | |
| | STB. BODY O.D. | |
| | RMR. BODY O.D. | |
| | SUBS O.D. | |
| | BIT OR C.B. | |
| | | |
| | KELLY DOWN | |
| | TOTAL | |
| WT. OF STRING | | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | |
| SIZE | |
| MFG. | |
| TYPE | |
| NOZZLE NO. | |
| NOZZLE SIZE | |
| SER. NO. | |
| DEPTH OUT | |
| DEPTH IN | |
| TOTAL FTG. | |
| TOTAL HR. RUN | |
| COND. OF BIT | |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | |
|---|---|
| TIME | |
| WEIGHT | |
| VISC.-SEC | |
| W.L.-C.C. | |
| FLTR. CK | |
| PH | |
| SD. CONT. % | |
| PRESSURE GRADIENT | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER C. Hopkins

**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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 45 | | | | Run Plug #3. | Plug #3 | | | 3 | 2750-2650 | | | |
| | | | | | 65 Sax | | | 3½ | Calcium. | | | |
| | | | | | Flush | | | 25 | Barrels Water | | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

Displace 5 Barrels Water
25 Barrels Mud.

| TIME LOG FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4 00 | 7 15 | 3¼ | W.O.C. |
| 7 15 | 8 15 | 1 | Feel Plug. Flush 25 Bbls Water |
| | | | #2 @ 4880 120 Sax Cement 3% Calcium |
| 8 15 | 8 45 | ½ | Pull up. Displace w/ 5 Bbls Water |
| | | | to Run Displace w/ 52 Bbls Mud |
| 8 45 | 9 15 | ½ | Plug #3. On Plug @ 11:15 A.M. w/ 0 C Bucks |
| | | | Top Plug #2 4880 |
| 9 15 | 12 00 | 2¾ | W.O.C. |

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DRILLING CREW PAYROLL DATA

DATE June 10/73

WELL NAME & NO. Union Aklavik F-38

COMPANY Union Oil Co Ltd.

TOOL PUSHER Barry J. Armstrong — RIG NO. 1E

MORNING TOUR ✓ P.M. ____ A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R Brundige | 12 |
| DRKMAN | | M McLaughlin | 12 |
| MTRMAN | | P Marsh | 12 |
| FIREMAN | | | |
| FLRMAN | | D Marsh | 12 |
| FLRMAN | | E Nowers | 12 |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST-TIME ACCIDENT

DAY TOUR ____ A.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. Hopkins | 12 |
| DRKMAN | | H. Kleen | 12 |
| MTRMAN | | J. Langlois | 12 |
| FIREMAN | | | |
| FLRMAN | | G. Albertson | 12 |
| FLRMAN | | R Hewko | 12 |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR ____ P.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 88 DATE June 8/73

OPERATOR: Union Oil Canada Co. LTD
LEASE: Union AKLAVIK E-28
WELL NO. F38
FIELD OR DIST. AKLAVIK
COUNTY CANADA
STATE

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD.
RIG NO. 1E
DRILL PIPE STRING: NO. 2 SIZE 4
TOOL JOINT 5 O.D.
TYPE THD. 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry D Armstrong

PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NAT | K-380 | 14 |
| 2. | NAT | K-380 | 14 |
| 3. | | | |

LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | MANN | 40 K55 | | 6765 | | | Cemened W/1500 SXS |
| | | | | | | | Oil Well Cement |
| | | | | | | | |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | | | |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | | |
| LUBRICATE RIG | | | |
| DEVIATION SURVEY | | | |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| [illegible] | | | |
| DRILLING LINE SLIPPING | | 4 | 1 |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT 2 HOO | | | 4½ |
| DLL STEM TEST | | | |
| OTHER | 4 | 4 | 2½ |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

## TIME SUMMARY (OFFICE USE ONLY)

DAY WORK
HRS. W/DP
HRS. WO/DP
HRS. STANDBY
TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.
NO. OF LINES SIZE
FEET SLIPPED
FEET CUT OFF
PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.

## MORNING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 64 | STANDS D.P. | 6026.66 | FT. |
| 1 | SINGLES D.P. | 31.66 | FT. |
| 2 | D.C. 2⅞ - 6¼ I.D. O.D. | 358.88 | FT. |
| 9 | D.C. 2⅞ - 6¼ I.D. O.D. | 262.43 | FT. |
| 2 | STB. BODY O.D. | 16.43 | FT. |
| 1 | STB. BODY O.D. | 8.10 | FT. |
| 1 | RMR. BODY O.D. | 8.62 | FT. |
| 3 | SUBS 2⅞ - 6¼ I.D. O.D. | 7.58 | FT. |
| | BIT OR C.B. | | FT. |
| 1 | Shock-Sub | 9.05 | FT. |
| | KELLY DOWN | 35.66 | FT. |
| | TOTAL | 67.45 | FT. |
| WT. OF STRING | 140 M | | LBS. |

### BIT RECORD

BIT NO.
SIZE
MFG.
TYPE
NOZZLE NO.
NOZZLE SIZE
SER. NO.
DEPTH OUT
DEPTH IN
TOTAL FTG.
TOTAL HR. RUN
COND. OF BIT
REAMER NO.
REAMER TYPE

### MUD RECORD

TIME
WEIGHT
VISC.-SEC
W.L.-C.C.
FLTR. CK.
PH
SD. CONT. %
PRESSURE GRADIENT

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. 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 | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12:00 | 4 00 | 4 | Logging W/ Schumberger |
| 4 00 | 8 00 | 4 | WAIT ON CIENSERIES. REPAIRS |

## DAY TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 64 | STANDS D.P. | 6026.66 | FT. |
| 1 | SINGLES D.P. | 31.66 | FT. |
| 12 | D.C. 2⅞ x 6¼ I.D. O.D. | 358.88 | FT. |
| 9 | D.C. 2⅞ x 6¼ I.D. O.D. | 262.43 | FT. |
| 2 | STB. BODY O.D. | 16.43 | FT. |
| 1 | STB. BODY O.D. | 8.10 | FT. |
| 1 | RMR. BODY O.D. | 8.62 | FT. |
| 3 | SUBS 2⅞ - 6¼ I.D. O.D. | 7.58 | FT. |
| | BIT OR C.B. | | FT. |
| 1 | SHOCK SUB | 9.05 | FT. |
| | KELLY DOWN | 16.61 | FT. |
| | TOTAL | 674.00 | FT. |
| WT. OF STRING | 140 M | | LBS. |

### BIT RECORD

BIT NO.
SIZE
MFG.
TYPE
NOZZLE NO.
NOZZLE SIZE
SER. NO.
DEPTH OUT
DEPTH IN
TOTAL FTG.
TOTAL HR. RUN
COND. OF BIT
REAMER NO.
REAMER TYPE

### MUD RECORD

TIME
WEIGHT
VISC.-SEC
W.L.-C.C.
FLTR. CK.
PH
SD. CONT. %
PRESSURE GRADIENT

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER C. Hopkins

### 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| @ 6745' | | | | | | | | | | | | |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8 00 | 12 00 | 4 | WAIT ON CENTURY REPAIRS |
| 12 00 | 4 00 | 4 | LOGGING W/ SCHLUMBERGER |

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| | STANDS D.P. | | FT. |
| | SINGLES D.P. | | FT. |
| | D.C. I.D. O.D. | | FT. |
| | D.C. I.D. O.D. | | FT. |
| | STB. BODY O.D. | | FT. |
| | STB. BODY O.D. | | FT. |
| | RMR. BODY O.D. | | FT. |
| | SUBS O.D. | | FT. |
| | BIT OR C.B. | | FT. |
| | | | FT. |
| | KELLY DOWN | | FT. |
| | TOTAL | | FT. |
| WT. OF STRING | | | LBS. |

### BIT RECORD

BIT NO.
SIZE
MFG.
TYPE
NOZZLE NO.
NOZZLE SIZE
SER. NO.
DEPTH OUT
DEPTH IN
TOTAL FTG.
TOTAL HR. RUN
COND. OF BIT
REAMER NO.
REAMER TYPE

### MUD RECORD

TIME
WEIGHT
VISC.-SEC
W.L.-C.C.
FLTR. CK
PH
SD. CONT. %
PRESSURE GRADIENT

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| @ 6745 | | | | | | | | | | | | |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4 00 | 6 00 | 1 | LOGGING W/ SCHLUMBERGER |
| 6 00 | 9 30 | 4½ | W.O.O. |
| 9 30 | 10 30 | 1 | RUN IN D.C. |
| 10 30 | 12 00 | 1½ | LAY DOWN D.C. |

## DRILLING CREW PAYROLL DATA

DATE June 9, 1973
WELL NAME & NO. Union AKLAVIK F-38
COMPANY Union Oil Co. LTD.
TOOL PUSHER Barry D Armstrong RIG NO. 1F

### MORNING TOUR ____ P.M. ____ A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R-BRundige | 12 |
| DRKMAN | | M-McLaughlin | 12 |
| MTRMAN | | ATROMBLEY | 8 T |
| FIREMAN | | | |
| FLRMAN | | P MARREON | 12 |
| FLRMAN | | D MARSH | 12 |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST-TIME ACCIDENT

### DAY TOUR ____ A.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. HOPKINS | 12 |
| DRKMAN | | H. KLEEN | 12 |
| MTRMAN | | J. LANGLOIS | 12 |
| FIREMAN | | | |
| FLRMAN | | G. ALBERTSON | 12 |
| FLRMAN | | R. HEWKO | 12 |
| FLRMAN | | E. NOWERS | 12 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

### EVENING TOUR ____ P.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| | | E. GRAUMANN | T |
| | | B. ARMSTRONG | T |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 83 DATE June 8 1973

OPERATOR: Union Oil of Canada Co Ltd.
LEASE: Union Aklavik F-38
WELL NO. F38
FIELD OR DIST.: Aklavik
COUNTY: Mackenzie
STATE: Canada

CONTRACTOR: S & T Drilling (Western) Co. Ltd.
RIG NO. 1E
DRILL PIPE STRING: NO. 2 SIZE 4
TOOL JOINT: TYPE THD 3½ IF O.D. 5

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: E W Braumann

PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NAT | K380 | 14 |
| 2. | NAT | K380 | 14 |
| 3. | | | |

LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | MANN | 40# H55 | 67 | 2765 | | 2760 | CEMENTED W/1500 SKS OIL WELL CEMENT. |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | | | |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | 1 | | |
| LUBRICATE RIG | | | |
| DEVIATION SURVEY | | | |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| [illegible] | | | |
| WIRE LINE LOGGING | 7 | 8 | 8 |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | |

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK
HRS. W/DP
HRS. WO/DP
HRS. STANDBY
TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.
NO. OF LINES SIZE
FEET SLIPPED
FEET CUT OFF
PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.

## MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 64 | STANDS D.P. | 6026.66 FT. |
| 1 | SINGLES D.P. | 31.66 FT. |
| 12 | D.C. 2 7/8 I.D. 6 3/4 O.D. | 358.88 FT. |
| 1 | D.C. 2 7/8 I.D. 6 1/4 O.D. | 242.43 FT. |
| 2 | STB. BODY O.D. | 14.45 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.42 FT. |
| 3 | SUBS O.D. | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock Sub | 9.05 FT. |
| | KELLY DOWN | 35.66 FT. |
| | TOTAL | 4745 FT. |
| WT. OF STRING | 140 M | LBS. |

BIT RECORD

| | |
|---|---|
| BIT NO. | 34 |
| SIZE | 8½ |
| MFG. | Smith |
| TYPE | 4JS |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 15 16 |
| SER. NO. | HC283 |
| DEPTH OUT | 6745 |
| DEPTH IN | 6507 |
| TOTAL FTG. | 238 |
| TOTAL HR. RUN | 43¼ |
| COND. OF BIT | 7S1 |
| REAMER NO. | |
| REAMER TYPE | |

MUD RECORD

| | |
|---|---|
| TIME | |
| WEIGHT | |
| VISC.-SEC | |
| W.L.-C.C. | |
| FL.TR. CK. | |
| PH | |
| SD. CONT. % | |
| PRESSURE GRADIENT | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER: B Brundige

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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 00 | 1 00 | 1 | Finish out hole. |
| 1 00 | 1 30 | ½ | Rig to Log. |
| 1 30 | 8 00 | 7 | Logging. |

BHC Sonic Gamma Ray Caliper 6745'-2761'
Dual Induction-Laterolog 6741'-2761'

## DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 64 | STANDS D.P. | 6026.66 FT. |
| 1 | SINGLES D.P. | 31.66 FT. |
| 12 | D.C. 2 7/8 x 6 3/4 I.D. O.D. | 358.88 FT. |
| 9 | D.C. 2 7/8 x 6 1/4 I.D. O.D. | 262.43 FT. |
| 2 | STB. BODY O.D. | 16.43 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.62 FT. |
| 3 | SUBS 6 1/4 O.D. | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | SHOCK SUB | 9.05 FT. |
| | KELLY DOWN | 16.61 FT. |
| | TOTAL | 6745.00 FT. |
| WT. OF STRING | 140 M | LBS. |

BIT RECORD

| | |
|---|---|
| BIT NO. | |
| SIZE | |
| MFG. | |
| TYPE | |
| NOZZLE NO. | |
| NOZZLE SIZE | |
| SER. NO. | |
| DEPTH OUT | |
| DEPTH IN | |
| TOTAL FTG. | |
| TOTAL HR. RUN | |
| COND. OF BIT | |
| REAMER NO. | |
| REAMER TYPE | |

MUD RECORD

| | |
|---|---|
| TIME | |
| WEIGHT | |
| VISC.-SEC | |
| W.L.-C.C. | |
| FL.TR. CK. | |
| PH | |
| SD. CONT. % | |
| PRESSURE GRADIENT | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER: C. Hopkins

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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6745 | | | | | | | | | | | | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 800 | 400 | 8 | Logging w/Schlumberger |

## EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 64 | STANDS D.P. | 6026.66 FT. |
| 1 | SINGLES D.P. | 31.66 FT. |
| 12 | D.C. 2 7/8 x 6 3/4 I.D. O.D. | 358.88 FT. |
| 9 | D.C. 2 7/8 x 6 1/4 I.D. O.D. | 262.43 FT. |
| 2 | STB. BODY O.D. | 16.43 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.62 FT. |
| 3 | SUBS 6 1/4 O.D. | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock Sub | 9.05 FT. |
| | KELLY DOWN | 16.61 FT. |
| | TOTAL | 6745 FT. |
| WT. OF STRING | 140 M | LBS. |

BIT RECORD

| | |
|---|---|
| BIT NO. | 34 |
| SIZE | 8½ |
| MFG. | Smith |
| TYPE | 4JS |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 15 18 |
| SER. NO. | HC283 |
| DEPTH OUT | 6745 |
| DEPTH IN | 6507 |
| TOTAL FTG. | 238 |
| TOTAL HR. RUN | 43½ |
| COND. OF BIT | 7S1 |
| REAMER NO. | |
| REAMER TYPE | |

MUD RECORD

| | |
|---|---|
| TIME | |
| WEIGHT | |
| VISC.-SEC | |
| W.L.-C.C. | |
| FL.TR. CK | |
| PH | |
| SD. CONT. % | |
| PRESSURE GRADIENT | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| @ 6745 | | | | | | | | | | | | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 400 | 1200 | 8 | Logging w/Schlumberger |

## DRILLING CREW PAYROLL DATA

DATE June 8 1973
WELL NAME & NO. Union Aklavik F-38
COMPANY Union Oil Co Ltd.
TOOL PUSHER E W Braumann RIG NO. 1E

MORNING TOUR ____ P.M. ____ A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R Brundige | 12 |
| DRKMAN | | M McLaughlin | 12 |
| MTRMAN | | A Trombley | 12 |
| FIREMAN | | | |
| FLRMAN | | P Marren | 12 |
| FLRMAN | | B Marsh | 12 |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST-TIME ACCIDENT

DAY TOUR ____ A.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. Hopkins | 12 |
| DRKMAN | | H. Kleen | 12 |
| MTRMAN | | T Landolts | 12 |
| FIREMAN | | | |
| FLRMAN | | G. Albertson | 12 |
| FLRMAN | | R. Hewko | 12 |
| FLRMAN | | E. Nowers | 12 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR ____ P.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 82 DATE JUNE 7/73

OPERATOR: UNION Oil of ~~Alberta~~ Canada Co LTD

LEASE: UNION Aklavik F-38

WELL NO. F-38 FIELD OR DIST. Aklavik COUNTY NWT STATE Canada

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. RIG NO. 1E

DRILL PIPE STRING: NO. 273 SIZE 4 TOOL JOINT 5 O.D. TYPE THD. 3½IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: A Foster

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: E W Kraimann

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NSCO | K380 | 14 |
| 2. | NSCO | K380 | 14 |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | MANN | 40# K55 | 67 | 2765 | | 2760 | Cemented w/1500sks |
| | | | | | | | Oil well cement. |
| | | | | | | | |

## TIME DISTRIBUTION–HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 8 | 7 ~~EB~~ 3½ | |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | 2 |
| TRIPS | | | 2 |
| LUBRICATE RIG | | ¼ | ¼ |
| DEVIATION SURVEY | | | ¼ |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| ~~RUNNING~~ | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

## TIME SUMMARY (OFFICE USE ONLY)

| | | | |
|---|---|---|---|
| DAY WORK | | | |
| HRS. W/DP | | | |
| HRS. WO/DP | | | |
| HRS. STANDBY | | | |
| TOTAL DAY WORK | | | |

## WIRE LINE RECORD

REEL NO.

NO. OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 63 | STANDS D.P. | 5932.95 FT. |
| 2 | SINGLES D.P. | 62.74 FT. |
| 12 | D.C. 2⅞ I.D. 6¾ O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.45 FT. |
| 2 | STB. BODY O.D. | 16.43 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.62 FT. |
| 3 | SUBS 6¾ 6¼ | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shocksub | 9.05 FT. |
| | KELLY DOWN | 35.22 FT. |
| | TOTAL | 6702.00 FT. |
| WT. OF STRING | 138M | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 34 |
| SIZE | 8½ |
| MFG. | Smith |
| TYPE | 4JS |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 15 18 |
| SER. NO. | HC283 |
| DEPTH OUT | |
| DEPTH IN | 6507 |
| TOTAL FTG. | 195 |
| TOTAL HR. RUN | 32 |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| TIME | 1 00 | 3 00 | 6 00 |
|---|---|---|---|
| WEIGHT | 9.5 | 9.8+ | 9.8+ |
| VISC.–SEC | 55 | 54 | 55 |
| W.L.–C.C. | | | |
| FLTR. CK. | | | |
| PH | 9.5 | 9.5 | 9.0 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER: R L Hayes

**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'D–C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6659 | 6702 | D | | | 40 | 45 | 1300 | 5½ | | 5½ | 65 | S |
| | | | | | | | | X | | X | | |
| | | | | | | | | 14 | | 14 | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 00 | 8 00 | 8 | DRLG |
| | | | Held Safety Meeting |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 64 | STANDS D.P. | 6026.66 FT. |
| 1 | SINGLES D.P. | 31.66 FT. |
| 12 | D.C. 2⅞ I.D. 6¾ O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.45 FT. |
| 2 | STB. BODY O.D. | 16.43 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.62 FT. |
| 3 | SUBS 6¾ 6¼ | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shocksub | 9.05 FT. |
| | KELLY DOWN | 16.61 FT. |
| | TOTAL | 6745.07 FT. |
| WT. OF STRING | 1.10 M | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 34 |
| SIZE | 8½ |
| MFG. | Smith |
| TYPE | 4JS |
| NOZZLE NO. | 1 1 |
| NOZZLE SIZE | 15 18 |
| SER. NO. | HC283 |
| DEPTH OUT | 6745 |
| DEPTH IN | 6507 |
| TOTAL FTG. | 238 |
| TOTAL HR. RUN | 43¼ |
| COND. OF BIT | T-T |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| TIME | 9.00 | 12.00 | 3.00 |
|---|---|---|---|
| WEIGHT | 9.9 | 9.9 | 9.9 |
| VISC.–SEC | 55 | 56 | 56 |
| W.L.–C.C. | | | |
| FLTR. CK. | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER: A Brundige

**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'D–C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6702 | 6731 | D | | | 40 | 45 | 1300 | 5½ | | 5½ | 65 | S |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8 00 | 9 15 | 1¼ | DRLG. |
| 9 15 | 9 30 | ¼ | RIG SERV + ✓ B.O.P. |
| 9 30 | 4 00 | 6½ | DRLG. |
| | | | LOST 30 BBL. AFT mud WT 67 14. |

## EVENING TOUR

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 34 |
| SIZE | 8½ |
| MFG. | Smith |
| TYPE | 4JS |
| NOZZLE NO. | 1 1 |
| NOZZLE SIZE | 15 18 |
| SER. NO. | HC285 |
| DEPTH OUT | 6745 |
| DEPTH IN | 6507 |
| TOTAL FTG. | 238 |
| TOTAL HR. RUN | 43¼ |
| COND. OF BIT | T-T |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| TIME | 4 00 | 8 00 | 10 00 |
|---|---|---|---|
| WEIGHT | 9.9 | 9.9 | 10.0 |
| VISC.–SEC | 50 | 57 | 63 |
| W.L.–C.C. | | | |
| FLTR. CK | | | |
| PH | 9.5 | 9.5 | 9+ |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Gel | 10 SAX | | |
| Benex | 2 SAX | | |

DRILLER: C. Hopkins

**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'D–C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6731 | 6745 | D | | CHANGE Clark Packing #2 | 40 | 45 | 1300 | 5½ | | 5½ | 65 | S |
| | | | | Lube Stop | | | | | | | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 6727 | 9⅞° | | 6745 | 10° | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4 00 | 5 00 | 1 | DRLG. 8½" Hole |
| 5 00 | 5 15 | ¼ | RIG SERV. ✓ 4 ¼" RAMS |
| 5 15 | 5 30 | ¼ | SURVEY |
| 5 30 | 8 00 | 9½ | DRILL TO 6745 |
| 8 00 | 10 00 | 2 | CIRC. & DROP SURVEY |
| 10 00 | 12 00 | 2 | HOIST + STRAP PIPE |

## DRILLING CREW PAYROLL DATA

DATE JUNE 7 1973

WELL NAME & NO. UNION Aklavik F-38

COMPANY UNION Oil Co. LTD

TOOL PUSHER E W Kraimann RIG NO. 1E

MORNING TOUR P.M. A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. | |
|---|---|---|---|---|
| DRILLER | | R L Hayes | 8 | T |
| DRKMAN | | C Campbell | 8 | T |
| MTRMAN | | D McLaughlin | 8 | T |
| FIREMAN | | | | |
| FLRMAN | | S Schumacher | 8 | T |
| FLRMAN | | B Garrecht | 8 | T |
| FLRMAN | | M Hazen | 8 | T |

NO. OF DAYS _____ SINCE LAST LOST-TIME ACCIDENT

DAY TOUR 8 A.M. 4 P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. | |
|---|---|---|---|---|
| DRILLER | | A Brundige | ~~12~~ 8 | |
| DRKMAN | | M McLaughlin | ~~12~~ 8 | |
| MTRMAN | | B Larsen | 3 ~~12~~ | T |
| FIREMAN | | | | |
| FLRMAN | | P Marbien | ~~12~~ 8 | T |
| FLRMAN | | E Edghill | 3 ~~12~~ | T |
| FLRMAN | | E Nowers | ~~12~~ 8 | T |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR 4 00 P.M. 12 00 P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. | |
|---|---|---|---|---|
| DRILLER | | C Hopkins | ~~12~~ 8 | T |
| DRKMAN | | H. Kiefn | ~~12~~ 8 | T |
| MTRMAN | | J. Langlois | ~~12~~ 8 | T |
| FIREMAN | | | | |
| FLRMAN | | B Albertson | ~~12~~ 8 | T |
| FLRMAN | | R. Hewlo | ~~12~~ 8 | T |
| FLRMAN | | | | |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 81 DATE JUNE 6/73

OPERATOR: UNION Oil of Canada Co LTD
CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. RIG NO. 1E
LEASE: UNION AKlavik F-38
WELL NO. F-38 FIELD OR DIST. AKlavik. COUNTY NWT STATE Canada
DRILL PIPE STRING NO. 273 SIZE 4 TOOL JOINT O.D. 5 TYPE THD. 3½ IF
SIGNATURE OF OPERATOR'S REPRESENTATIVE: C.R. McLaughlin
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: E.W. Baumann

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NSCO | K380 | 14 |
| 2. | NSCO | K380 | 14 |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | MANN | 40# K55 | 67 | 2765 | | 2760 | Cemented w/1500SKS Oil Well Cement |

**TIME DISTRIBUTION—HOURS**

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 7¾ | 7¾ | 7½ |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | | |
| LUBRICATE RIG | ¼ | ¼ | ¼ |
| DEVIATION SURVEY | | | ¼ |
| TEST B.O.P. | ✓ | | ✓ |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| CASING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |

COMPLETION WORK: A. PERFORATING; B. TUBING TRIPS; C. SWABBING; D. TESTING; E. ADDITIONAL

TOTALS 5 8 8

**TIME SUMMARY (OFFICE USE ONLY)**

DAY WORK
HRS. W/DP
HRS. WO/DP
HRS. STANDBY
TOTAL DAY WORK

**WIRE LINE RECORD**

REEL NO.
NO. OF LINES SIZE
FEET SLIPPED
FEET CUT OFF
PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.

## MORNING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 62 | STANDS D.P. | 5840.83 FT. |
| 1 | SINGLES D.P. | 30.98 FT. |
| 12 | D.C. 2⅞ I.D. 6¾ O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 FT. |
| 2 | STB. BODY O.D. | 16.43 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.62 FT. |
| 3 | SUBS 6¼ 6⅝ O.D. | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shocksub | 9.05 FT. |
| | KELLY DOWN | 19.10 FT. |
| | TOTAL | 6562.00 FT. |

WT. OF STRING 137M LBS.

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 34 |
| SIZE | 8½ |
| MFG. | Smith |
| TYPE | 4JS |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 15 18 |
| SER. NO. | HC283 |
| DEPTH OUT | |
| DEPTH IN | 6507 |
| TOTAL FTG. | 55 |
| TOTAL HR. RUN | 8¾ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 12 00 | 3 00 | 5 00 |
| WEIGHT | 9.9 | 9.8 | 9.7+ |
| VISC.-SEC | 57 | 52 | 50 |
| W.L.-C.C. | | | |
| FL.TR. CK. | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Baroid | ~~4000#~~ | BAROID | 3500# |
| Gel | 1000# | | |
| ~~Baroid~~ | ~~#~~ | BENEX | 8# |

DRILLER R L Hayes

**FOOTAGE**

| FROM | TO | DR.-D RM.-R CORE.-C | CORE NO. |
|---|---|---|---|
| 6511 | 6562 | D | |

**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 SGL.-S PAR'EL.-P COM'D.-C |
|---|---|---|---|---|---|---|---|
| 40 | 45 | 1300 | 5½ X 14 | | 5½ X 14 | 65 | S |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

| TIME LOG FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 00 | 1 45 | 1¾ | DRLG |
| 1 45 | 2 00 | ¼ | Rig serv ✓ Pipe Rams |
| 2 00 | 8 00 | 6 | DRLG |

## DAY TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 62 | STANDS D.P. | 5840.83 FT. |
| 2 | SINGLES D.P. | 62.81 FT. |
| 12 | D.C. 2⅞ I.D. 6¾ O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 FT. |
| 2 | STB. BODY O.D. | 16.43 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.62 FT. |
| 3 | SUBS 6¼ 6⅝ O.D. | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shocksub | 9.05 FT. |
| | KELLY DOWN | 33.10 FT. |
| | TOTAL | 6604 FT. |

WT. OF STRING 137 M. LBS.

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 34 |
| SIZE | 8½ |
| MFG. | Smith |
| TYPE | 4JS |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 15 18 |
| SER. NO. | HC283 |
| DEPTH OUT | |
| DEPTH IN | 6507 |
| TOTAL FTG. | 102 |
| TOTAL HR. RUN | 16½ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 9.00 | 12 00 | 3.00 |
| WEIGHT | 9.9 | 9.8+ | 9.8+ |
| VISC.-SEC | 50 | 52 | 50 |
| W.L.-C.C. | | | |
| FL.TR. CK. | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| BAROID | 500# | | |
| BENEX | 2# | | |

DRILLER R Baumann

**FOOTAGE**

| FROM | TO | DR.-D RM.-R CORE.-C | CORE NO. |
|---|---|---|---|
| 6562 | 6609 | D | |

**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 SGL.-S PAR'EL.-P COM'D.-C |
|---|---|---|---|---|---|---|---|
| 40 | 45 | 1800 | 5½ | | 5½ | 65 | S |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

| TIME LOG FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8 00 | 11 45 | 3¾ | DRLG. |
| 11 45 | 12 00 | ¼ | Rig SERV. & ✓ BOP. |
| 12 00 | 4 00 | 4 | DRLG. |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 63 | STANDS D.P. | 5932.95 FT. |
| 2 | SINGLES D.P. | 30.89 FT. |
| 12 | D.C. 2⅞ I.D. 6¾ O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 FT. |
| 2 | STB. BODY O.D. | 16.43 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.62 FT. |
| 3 | SUBS 6¼ 6⅝ O.D. | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shocksub | 9.05 FT. |
| | KELLY DOWN | 24.07 FT. |
| | TOTAL | 6659.00 FT. |

WT. OF STRING 138 M LBS.

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 34 |
| SIZE | 8½ |
| MFG. | Smith |
| TYPE | 4JS |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 15 15 |
| SER. NO. | HC283 |
| DEPTH OUT | |
| DEPTH IN | 6507 |
| TOTAL FTG. | 152 |
| TOTAL HR. RUN | 24 |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 6 00 | 8 00 | 11 00 |
| WEIGHT | 9.8+ | 9.8+ | 9.8+ |
| VISC.-SEC | 58 | 56 | 55 |
| W.L.-C.C. | | | |
| FL.TR. CK | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER

**FOOTAGE**

| FROM | TO | DR.-D RM.-R CORE.-C | CORE NO. |
|---|---|---|---|
| 6609 | 6659 | D | |

**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 SGL.-S PAR'EL.-P COM'D.-C |
|---|---|---|---|---|---|---|---|
| 40 | 45 | 1300 | 5½ | | 5½ | 65 | S |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 6634 | 9½° | | | | | | | |

| TIME LOG FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4 00 | 9 30 | 5½ | DRLG. |
| 9 30 | 10 00 | ½ | Rig Serv + Survey |
| 10 00 | 12 00 | 2 | DRLG |

**DRILLING CREW PAYROLL DATA**

DATE JUNE 6 1973
WELL NAME & NO. UNION AKlavik F-38
COMPANY UNION Oil Co LTD
TOOL PUSHER E.W. Baumann RIG NO. 1E

MORNING TOUR P.M. A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R L Hayes | 12 |
| DRKMAN | | C Campbell | 12 |
| MTRMAN | | D McLaughlin | 12 |
| FIREMAN | | | |
| FLRMAN | | S Schumacher | 12 |
| FLRMAN | | G Garrecht | 12 |
| FLRMAN | | M Hazen | 12 |

NO. OF DAYS SINCE LAST LOST-TIME ACCIDENT

DAY TOUR 8 00 A.M. 4 00 P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R BRUNDAGE | 12 |
| DRKMAN | | m mcLaughlin | 12 |
| MTRMAN | | B LARSEN | 12 |
| FIREMAN | | | |
| FLRMAN | | P MARRIEN | |
| FLRMAN | | E EDGHILL | 12 |
| FLRMAN | | E NORRIS | 12 |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

EVENING TOUR P.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 80 DATE June 3/73

OPERATOR: UNION Oil of Canada Co LTD
LEASE: UNION Aklavik F-38
WELL NO. F-38 FIELD OR DIST. Aklavik COUNTY NWT STATE Canada

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. RIG NO. 1E

SIGNATURE OF OPERATOR'S REPRESENTATIVE: W K McLeod
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: E J Grauman

DRILL PIPE STRING: NO. 283 SIZE 4 — TOOL JOINT 5" O.D. TYPE THD. 3½ IF

PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NSCO | K380 | 14 |
| 2. | NSCO | K380 | 14 |
| 3. | | | |

LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | MANN | 40# K55 | 67 | 2765 | | 2760 | Cemented W/350 SKS |
| | | | | | | | Oil well Cement |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 7¼ | 7½ | 3¾ |
| REAMING | | | ¼ |
| CONDITIONING MUD & CIRCULATING | | | ¾ |
| TRIPS | | | 4 |
| LUBRICATE RIG | ¼ | | ¾ |
| DEVIATION SURVEY | | ¼ | ¼ |
| TEST B.O.P. | ✓ | | ¼ |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | ½ | | |
| RIGGING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

### TIME SUMMARY (OFFICE USE ONLY)

DAY WORK: FT.
HRS. W/DP
HRS. WO/DP
HRS. STANDBY
TOTAL DAY WORK

### WIRE LINE RECORD

REEL NO.
NO. OF LINES SIZE
FEET SLIPPED
FEET CUT OFF
PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.

## MORNING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 61 | STANDS D.P. | 5746.53 FT. |
| | SINGLES D.P. | FT. |
| 12 | D.C. 2⅞ I.D. 6¼ O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 FT. |
| 2 | STB. BODY O.D. | 16.43 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.62 FT. |
| 3 | SUB 6⅝ O.D. | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock sub | 9.05 FT. |
| | KELLY DOWN | 28.38 FT. |
| | TOTAL | 6446.60 FT. |
| WT. OF STRING | 135M | LBS. |

### BIT RECORD

| | |
|---|---|
| BIT NO. | RR 33 |
| SIZE | 8½ |
| MFG. | Smith |
| TYPE | 4JS |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 15-18 |
| SER. NO. | HC255 |
| DEPTH OUT | |
| DEPTH IN | 6327 |
| TOTAL FTG. | 119 |
| TOTAL HR. RUN | 28¾ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| TIME | 1 AM | 3 AM | 5 AM |
|---|---|---|---|
| WEIGHT | 9.9 | 9.9 | 9.9 |
| VISC.-SEC | 54 | 52 | 50 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | 9.5 | 9.0 | 9.0 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R L Hayes

### 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 SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6406 | 6446 | D | | | 40 | 40 | 1300 | 5½ | | 5½ | 65 | S |
| | | | | | | | | X | | X | | |
| | | | | | | | | 14 | | 14 | | |

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

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 AM | 12 15 | ¼ | Rig serv. & Pipe Rams |
| 12 15 | 4 AM | 3¾ | DRLG. |
| 4 AM | 4 30 | ½ | Change washpipe & washpipe Packing |
| 4 30 | 8 AM | 3½ | DRLG |

## DAY TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 61 | STANDS D.P. | 5744.53 FT. |
| 2 | SINGLES D.P. | 63.41 FT. |
| 12 | D.C. 2⅞ I.D. 6¼ O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 FT. |
| 2 | STB. BODY O.D. | 16.43 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.62 FT. |
| 3 | SUB 6⅝ O.D. | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock sub | 9.05 FT. |
| | KELLY DOWN | 12.03 FT. |
| | TOTAL | 6472 FT. |
| WT. OF STRING | 136 M. | LBS. |

### BIT RECORD

| | |
|---|---|
| BIT NO. | RR 33 |
| SIZE | 8½ |
| MFG. | Smith |
| TYPE | 4JS |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 15-18 |
| SER. NO. | HC255 |
| DEPTH OUT | |
| DEPTH IN | 6327 |
| TOTAL FTG. | 146 |
| TOTAL HR. RUN | 36½ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| TIME | 9 AM | 12 AM | 3 PM |
|---|---|---|---|
| WEIGHT | 9.9 | 9.9 | 9.9 |
| VISC.-SEC | 50 | 59 | 62 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | 9.0 | 9.0 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | 1000 # | | |
| SODA ASH | 300 # | | |
| DEMEX | 3 SKS | | |

DRILLER R Brundrigs

### 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6446 | 6492 | D | | | 40 | 45 | 1300 | 5½ | | 5½ | 64 | S |

DEVIATION RECORD: DEPTH 6445 DEV. 7¾ | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8 AM | 10 AM | 2 | DRLG |
| 10 AM | 10 30 | ½ | Rig Serv & Survey |
| 10 30 | 4 PM | 5½ | DRLG. |

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 61 | STANDS D.P. | 5746.53 FT. |
| 2 | SINGLES D.P. | 63.41 FT. |
| 12 | D.C. 2⅞ I.D. 6¼ O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 FT. |
| 2 | STB. BODY O.D. | 16.43 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.62 FT. |
| 3 | SUB 6⅝ O.D. | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock sub | 9.05 FT. |
| | KELLY DOWN | 29.75 FT. |
| | TOTAL | 6511.60 FT. |
| WT. OF STRING | 137M | LBS. |

### BIT RECORD

| | | |
|---|---|---|
| BIT NO. | RR 33 | 34 |
| SIZE | 8½ | 8½ |
| MFG. | Smith | Smith |
| TYPE | 4JS | 4JS |
| NOZZLE NO. | 1 2 | 1 2 |
| NOZZLE SIZE | 15 18 | 15 18 |
| SER. NO. | HC275 | HC283 |
| DEPTH OUT | 6507 | |
| DEPTH IN | 6327 | 6507 |
| TOTAL FTG. | 180 | 4 |
| TOTAL HR. RUN | 38½ | 1 |
| COND. OF BIT | 3-5-1 | DRLG |
| REAMER NO. | | |
| REAMER TYPE | | |

### MUD RECORD

| TIME | | |
|---|---|---|
| WEIGHT | | |
| VISC.-SEC | | |
| W.L.-C.C. | | |
| FLTR. CK | | |
| PH | | |
| SD. CONT. % | | |
| PRESSURE GRADIENT | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6492 | 6511 | D | | | 40 | 45 | 1300 | 5½ | | 5½ | 64 | S |
| | | | | | 35 | 30 | 1300 | | | | 65 | S |
| | | | | | | 35 | | | | | | |

DEVIATION RECORD: DEPTH 6507 DEV. 8½° | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4 AM | 6 15 | 2¼ | DRLG |
| 6 15 | 8 45 | 2½ | DRLG Survey & Hoist Bit #33. |
| 8 45 | 9 AM | ¼ | Change Bits & Blind Rams |
| 9 AM | 10 45 | 1¾ | RUN IN |
| 10 45 | 11 AM | ¼ | Break circ & clean 7' to Bottom |
| 11 AM | 12 AM | 1 | DRLG |

## DRILLING CREW PAYROLL DATA

DATE June 5 1973
WELL NAME & NO. UNION Aklavik
COMPANY UNION Oil of Co LTD
TOOL PUSHER E J Grauman RIG NO. 1E

### MORNING TOUR ____ P.M. ____ A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R L Hayes | 12 |
| DRKMAN | | C. Campbell | 12 |
| MTRMAN | | D McLaughlin | 12 |
| FIREMAN | | | |
| FLRMAN | | S Schumacher | 12 |
| FLRMAN | | G Garrecht | 12 |
| FLRMAN | | M Hazen | 12 |

NO. OF DAYS ____ SINCE LAST LOST-TIME ACCIDENT

### DAY TOUR ____ A.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | B Brundrigs | 12 |
| DRKMAN | | M McLaughlin | 12 |
| MTRMAN | | B Larsen | 12 |
| FIREMAN | | | |
| FLRMAN | | P Morasey | 12 |
| FLRMAN | | E Edghill | 12 |
| FLRMAN | | E Rogers | 12 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

### EVENING TOUR ____ P.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 79 DATE JUNE 4/73

OPERATOR: UNION OIL of Canada Co LTD
LEASE: UNION AKlavik
WELL NO. F-38
FIELD OR DIST. AKLAVIK
COUNTY NWT
STATE Canada

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD.
RIG NO. 1E

DRILL PIPE STRING: NO. 23 SIZE 4
TOOL JOINT: O.D. 5 TYPE THD. 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: W.R. McIntosh
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: E.W. Braunmann

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NSCO | K 380 | 14 |
| 2. | NSCO | K 380 | 14 |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9 5/8 | MONN | 40# K55 | 67 | 2765 | | 2760 | Cemented W/ 1500 sks Oil well Cement |

**TIME DISTRIBUTION—HOURS**

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | 6¼ | 7¾ | 10½ |
| DRILLING ACTUAL | ¼ | | |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | 1¼ | | |
| LUBRICATE RIG | ¼ | ¼ | U |
| DEVIATION SURVEY | | | ½ |
| TEST B.O.P. | | | V |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| SLIPPING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

**TIME SUMMARY (OFFICE USE ONLY)**

DAY WORK
HRS. W/DP
HRS. WO/DP
HRS. STANDBY
TOTAL DAY WORK

**WIRE LINE RECORD**

REEL NO.
NO. OF LINES SIZE
FEET SLIPPED
FEET CUT OFF
PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.

## MORNING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 60 | STANDS D.P. | 5662.72 FT. |
| | SINGLES D.P. | FT. |
| 12 | DC 2⅞ I.D. 6¾ O.D. | 358.88 FT. |
| 9 | DC 2⅞ I.D. 6¼ O.D. | 262.43 FT. |
| 2 | STB. BODY O.D. | 16.43 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.62 FT. |
| 3 | DC 2⅞ I.D. 6¼ O.D. | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock Sub | 9.05 FT. |
| | KELLY DOWN | 21.19 FT. |
| | TOTAL | 6345.00 FT. |
| WT. OF STRING | 135M | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | PR 33 |
| SIZE | 8½ |
| MFG. | Smith |
| TYPE | 4JS |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 15 18 |
| SER. NO. | HC235 |
| DEPTH OUT | |
| DEPTH IN | 6327 |
| TOTAL FTG. | 18 |
| TOTAL HR. RUN | 6¼ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | | 3 00 | 6 |
| WEIGHT | | 9.4 | 9.8 |
| VISC.-SEC | | 60 | 58 |
| W.L.-C.C. | | | 8.8 |
| FLTR. CK. | | | 2/32 |
| PH | | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R.L. Hayes

**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 SGL.-S PAR'EL-P COMP.-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6327 | 6345 | D | | | 40 | 30 | 1300 | 5½ | | 5½ | 65 | S |
| | | | | | | | | X | | X | | |
| | | | | | | | | 14 | | 14 | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 00 | 12 15 | ¼ | Rig Serv. |
| 12 15 | 1 30 | 1¼ | FINISH IN Hole |
| 1 30 | 1 45 | ¼ | Break Circ & Clean 3' to Bottom |
| 1 45 | 8 00 | 6¼ | DRLG |

## DAY TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 60 | STANDS D.P. | 5662.72 FT. |
| 1 | SINGLES D.P. | 31.72 FT. |
| 12 | DC 2⅞ I.D. 6¾ O.D. | 358.88 FT. |
| 9 | DC 2⅞ I.D. 6¼ O.D. | 262.43 FT. |
| 2 | STB. BODY O.D. | 16.43 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.62 FT. |
| 3 | DC 2⅞ I.D. 6¼ O.D. | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock Sub | 9.01 FT. |
| | KELLY DOWN | 19.53 FT. |
| | TOTAL | 6374 FT. |
| WT. OF STRING | 135M | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | AR 33 |
| SIZE | 8½ |
| MFG. | SmiTH |
| TYPE | 4JS |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 15 18 |
| SER. NO. | HC235 |
| DEPTH OUT | |
| DEPTH IN | 6327 |
| TOTAL FTG. | 47 |
| TOTAL HR. RUN | 14 |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 9.00 | 12.00 | 3.00 |
| WEIGHT | 9.9 | 9.9 | 9.9 |
| VISC.-SEC | 60 | 60 | 60 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R Brundige

**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 SGL.-S PAR'EL-P COMP.-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6343 | 6374 | D | | | 40 | 30 | 1300 | 5½ | | 5½ | 64 | S |
| | | | | | 35 | 40 | 1300 | | | | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8 00 | 1 30 | 5½ | DRLG. |
| 1 30 | 1 45 | ¼ | Rig SERV + V B.O.P. |
| 1 45 | 4 00 | 2¼ | DRLG. |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 60 | STANDS D.P. | 5652.72 FT. |
| 2 | SINGLES D.P. | 62.41 FT. |
| 12 | DC 2⅞ I.D. 6¾ O.D. | 358.88 FT. |
| 9 | DC 2⅞ I.D. 6¼ O.D. | 262.43 FT. |
| 2 | STB. BODY O.D. | 16.43 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.62 FT. |
| 3 | DC 2⅞ I.D. 6¼ O.D. | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock Sub | 9.05 FT. |
| | KELLY DOWN | 19.72 FT. |
| | TOTAL | 6406.00 FT. |
| WT. OF STRING | 135M | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 33 |
| SIZE | 8½ |
| MFG. | SmiTH |
| TYPE | 4JS |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 15 16 |
| SER. NO. | HC235 |
| DEPTH OUT | |
| DEPTH IN | 6327 |
| TOTAL FTG. | 79 |
| TOTAL HR. RUN | 21½ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 6.00 | 8 00 | 11 00 |
| WEIGHT | 9.9 | 9.9 | 9.9 |
| VISC.-SEC | 58 | 57 | 56 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. 2 LINER SIZE | PUMP NO. 2 S.P.M. | METHOD RUN SGL.-S PAR'EL-P COMP.-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6374 | 6406 | D | | | 30 | 40 | 1300 | | | 5½ | 65 | S |
| | | | | | 30 | 45 | | | | X | | |
| | | | | | | | | | | 14 | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 6386 | 7¾ | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4 00 | 9 00 | 5 | DRLG. |
| 9 00 | 9 30 | ½ | Rig Servit Survey |
| 9 30 | 12 00 | 2½ | DRLG |

**DRILLING CREW PAYROLL DATA**

DATE JUNE 4 1973
WELL NAME & NO. UNION AKlavik F-38
COMPANY UNION OIL CO LTD
TOOL PUSHER E.W. Braunmann RIG NO. 1E

MORNING TOUR ____ P.M. ____ A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R L Hayes | 12 |
| DRKMAN | | C Campbell | 12 |
| MTRMAN | | D McLaughlin | 12 |
| FIREMAN | | | |
| FLRMAN | | S Schumacher | 12 |
| FLRMAN | | G Garrecht | 12 |
| FLRMAN | | M. Hazen | 12 |

NO. OF DAYS ____ SINCE LAST LOST-TIME ACCIDENT

DAY TOUR 8 A.M. 4 P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R Brundigle | 12 |
| DRKMAN | | M McLaughlin | 12 |
| MTRMAN | | B Larsen | 12 |
| FIREMAN | | | |
| FLRMAN | | P Marren | 12 |
| FLRMAN | | E Eidshill | 12 |
| FLRMAN | | E Nowers | 12 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR ____ P.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 78 DATE June 3/73

OPERATOR: Union Oil of Canada Co. LTD
LEASE: Union Aklavik F-38
WELL NO. F-38 FIELD OR DIST. Aklavik COUNTY NWT STATE Canada

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. RIG NO. 1E
DRILL PIPE STRING NO. 273 SIZE 4 TOOL JOINT 5 O.D. TYPE THD. 3½IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: W.K. McSmith
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: E.W. Baumann

PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NSCO | K380 | 14 |
| 2. | NSCO | K380 | 14 |
| 3. | | | |

LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9 5/8 | MaWN | 40# K55 | 67 | 2765 | | 2760 | Cemented w/1500 sks Oil well cement |
| | | | | | | | |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | | | |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | 2½ | | |
| TRIPS | 3½ | | |
| LUBRICATE RIG | ✓ | | |
| DEVIATION SURVEY | ¼ | | |
| TEST B.O.P. | ✓ | | |
| CUT OFF DRILLING LINE | ¼ | | |
| REPAIR RIG | | | |
| SLIP & SERVICE RIG | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | 1¼ | | |
| FISHING | | | |

COMPLETION WORK: A. PERFORATING; B. TUBING TRIPS; C. SWABBING; D. TESTING; E. ADDITIONAL; TOTALS

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK
HRS. W/DP
HRS. WO/DP
HRS. STANDBY
TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.
NO. OF LINES SIZE
FEET SLIPPED
FEET CUT OFF
PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.

## MORNING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 59 | STANDS D.P. | 5535.26 | FT. |
| 2 | SINGLES D.P. | 62.92 | FT. |
| 12 | D.C. 2 7/8 I.D. 6¼ O.D. | 358.56 | FT. |
| 9 | D.C. 2 7/8 I.D. 6¼ O.D. | 262.43 | FT. |
| 2 | STB. BODY O.D. | 16.40 | FT. |
| 1 | STB. BODY O.D. | 8.10 | FT. |
| 1 | RMR. BODY O.D. | 8.62 | FT. |
| 3 | CVS 6½ | 7.51 | FT. |
| | BIT OR C.B. | | FT. |
| 1 | Shock Sub | 9.06 | FT. |
| | KELLY DOWN | 34.78 | FT. |
| | TOTAL | 6327 | FT. |

WT. OF STRING 133 m. LBS.

### BIT RECORD

| | |
|---|---|
| BIT NO. | 33 |
| SIZE | 8½ |
| MFG. | Smith |
| TYPE | 4JS |
| NOZZLE NO. | 2 1 |
| NOZZLE SIZE | 18 15 |
| SER. NO. | HC235 |
| DEPTH OUT | 6327 |
| DEPTH IN | 6299 |
| TOTAL FTG. | 28 |
| TOTAL HR. RUN | 8 |
| COND. OF BIT | 111 |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | |
|---|---|
| TIME | 12 00 |
| WEIGHT | 9.9 |
| VISC.-SEC | 60 |
| W.L.-C.C. | 8.0 |
| FL.TR. CK. | 3/32 |
| PH | 9.5 |
| SD. CONT. % | |
| PRESSURE GRADIENT | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R L Hayes

### 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6327 | | | | | | | 1300 | | | 5½ | 65 | |
| | | | | Check Fire Extinguishers | | | | | | 4 | | |
| | | | | | | | | | | 14 | | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 6325 | 7 3/4 | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 00 | 1 00 | 1 | Circ to test + Rig serv |
| 1 00 | 1 45 | ¾ | Make 10 std Dummy TRIP |
| 1 45 | 3 15 | 1½ | Circ to Test |
| 3 15 | 3 30 | ¼ | Survey |
| 3 30 | 6 30 | 3 | Hoist + Lay down stab + Reamer |
| 6 30 | 7 00 | ½ | Slip 23' DRLG Line + Check Motor shut off's O.K. |
| 7 00 | 8 00 | 1 | Handle Test tools |

## DAY TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 60 | STANDS D.P. | 5839.04 | FT. |
| 2 | SINGLES D.P. | 62.90 | FT. |
| 9 | D.C. 2 7/8 I.D. 6¼ O.D. | 268.85 | FT. |
| 9 | D.C. 2 7/8 I.D. 6¼ O.D. | 262.43 | FT. |
| | STB. BODY O.D. | | FT. |
| | STB. BODY O.D. | | FT. |
| | RMR. BODY O.D. | | FT. |
| | SUBS O.D. | | FT. |
| | BIT OR C.B. | | FT. |
| 1 | Shock Sub | 9.02 | FT. |
| | KELLY DOWN | | FT. |
| | TOTAL | | FT. |

WT. OF STRING 100 m. LBS.

### BIT RECORD

| | |
|---|---|
| BIT NO. | |
| SIZE | |
| MFG. | |
| TYPE | |
| NOZZLE NO. | |
| NOZZLE SIZE | |
| SER. NO. | |
| DEPTH OUT | |
| DEPTH IN | |
| TOTAL FTG. | |
| TOTAL HR. RUN | |
| COND. OF BIT | |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | |
|---|---|
| TIME | |
| WEIGHT | |
| VISC.-SEC | |
| W.L.-C.C. | |
| FL.TR. CK. | |
| PH | |
| SD. CONT. % | |
| PRESSURE GRADIENT | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R Brundige

### 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6327 | | | | | | | | | | | | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8 00 | 10 00 | 2 | Handle Test Tools & make up Packer. |
| 10 00 | 1 00 | 3 | Run in Test # 2. |
| 1 00 | 4 00 | 3 | Testing D.S.T. No 2. 6327 To 6060 |
| | | | H.M.P. 3110 T.S.I. 2460 - F.S.I. 2460 |
| | | | F.H.M. 3110 |
| | | | Flume Recovery 45 FT. SLIGHT GAS. |
| | | | Cut DRLG MUD |

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| | STANDS D.P. | | FT. |
| | SINGLES D.P. | | FT. |
| 12 | D.C. 2 7/8 I.D. 6¼ O.D. | 358.88 | FT. |
| 9 | D.C. 2 7/8 I.D. 6¼ O.D. | 262.43 | FT. |
| 2 | STB. BODY O.D. | 16.49 | FT. |
| 1 | STB. BODY O.D. | 8.10 | FT. |
| 1 | RMR. BODY O.D. | 8.62 | FT. |
| 3 | CVS 6¼ | 7.58 | FT. |
| | BIT OR C.B. | | FT. |
| 1 | Shock Sub | 9.05 | FT. |
| | KELLY DOWN | | FT. |
| | TOTAL | | FT. |

WT. OF STRING LBS.

### BIT RECORD

| | |
|---|---|
| BIT NO. | RR 33 |
| SIZE | 8½ |
| MFG. | Smith |
| TYPE | 4JS |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 15 18 |
| SER. NO. | HC235 |
| DEPTH OUT | |
| DEPTH IN | 6327 |
| TOTAL FTG. | |
| TOTAL HR. RUN | |
| COND. OF BIT | |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | |
|---|---|
| TIME | 1 1 |
| WEIGHT | 9.9 9.9 |
| VISC.-SEC | 57 57 |
| W.L.-C.C. | 7.6 7.6 |
| FL.TR. CK | 1/32 1/32 |
| PH | 9.5 9.5 |
| SD. CONT. % | 6 6 |
| PRESSURE GRADIENT | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. 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 | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4 00 | 7 30 | 3½ | HOIST D.S.T #0-2 |
| 2 30 | 9 15 | 1¾ | WOO |
| 9 15 | 10 30 | 1¼ | Lay down Tools + service same |
| 10 30 | 12 00 | 1½ | Pick up Reamer + Stab + Run in |

## DRILLING CREW PAYROLL DATA

DATE June 3 1973
WELL NAME & NO. Union Aklavik E-38
COMPANY Union Oil Co. LTD
TOOL PUSHER E.W. Baumann RIG NO. 1E

### MORNING TOUR P.M. A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R L Hayes | 12 |
| DRKMAN | | C Campbell | 12 |
| MTRMAN | | D McLaughlin | 12 |
| FIREMAN | | | |
| FLRMAN | | S Schumacher | 12 |
| FLRMAN | | G Garrecht | 12 |
| FLRMAN | | M Hazen | 12 |

NO. OF DAYS SINCE LAST LOST-TIME ACCIDENT

### DAY TOUR A.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R Brundige | 12 |
| DRKMAN | | M McLaughlin | 12 |
| MTRMAN | | B Larsen | 12 |
| FIREMAN | | | |
| FLRMAN | | P Murren | 12 |
| FLRMAN | | E Dyhill | 12 |
| FLRMAN | | E Mowers | 12 |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

### EVENING TOUR P.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 77 DATE JUNE 2/73

OPERATOR: UNION Oil of Canada Co. LTD
LEASE: UNION Aklavik
WELL NO. F-38 FIELD OR DIST. Aklavik COUNTY NWT STATE Canada

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. RIG NO. 1E

DRILL PIPE STRING NO. 273 SIZE 4 TOOL JOINT 5 O.D. TYPE THD. 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: M.K. McDaffe
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: E.W. Braumann

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NSCO | K 380 | 14 |
| 2. | NSCO | K 380 | 14 |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | MANN | 40# K55 | 67 | 2765 | | 2760 | Cemented W/1500 Sks |
| | | | | | | | Oil well Cement |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | | 2'6 8 | |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | 5½ | |
| LUBRICATE RIG | ¼ | | |
| DEVIATION SURVEY | | | |
| TEST B.O.P. | ✓ | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| RING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

TIME SUMMARY (OFFICE USE ONLY)

| | |
|---|---|
| DAY WORK | |
| HRS. W/DP | |
| HRS. WO/DP | |
| HRS. STANDBY | |
| TOTAL DAY WORK | |

## WIRE LINE RECORD

| | |
|---|---|
| REEL NO. | |
| NO. OF LINES | SIZE |
| FEET SLIPPED | |
| FEET CUT OFF | |
| PRESENT LENGTH | |
| TON MI. OR TRIPS SINCE LAST CUT | |
| CUMULATIVE TON MI. OR TRIPS | |
| NO. OF DAYS FROM SPUD | |
| CUMULATIVE ROTATING HRS. | |

## MORNING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 59 | STANDS D.P. | 5558.26 FT. |
| 1 | SINGLES D.P. | 31.56 FT. |
| 12 | D.C. 2¾ I.D. 6¾ O.D. | 358.88 FT. |
| 9 | D.C. 2¾ I.D. 6¼ O.D. | 262.43 FT. |
| 2 | STB. BODY O.D. | 16.40 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.42 FT. |
| 3 | SUBS 6¾ 6¼ | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shocksub | 9.05 FT. |
| | KELLY DOWN | 32.09 FT. |
| | TOTAL | 6293.00 FT. |
| WT. OF STRING | 132M | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 32 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | S88 |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 15 16 |
| SER. NO. | 297447 |
| DEPTH OUT | |
| DEPTH IN | 6135 |
| TOTAL FTG. | 158 |
| TOTAL HR. RUN | 42 |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| TIME | 1 00 | 3 00 | 6 00 |
|---|---|---|---|
| WEIGHT | 9.9 | 9.9 | 9.9 |
| VISC.-SEC | 57 | 55 | 60 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| BeNex | 4# | Cellex | 100# |
| Soda Ash | 100# | | |
| Dextrid | 150# | | |

DRILLER R L Hayes

**FOOTAGE**

| FROM | TO | DR.-D RM.-R CORE.-C | CORE NO. |
|---|---|---|---|
| 6270 | 6293 | D | |

**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.-P PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|
| 40 | 30 | 1300 | 5½ | 65 | 5½ | 65 | S |
| | | | X | | X | | |
| | | | 14 | | 14 | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 00 | 12 13 | ¼ | Rig Serv ✓ Pipe Rams |
| 12 13 | 8 00 | 7¾ | DRLG. |

Change G-land packing ON # 1 pump Lube Side

## DAY TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 59 | STANDS D.P. | 5558.26 FT. |
| 8 | SINGLES D.P. | 31.56 FT. |
| 12 | D.C. 2¾ ½ I.D. 6¼ O.D. | 358.88 FT. |
| 9 | D.C. 2¾ I.D. 6¼ O.D. | 262.43 FT. |
| 2 | STB. BODY O.D. | 16.40 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.42 FT. |
| 3 | SUBS 6¾ 6¼ | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shocksub | 9.05 FT. |
| | KELLY DOWN | 39.91 FT. |
| | TOTAL | 6299 FT. |
| WT. OF STRING | 135 M. | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 32 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | S88 |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 15 16 |
| SER. NO. | 297447 |
| DEPTH OUT | 6299 |
| DEPTH IN | 6135 |
| TOTAL FTG. | 164 |
| TOTAL HR. RUN | 44½ |
| COND. OF BIT | 8 4 1 |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| TIME | 9 00 | T | T |
|---|---|---|---|
| WEIGHT | 9.9 | R | R |
| VISC.-SEC | 65 | I | I |
| W.L.-C.C. | | P | P |
| FLTR. CK. | | | |
| PH | 9.5 | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R Brandrige

**FOOTAGE**

| FROM | TO | DR.-D RM.-R CORE.-C | CORE NO. |
|---|---|---|---|
| ~~6245~~ | ~~6~~ | D. | |
| 6295 | 6299 | | |

**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.-P PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|
| 40 | 30 | 1300 | 5½ | 65 | 5½ | | S |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 6249 | 8° | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8 | 10 30 | 2 1/2 | DRLG. |
| 10 30 | 1 30 | 3 | DROP SURVIEY & HOIST BIT # 32. |
| 1 30 | 4 00 | 2½ | RUN IN HOLE |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 59 | STANDS D.P. | 5558.26 FT. |
| 2 | SINGLES D.P. | 62.92 FT. |
| 12 | D.C. 2¾ I.D. 6¾ O.D. | 358.88 FT. |
| 9 | D.C. 2¾ I.D. 6¼ O.D. | 262.43 FT. |
| 2 | STB. BODY O.D. | 16.40 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.42 FT. |
| 3 | SUBS 6¾ 6¼ | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | SHOCKSUB | 9.05 FT. |
| | KELLY DOWN | 34.78 FT. |
| | TOTAL | 6327.00 FT. |
| WT. OF STRING | 133 M | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 33 |
| SIZE | 8½ |
| MFG. | SMITH |
| TYPE | 4TS |
| NOZZLE NO. | 3 1 |
| NOZZLE SIZE | 15 15 |
| SER. NO. | 8C235 |
| DEPTH OUT | 6327 |
| DEPTH IN | 6299 |
| TOTAL FTG. | 28 |
| TOTAL HR. RUN | 8 |
| COND. OF BIT | |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| TIME | 4.00 | 7 00 | 11 00 |
|---|---|---|---|
| WEIGHT | 9.9 | 9.9 | 9.9 |
| VISC.-SEC | 65 | 63 | 61 |
| W.L.-C.C. | | | |
| FLTR. CK | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER

**FOOTAGE**

| FROM | TO | DR.-D RM.-R CORE.-C | CORE NO. |
|---|---|---|---|
| 6294 | 6327 | D | |

**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.-P PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|
| 40 | 30 | 1300 | 5½ | | 5½ | 65 | |
| | | | X | | X | | |
| | | | 14 | | 14 | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4 | 12 00 | 8 | DRLG. |

## DRILLING CREW PAYROLL DATA

DATE JUNE 2 1973
WELL NAME & NO. UNION AKlavik F-38
COMPANY UNION Oil Co LTD
TOOL PUSHER E.W. Braumann RIG NO. 1E

MORNING TOUR ____ P.M. ____ A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R L Hayes | 12 |
| DRKMAN | | C Campbell | 12 |
| MTRMAN | | D McLaughLIN | 12 |
| FIREMA. | | | |
| FLRMAN | | S Schumacher | 12 |
| FLRMAN | | G Garrecht | 12 |
| FLRMAN | | M Hazen | 12 |

NO. OF DAYS ____ SINCE LAST LOST-TIME ACCIDENT

DAY TOUR ____ A.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R BRANDRIGE | 12 |
| DRKMAN | | m mcLAUGHLIN | 12 |
| MTRMAN | | B LARSEN. | 12 |
| FIREMAN | | | |
| FLRMAN | | P MARREN | 12 |
| FLRMAN | | E EDGHILL | 12 |
| FLRMAN | | E NOWTERS | 12 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR ____ P.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 16 DATE JUNE 1/73

OPERATOR: UNION OIL of Canada Co LTD
LEASE: UNION AKLAVIK
WELL NO. F-38 FIELD OR DIST. AKLAVIK COUNTY NWT STATE Canada

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. RIG NO. 1E

DRILL PIPE STRING NO. 273 SIZE 4 TOOL JOINT O.D. 5 TYPE THD. 3½IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: M.K. McEachern
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: E.O. Graumann

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NSCO | K380 | 14 |
| 2. | NSCO | K380 | 14 |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | MANN | 40# K55 | 2765 | 2765 | | 2760 | Cemented w/1500 SKS |
| | | | | | | | Oil Well Cement |

**TIME DISTRIBUTION—HOURS**

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 9¾ | 6¾ | 7½ |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | 1 | |
| TRIPS | | | |
| LUBRICATE RIG | ✓ | 1¼ | ✓ |
| DEVIATION SURVEY | ¼ | | ¼ |
| TEST B.O.P. | ✓ | | ✓ |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| BORING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK
HRS. W/DP
HRS. WO/DP
HRS. STANDBY
TOTAL DAY WORK

**WIRE LINE RECORD**

REEL NO.
NO. OF LINES SIZE
FEET SLIPPED
FEET CUT OFF
PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.

## MORNING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 58 | STANDS D.P. | 5463.69 FT. |
| 1 | SINGLES D.P. | 31.34 FT. |
| 12 | D.C. 2⅞ I.D. 6¾ O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 FT. |
| 2 | STB. BODY O.D. | 16.43 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.62 FT. |
| 3 | SUB 6¼ 6¼ | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock Sub | 9.05 FT. |
| | KELLY-DOWN | 33.89 FT. |
| | TOTAL | 6200.80 FT. |
| WT. OF STRING | 132 M | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 32 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | S88 |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 15 16 |
| SER. NO. | 297447 |
| DEPTH OUT | |
| DEPTH IN | 6135 |
| TOTAL FTG. | 65 |
| TOTAL HR. RUN | 20 |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 12:00 | 3 00 | 7 00 |
| WEIGHT | 9.8 | 9.9 | 9.9 |
| VISC.-SEC | 54 | 53 | 60 |
| W.L.-C.C. | | | 10.0 |
| FL.TR. CK. | | | 2/32 |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Benex | 4# | | |
| Ge18 | 1000# | | |

DRILLER R L Hayes

**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. 2 LINER SIZE | PUMP NO. 2 S.P.M. | METHOD RUN SGC-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6175 | 6200 | D | | | 40 | 30 | 1300 | | | 5½ | 65 | S |
| | | | | | 1 | | | | | Y | | |
| | | | | | | | | | | 14 | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 00 | 12 15 | ¼ | Finish Survey & Rig Serv ✓ Pipe Rams |
| 12 15 | 6 00 | 17¾ | DRLG |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 58 | STANDS D.P. | 5463.69 FT. |
| 2 | SINGLES D.P. | 62.72 FT. |
| 12 | D.C. 2⅞ I.D. 6¾ O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 FT. |
| 2 | STB. BODY O.D. | 16.43 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.62 FT. |
| 3 | SUB 6¼ 6¼ | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock Sub | 9.05 FT. |
| | KELLY DOWN | 41.00 FT. |
| | TOTAL | 6258 FT. |
| WT. OF STRING | 132 M | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 32 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | S88 |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 15 16 |
| SER. NO. | 297447 |
| DEPTH OUT | |
| DEPTH IN | 6135 |
| TOTAL FTG. | 105 |
| TOTAL HR. RUN | 26¾ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 9.00 | 12.00 | 3 00 |
| WEIGHT | 9.9 | 9.9 | 9.9 |
| VISC.-SEC | 64 | 63 | 63 |
| W.L.-C.C. | | | |
| FL.TR. CK. | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R Brandigi

**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. 2 LINER SIZE | PUMP NO. 2 S.P.M. | METHOD RUN SGC-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6200 | 6258 | D. | | | 40 | 30 | 1300 | 5½ | | 5½ | 65 | S |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8 00 | 9 45 | 1¾ | DRLG. |
| 9 45 | 10 00 | ¼ | RIG SERV & V BOPS. & DRILLING LINE |
| 10 00 | 12 45 | 2¾ | DRLG. |
| 12 45 | 1 15 | 1 | CIRC SAMPLE. |
| 1 15 | 4 00 | 2¾ | DRLG |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 59 | STANDS D.P. | 5558.26 FT. |
| | SINGLES D.P. | FT. |
| 12 | D.C. 2⅞ I.D. 6¾ O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 FT. |
| 2 | STB. BODY O.D. | 16.43 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.62 FT. |
| 3 | SUB 6¼ 6¼ | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock Sub | 9.05 FT. |
| | KELLY DOWN | 40.65 FT. |
| | TOTAL | 6270.80 FT. |
| WT. OF STRING | 132 M | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 32 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | S88 |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 15 16 |
| SER. NO. | 297447 |
| DEPTH OUT | |
| DEPTH IN | 6135 |
| TOTAL FTG. | 135 |
| TOTAL HR. RUN | 34¼ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 6.00 | 9 00 | 11 00 |
| WEIGHT | 9.9 | 9.9 | 9.9 |
| VISC.-SEC | 60 | 60 | 59 |
| W.L.-C.C. | | | |
| FL.TR. CK | | | |
| PH | 9.5 | 9.8 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. 2 LINER SIZE | PUMP NO. 2 S.P.M. | METHOD RUN SGC-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6238 | 6270 | D. | | changed 2" motor | 40 | 30 | 1300 | 5½ | 65 | | | |
| | | | | clutch. | | | | ✓ | | | | |
| | | | | | | | | 14 | | | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 6238 | 8° | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4 00 | 4 30 | ½ | SURVEY |
| 4 30 | 12 00 | 7½ | DRLG. |

## DRILLING CREW PAYROLL DATA

DATE JUNE 1 1973
WELL NAME & NO. UNION AKLAVIK E-38
COMPANY UNION OIL Co LTD
TOOL PUSHER E.O. Graumann RIG NO. 1E

**MORNING TOUR** P.M. A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R L Hayes | 12 |
| DRKMAN | | C Campbell | 12 |
| MTRMAN | | D. McLaughlin | 12 |
| FIREMAN | | | |
| FLRMAN | | S Schumacher | 12 |
| FLRMAN | | G Garrecht | 12 |
| FLRMAN | | M Hazen | 12 |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

**DAY TOUR** A.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R Brandigi | 12 |
| DRKMAN | | M McLaughlin | 12 |
| MTRMAN | | B LARSEN | 12 |
| FIREMAN | | | |
| FLRMAN | | P MARREN | 12 |
| FLRMAN | | E EDGHILL | 12 |
| FLRMAN | | E NOWERS | 12 |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

**EVENING TOUR** P.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 75 DATE MAY 31/73

OPERATOR: UNION Oil of Canada Co LTD
LEASE: UNION AKlavik
WELL NO. F-38 FIELD OR DIST. AKlavik
COUNTY NWT STATE Canada

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. RIG NO. 1E
DRILL PIPE STRING NO. 273 SIZE 4 TOOL JOINT 5 O.D. TYPE THD. 3½ F.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: W.K. McIntosh
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: E.W. Kaumann

## PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NSCO | K380 | 14 |
| 2. | NSCO | K380 | 14 |
| 3. | | | |

## LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | MaNN | 40#K55 | 67 | 2765 | | 2760 | Cemented w/ 1500 SKS Oil well Cement. |
| | | | | | | | |
| | | | | | | | |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 3 | 4½ | 7¾ |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | 4¾ | 3¼ | |
| LUBRICATE RIG | | | ✓ |
| DEVIATION SURVEY | ¼ | | ¼ |
| TEST B.O.P. | ✓ | | |
| CUT OFF DRILLING LINE | | ¼ | |
| REPAIR RIG | | | |
| BORING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK
HRS. W/DP
HRS. WO/DP
HRS. STANDBY
TOTAL DAY WORK

WIRE LINE RECORD

REEL NO.
NO. OF LINES SIZE
FEET SLIPPED 23½
FEET CUT OFF
PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.

## MORNING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 57 | STANDS D.P. | 5369.48 FT. |
| 2 | SINGLES D.P. | 62.51 FT. |
| 12 | D.C. 2⅞ I.D. 6¼ O.D. | 358.88 FT. |
| 9 | D.C. 2¼ I.D. 6¼ O.D. | 262.43 FT. |
| 2 | STB. BODY O.D. | 16.43 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.62 FT. |
| 3 | D.C. 2¼ I.D. 6¼ O.D. | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shocksub | 9.05 FT. |
| | KELLY DOWN | 31.92 FT. |
| | TOTAL | 6135.00 FT. |
| WT. OF STRING | 130M | LBS. |

### BIT RECORD

| | |
|---|---|
| BIT NO. | 31 |
| SIZE | 8½ |
| MFG. | Smith |
| TYPE | 4JS |
| NOZZLE NO. | 2 1 |
| NOZZLE SIZE | 15 18 |
| SER. NO. | MM780 |
| DEPTH OUT | 6135 |
| DEPTH IN | 5974 |
| TOTAL FTG. | 161 |
| TOTAL HR. RUN | 45½ |
| COND. OF BIT | 4 4 1 |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 2:00 | | |
| WEIGHT | 9.9 | | |
| VISC.-SEC | 57 | | |
| W.L.-C.C. | | | |
| FL.TR. CK. | | | |
| PH | 9.5 | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R.L. Hayes

### 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. 2 LINER SIZE | PUMP NO. 2 S.P.M. | METHOD RUN SGL.—S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6124 | 6135 | D | | | 40 | 28 | 1300 | | | 5½ | 65 | S |
| | | | | | | | | | | X | | |
| | | | | | | | | | | 14 | | |

DEVIATION RECORD: DEPTH 6135 DEV. 8° DIRECTION

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 00 | 3 00 | 3 | DRLG. |
| 3 00 | 3 15 | ¼ | Survey @ 6135 |
| 3 15 | 8:00 | 4¾ | Hoist + Check Drill Collars subs & stb. |

## DAY TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 58 | STANDS D.P. | 5463.68 FT. |
| | SINGLES D.P. | FT. |
| 12 | D.C. 2⅞ I.D. 6¼ O.D. | 358.88 FT. |
| 9 | D.C. 2¼ I.D. 6¼ O.D. | 262.43 FT. |
| 2 | STB. BODY O.D. | 16.45 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.62 FT. |
| 3 | D.C. 2¼ I.D. 6¼ O.D. | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shocksub | 9.05 FT. |
| | KELLY DOWN | 15.77 FT. |
| | TOTAL | 6149 FT. |
| WT. OF STRING | 132 M. | LBS. |

### BIT RECORD

| | |
|---|---|
| BIT NO. | 32 |
| SIZE | 8½ |
| MFG. | SIEC |
| TYPE | S88 |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 15 16 |
| SER. NO. | 29447 |
| DEPTH OUT | ~~2[illegible]~~ |
| DEPTH IN | 6135 |
| TOTAL FTG. | 14 |
| TOTAL HR. RUN | 4½ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | |
|---|---|---|
| TIME | 11.00 | 2.00 |
| WEIGHT | 9.9 | 9.9 |
| VISC.-SEC | 58 | 57 |
| W.L.-C.C. | | |
| FL.TR. CK. | | |
| PH | 9.5 | 9.5 |
| SD. CONT. % | | |
| PRESSURE GRADIENT | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R Brundidge

### 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6135 | 6149 | D | | | 40 | 25 | 1300 | 5½ | | 5½ | 65 | S |
| | | | | | | | | | | | | |

DEVIATION RECORD: DEPTH DEV. DIRECTION

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8 00 | 8 30 | ½ | FINISH CHECKING COLLARS & CHANGE BITS |
| 8 30 | 9 15 | ¾ | RUN D.C. |
| 9 15 | 9 30 | ¼ | SLIP LINE |
| 9 30 | 11 30 | 2 | RUN IN HOLE & BREAK CIRC |
| 11 30 | 4 00 | 4½ | DRLG. |

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 58 | STANDS D.P. | 5463.68 FT. |
| | SINGLES D.P. | FT. |
| 12 | D.C. 2⅞ I.D. 6¼ O.D. | 358.88 FT. |
| 9 | D.C. 2¼ I.D. 6¼ O.D. | 262.43 FT. |
| 2 | STB. BODY O.D. | 16.43 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.62 FT. |
| 3 | D.C. 2¼ I.D. 6¼ O.D. | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shocksub | 9.05 FT. |
| | KELLY DOWN | 40.27 FT. |
| | TOTAL | 6175.00 FT. |
| WT. OF STRING | 132M | LBS. |

### BIT RECORD

| | |
|---|---|
| BIT NO. | 32 |
| SIZE | 8½ |
| MFG. | SIEC |
| TYPE | S88 |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 15 16 |
| SER. NO. | 29447 |
| DEPTH OUT | |
| DEPTH IN | 6135 |
| TOTAL FTG. | 40 |
| TOTAL HR. RUN | 12¼ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 4 00 | 7 00 | 11 00 |
| WEIGHT | 9.9 | 9.9 | 9.9 |
| VISC.-SEC | 57 | 55 | 54 |
| W.L.-C.C. | | | |
| FL.TR. CK | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6149 | 6175 | D | | | 40 | 25 | 1300 | | | 5½ | 65 | S |
| | | | | | | | | | | X | | |
| | | | | | | | | | | 14 | | |

DEVIATION RECORD: DEPTH 6165 DEV. 8° DIRECTION

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4 00 | 11 45 | 7¾ | DRLG. |
| 11 45 | 12 00 | ¼ | Survey |

## DRILLING CREW PAYROLL DATA

DATE May 31 1973
WELL NAME & NO. UNION AKlavik F-38
COMPANY UNION Oil Co. LTD
TOOL PUSHER E.W. Kaumann RIG NO. 1E

MORNING TOUR ____ P.M. ____ A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R.L. Hayes | 12 |
| DRKMAN | | C Campbell | 12 |
| MTRMAN | | D McLaughLin | 12 |
| FIREMAN | | | |
| FLRMAN | | S Schumacher | 12 |
| FLRMAN | | G Garrecht | 12 |
| FLRMAN | | M Hazen | 12 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

DAY TOUR ____ A.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R BRundidge | 12 |
| DRKMAN | | M McLAUGHLIN | 12 |
| MTRMAN | | B LARSEN | 12 |
| FIREMAN | | | |
| FLRMAN | | R MARREN | 12 |
| FLRMAN | | E EDYHILL | 12 |
| FLRMAN | | E DOWIERS | 12 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR ____ P.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

DAILY DRILLING REPORT — REPORT NO. 74 — DATE May 30/73

OPERATOR: UNION Oil of Canada Co. LTD
LEASE: UNION ARLAVIK F-38
WELL NO.: F-38 — FIELD OR DIST.: ARLAVIK — COUNTY: NWT — STATE: Canada
CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. — RIG NO.: 1E
DRILL PIPE STRING NO.: 273 — SIZE: 4 — TOOL JOINT O.D.: 5 — TYPE THD.: 3½ IF
SIGNATURE OF OPERATOR'S REPRESENTATIVE: W. K. McIntosh
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry D. Armstrong

PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NSCO | K-380 | 14 |
| 2. | NSCO | K 380 | 14 |
| 3. | | | |

LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | MANN | 40# K55 | 67 | 2765 | | 2766 | Cemented w/1500 sks Oil Well Cement |

DRILLING CREW PAYROLL DATA
DATE May 30 1973
WELL NAME & NO. UNION ARLAVIK F-38
COMPANY UNION OIL Co. LTD
TOOL PUSHER Barry D. Armstrong — RIG NO. 1E

MORNING TOUR

TIME DISTRIBUTION–HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 7½ | 7¾ | 7½ |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | | |
| LUBRICATE RIG | ✓ | ¼ | ✓ |
| DEVIATION SURVEY | ½ | | ½ |
| TEST B.O.P. | ✓ | ✓ | ✓ |
| CUT OFF DRILLING LINE | | | ✓ |
| REPAIR RIG | | | |
| BORING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

TIME SUMMARY (OFFICE USE ONLY)
DAY WORK
HRS. W/DP
HRS. WO/DP
HRS. STANDBY
TOTAL DAY WORK

WIRE LINE RECORD
REEL NO.
NO. OF LINES — SIZE
FEET SLIPPED
FEET CUT OFF
PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 57 | STANDS D.P. | 5369.48 FT. |
| | SINGLES D.P. | FT. |
| 12 | D.C. 2⅞ I.D. 6¾ O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 FT. |
| 2 | STB. BODY O.D. | 16.43 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.62 FT. |
| 3 | DSJ 6¼ 6⅝ | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shocksub | 9.05 FT. |
| | KELLY DOWN | 29.43 FT. |
| | TOTAL | 6070.00 FT. |
| WT. OF STRING | 130M | LBS. |

BIT RECORD

| | |
|---|---|
| BIT NO. | 31 |
| SIZE | 8½ |
| MFG. | Smith |
| TYPE | 4JS |
| NOZZLE NO. | 2 1 |
| NOZZLE SIZE | 15 18 |
| SER. NO. | MN780 |
| DEPTH OUT | |
| DEPTH IN | 5974 |
| TOTAL FTG. | 96 |
| TOTAL HR. RUN | 27¼ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 1 AM | 4 AM | 7 AM |
| WEIGHT | 9.8 | 9.8 | 9.8 |
| VISC.–SEC | 52 | 65 | 66 |
| W.L.–C.C. | | | |
| FL.TR. CK. | | | |
| PH | 9.0 | 9.0 | 9.0 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Gel | 1000# | | |
| Benex | 5 sks | | |
| Soda Ash | 100# | | |

DRILLER: R L Hayes

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'EL–P COM'D–C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6042 | 6070 | D | | | 40 | 28 | 1300 | | | 5½ | 65 | |
| | | | | | | | | | | X | | |
| | | | | | | | | | | 14 | | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 6039 | 7½° | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 AM | 9 AM | 2 | DRLG 8½" hole |
| 2 AM | 2 30 | ½ | Survey & Rig Serv |
| 2 30 | 8 AM | 5½ | DRLG. |

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 57 | STANDS D.P. | 5369.48 FT. |
| 1 | SINGLES D.P. | 31.64 FT. |
| 12 | D.C. 2⅞ I.D. 6¾ O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 FT. |
| 2 | STB. BODY O.D. | 16.43 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.62 FT. |
| 3 | DSJ 6¼ 6⅝ | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shocksub | 9.05 FT. |
| | KELLY DOWN | 28.21 FT. |
| | TOTAL | 6100 FT. |
| WT. OF STRING | 130 M | LBS. |

BIT RECORD

| | |
|---|---|
| BIT NO. | 31 |
| SIZE | 8½ |
| MFG. | Smith |
| TYPE | 4JS |
| NOZZLE NO. | 2 1 |
| NOZZLE SIZE | 15 18 |
| SER. NO. | MN780 |
| DEPTH OUT | |
| DEPTH IN | 5974 |
| TOTAL FTG. | 126 |
| TOTAL HR. RUN | 3¾ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 9 00 | | |
| WEIGHT | 9.8 | 12.00 | 3.00 |
| VISC.–SEC | 66 | 9.8 | 9.9 |
| W.L.–C.C. | | 66 | 65 |
| FL.TR. CK. | | | |
| PH | 9.0 | | |
| SD. CONT. % | | 9.0 | 9.5 |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| BAROID | 350# | | |
| BENEX | 2 Ck | | |
| SODA ASH | 100# | | |

DRILLER: A Brundige

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'EL–P COM'D–C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6070 | 6100 | D | | | 40 | 25 | 1300 | 5½ | 63 | 5½ | | S |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8 00 | 11 00 | 3 | DRLg. |
| 11 00 | 11 15 | ¼ | RIG SERV & ✓ BOP. + MOTOR SHUT OFF |
| 11 15 | 4 00 | 4¾ | DRLg (CONSERVATION BOARD CHECK) |

MORNING TOUR — P.M. — A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R L Hayes | 12 |
| DRKMAN | | C Campbell | 12 |
| MTRMAN | | D McLaughlin | 12 |
| FIREMAN | | | |
| FLRMAN | | S Schumacher | 12 |
| FLRMAN | | G Garrecht | 12 |
| FLRMAN | | M Hazen | 12 |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

DAY TOUR — A.M. — P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | A Brundige | 12 |
| DRKMAN | | M McLaughlin | 12 |
| MTRMAN | | B Larsen | 12 |
| FIREMAN | | | |
| FLRMAN | | P Marrien | 12 |
| FLRMAN | | E Eddyhill | 12 |
| FLRMAN | | E Nowiers | 12 |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 57 | STANDS D.P. | 5369.48 FT. |
| 2 | SINGLES D.P. | 62.51 FT. |
| 12 | D.C. 2⅞ I.D. 6¾ O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 FT. |
| 2 | STB. BODY O.D. | 16.43 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.62 FT. |
| 3 | DSJ 6¼ 6⅝ | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shocksub | 9.05 FT. |
| | KELLY DOWN | 20.92 FT. |
| | TOTAL | 6124.00 FT. |
| WT. OF STRING | 130 M | LBS. |

BIT RECORD

| | |
|---|---|
| BIT NO. | 31 |
| SIZE | 8½ |
| MFG. | Smith |
| TYPE | 4JS |
| NOZZLE NO. | 2 1 |
| NOZZLE SIZE | 5 18 |
| SER. NO. | MN780 |
| DEPTH OUT | |
| DEPTH IN | 5974 |
| TOTAL FTG. | 150 |
| TOTAL HR. RUN | 42¾ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 6.00 | 8.00 | 11.00 |
| WEIGHT | 9.9 | 9.9 | 9.9 |
| VISC.–SEC | 65 | 60 | 57 |
| W.L.–C.C. | | | |
| FL.TR. CK | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.–S PAR'EL–P COM'D–C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6100 | 6124 | D | | | 40 | 28 | 1300 | 5½ | | 5½ | 65 | S |
| | | | | | | | | X | | X | | |
| | | | | | | | | 14 | | 14 | | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 6103 | 8° | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4 00 | 8 00 | 4 | DRLg. |
| 8 00 | 8 30 | ½ | SURVEY & RIG SERV & ✓ B.O.P. |
| 8 30 | 12 00 | 3½ | DRLG |

EVENING TOUR — P.M. — P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 73 DATE MAY 29/73

OPERATOR: UNION Oil of Canada Co. LTD
LEASE: UNION AKLAVIK F-38
WELL NO. F-38 FIELD OR DIST. AKLAVIK COUNTY N.W.T. STATE Canada
CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. RIG NO. 1E
DRILL PIPE STRING NO. 273 SIZE 4 TOOL JOINT 5 O.D. TYPE THD. 3½ IF
SIGNATURE OF OPERATOR'S REPRESENTATIVE: W.K. McLachlan
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry Armstrong

PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NSCO | K380 | 14 |
| 2. | NSCO | K380 | 14 |
| 3. | | | |

LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | MaNN | 40# K55 | 67 | 2765 | | 2760 | Cemented W/1500 sks Oil well cement |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 4½ | 7¾ | 7½ |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | 1 | | |
| LUBRICATE RIG | ¼ | ¼ | |
| DEVIATION SURVEY | | | ½ |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | 1½ | | |
| [illegible]ING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | ¾ |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

TIME SUMMARY (OFFICE USE ONLY)

| | |
|---|---|
| DAY WORK | |
| HRS. W/DP | |
| HRS. WO/DP | |
| HRS. STANDBY | |
| TOTAL DAY WORK | |

WIRE LINE RECORD

| | |
|---|---|
| REEL NO. | |
| NO. OF LINES / SIZE | |
| FEET SLIPPED | |
| FEET CUT OFF | |
| PRESENT LENGTH | |
| TON MI. OR TRIPS SINCE LAST CUT | |
| CUMULATIVE TON MI. OR TRIPS | |
| NO. OF DAYS FROM SPUD | |
| CUMULATIVE ROTATING HRS. | |

## MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 56 | STANDS D.P. | 5275.20 FT. |
| | SINGLES D.P. | FT. |
| 12 | D.C. 2⅞ I.D. 6¾ O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 FT. |
| 2 | STB. BODY O.D. | 16.43 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.62 FT. |
| 3 | SHOCK SUB 6¼ O.D. | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shocksub | 9.05 FT. |
| | KELLY DOWN | 40.78 FT. |
| | TOTAL | 5987.00 FT. |
| | WT. OF STRING | 128M LBS. |

BIT RECORD

| | |
|---|---|
| BIT NO. | 31 |
| SIZE | 8½ |
| MFG. | SMITH |
| TYPE | HJS |
| NOZZLE NO. | 2 1 |
| NOZZLE SIZE | 15 18 |
| SER. NO. | MN780 |
| DEPTH OUT | |
| DEPTH IN | 5974 |
| TOTAL FTG. | 13 |
| TOTAL HR. RUN | 4½ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

MUD RECORD

| | | | |
|---|---|---|---|
| TIME | | 4 00 | 6 00 |
| WEIGHT | | 9.8+ | 9.8+ |
| VISC.-SEC | | 60 | 57 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | | 9.0 | 9.0 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R.P. Hayes

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 SGL.-1 PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5974 | 5987 | D | | Change Head Rubbers & | 35 | 25 | 1300 | 5½ | 65 | 5½ | | S |
| | | | | Clean Packing Powerside #1 Pump. | | | | X | | X | | |
| | | | | Change Pump Clutch on #2 Pump | | | | 14 | | 14 | | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 00 | 12 15 | ¼ | Rig Serv |
| 12 15 | 1 30 | 1¼ | RUN IN Hole |
| 1 15 | 2 00 | ¾ | Work ON Pumps |
| 2 00 | 2 45 | ¾ | Break Circ & Clean 10 FT To Bottom |
| 2 45 | 3 15 | ½ | DRLG. |
| 3 15 | 4 00 | ¾ | Work ON Pumps |
| 4 00 | 8 00 | 4 | DRLG |
| | | | Held Safety Meeting. |

## EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 56 | STANDS D.P. | 5275.20 FT. |
| 1 | SINGLES D.P. | 31.53 FT. |
| 12 | D.C. 2⅞ I.D. 6¾ O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 FT. |
| 2 | STB. BODY O.D. | 16.43 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.62 FT. |
| 3 | SHOCK SUB 6¼ O.D. | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shocksub | 9.05 FT. |
| | KELLY DOWN | 38.75 FT. |
| | TOTAL | 6015 FT. |
| | WT. OF STRING | 128 M LBS. |

BIT RECORD

| | |
|---|---|
| BIT NO. | 31 |
| SIZE | 8½ |
| MFG. | Smith |
| TYPE | HJS |
| NOZZLE NO. | 2 1 |
| NOZZLE SIZE | 15 18 |
| SER. NO. | MN780 |
| DEPTH OUT | |
| DEPTH IN | 5974 |
| TOTAL FTG. | 41 |
| TOTAL HR. RUN | 12¼ |
| COND. OF BIT | ORLg |
| REAMER NO. | |
| REAMER TYPE | |

MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 9 00 | 3 00 | 3 00 |
| WEIGHT | 9.8 | 9.8+ | 9.8+ |
| VISC.-SEC | 52 | 54 | 54 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | 9.0 | 9.0 | 9.0 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| BENEX | 1 SK | | |

DRILLER A Brundage

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 SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5987 | 6015 | T | | | 40 | 25 | 1300 | 5½ | 65 | 5½ | 64 | S |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8 00 | 8 45 | 7¾ | DRLG. |
| 8 45 | 4 00 | ¼ | RIG SERV. & V BOPS. |
| | | | HELD BOP DRILL [illegible] |

## EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 56 | STANDS D.P. | 5275.20 FT. |
| 2 | SINGLES D.P. | 62.58 FT. |
| 12 | D.C. 2⅞ I.D. 6¾ O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 FT. |
| 2 | STB. BODY O.D. | 16.43 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.62 FT. |
| 3 | SHOCK SUB 6¼ O.D. | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shocksub | 9.05 FT. |
| | KELLY DOWN | 33.50 FT. |
| | TOTAL | 6042.00 FT. |
| | WT. OF STRING | 128M LBS. |

BIT RECORD

| | |
|---|---|
| BIT NO. | 31 |
| SIZE | 8½ |
| MFG. | Smith |
| TYPE | HJS |
| NOZZLE NO. | 2 1 |
| NOZZLE SIZE | 15 18 |
| SER. NO. | MN780 |
| DEPTH OUT | |
| DEPTH IN | 5974 |
| TOTAL FTG. | 68 |
| TOTAL HR. RUN | 19¾ |
| COND. OF BIT | DRLG. |
| REAMER NO. | |
| REAMER TYPE | |

MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 6 00 | 8 00 | 11 00 |
| WEIGHT | 9.8 | 9.8 | 9.8 |
| VISC.-SEC | 52 | 51 | 50 |
| W.L.-C.C. | | | |
| FLTR. CK | 9 | | |
| PH | 9.0 | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6015 | 6042 | D | | | 40 | 25 | 1300 | 5½ | 65 | 5½ | 65 | S |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 6008 | 7¾ | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4 00 | 4 45 | 3/4 | DRLG. |
| 4 45 | 5 15 | ½ | SURVEY. |
| 5 15 | 12 00 | 6¾ | DRLG |

## DRILLING CREW PAYROLL DATA

DATE MAY 29 1973
WELL NAME & NO. UNION AKLAVIK F-38
COMPANY UNION OIL CO. LTD
TOOL PUSHER Barry Armstrong RIG NO. 1E

MORNING TOUR ✓ P.M. A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R L Hayes | 12 |
| DRKMAN | | C Campbell | 12 |
| MTRMAN | | D McLaughlin | 12 |
| FIREMAN | | | |
| FLRMAN | | S. Schumacker | 12 |
| FLRMAN | | G Garrecht | 12 |
| FLRMAN | | M Hazen | 12 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

DAY TOUR ____ A.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | A Brundage | 12 |
| DRKMAN | | M McLaughlin | 12 |
| MTRMAN | | B Larsen | 12 |
| FIREMAN | | | |
| FLRMAN | | P Marrien | 12 |
| FLRMAN | | E Edghill | 12 |
| FLRMAN | | E Nowers | 12 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR ____ P.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 72 DATE May 28/73

OPERATOR: UNION Oil of Canada Co. LTD
LEASE: UNION Aklavik F-38
WELL NO. F-38 FIELD OR DIST. Aklavik COUNTY NWT STATE Canada
CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. RIG NO. 1E
DRILL PIPE STRING NO. 275 SIZE 4 TOOL JOINT O.D. 5 TYPE THD. 3½ IF
SIGNATURE OF OPERATOR'S REPRESENTATIVE
SIGNATURE OF CONTRACTOR'S TOOL PUSHER Barry Armstrong

PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NSCO | K380 | 14 |
| 2. | NSCO | K380 | 14 |
| 3. | | | |

LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | MaNN | 40# K55 | 67 | 2765 | | 2760 | Cemented W/1500 SKS Oil Well Cement. |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 7¾ | 7¼ | 3¼ |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | | 4 |
| LUBRICATE RIG | ¼ | 1/4 | |
| DEVIATION SURVEY | | 1/2 | ¼ |
| TEST B.O.P. | ✓ | | |
| CUT OFF DRILLING LINE | | | ½ |
| REPAIR RIG | | | |
| [illegible]ING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

TIME SUMMARY (OFFICE USE ONLY)

| | |
|---|---|
| DAY WORK | FT. |
| HRS. W/DP | |
| HRS. WO/DP | |
| HRS. STANDBY | |
| TOTAL DAY WORK | |

WIRE LINE RECORD

| | |
|---|---|
| REEL NO. | |
| NO. OF LINES | SIZE |
| FEET SLIPPED | |
| FEET CUT OFF | |
| PRESENT LENGTH | |
| TON MI. OR TRIPS SINCE LAST CUT | |
| CUMULATIVE TON MI. OR TRIPS | |
| NO. OF DAYS FROM SPUD | |
| CUMULATIVE ROTATING HRS. | |

## MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 55 | STANDS D.P. | 5180.90 FT. |
| 2 | SINGLES D.P. | 62.91 FT. |
| 12 | D.C. 2⅞ I.D. 6¼ O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.62 FT. |
| 3 | 6¼ 6⅛ | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shocksub | 9.05 FT. |
| | KELLY DOWN | 34.37 FT. |
| | TOTAL | 3941.00 FT. |

WT. OF STRING 122M LBS.

BIT RECORD

| | |
|---|---|
| BIT NO. | 30 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | M88 |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 15 16 |
| SER. NO. | 359177 |
| DEPTH OUT | |
| DEPTH IN | 5799 |
| TOTAL FTG. | 142 |
| TOTAL HR. RUN | 45¼ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 1 00 | 4 00 | 6 00 |
| WEIGHT | 9.8 | 9.8 | 9.8 |
| VISC.-SEC | 54 | 51 | 47 |
| W.L.-C.C. | | | |
| FL.TR. CK. | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| BENEX | 1# | | |
| CELEX | 50# | | |
| DE-TRIA | 150# | | |

DRILLER R L Hayes

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 SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5907 | 5941 | D | | | 35 | 40 | 1300 | 5½ X 14 | 65 | 5½ X 14 | | S |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 00 | 1 45 | 1¾ | DRLG |
| 1 45 | 2 00 | ¼ | Rig Serv ✓ Pipe Rams |
| 2 00 | 8 00 | 6 | DRLG. |

## DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 54 | STANDS D.P. | 5271.20 FT. |
| | SINGLES D.P. | FT. |
| 12 | D.C. 2⅞ I.D. 6¼ O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.62 FT. |
| 3 | 6¼ 6⅛ | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shocksub | 9.05 FT. |
| | KELLY DOWN | 25.00 FT. |
| | TOTAL | 5463 FT. |

WT. OF STRING 122 M. LBS.

BIT RECORD

| | |
|---|---|
| BIT NO. | 30 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | M88 |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 15 14 |
| SER. NO. | 359177 |
| DEPTH OUT | 5794 |
| DEPTH IN | 5799 |
| TOTAL FTG. | 164 |
| TOTAL HR. RUN | 52½ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 9.00 | 13.00 | 3.00 |
| WEIGHT | 9.7 | 9.7 | 9.8 |
| VISC.-SEC | 47 | 48 | 51 |
| W.L.-C.C. | | | |
| FL.TR. CK. | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | 1000# | | |
| BENEX | 3 SKS | | |
| BAROID | 3500# | | |

DRILLER R Brundige

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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5941 | 5963 | — | D | | 35 40 | 40 | 1300 | 5½ | 65 | 5½ | | S |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 5937 | 7° | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8 00 | 10 00 | 2 | DRLG. |
| 10 00 | 10 15 | ¼ | SURVEY |
| 10 15 | 4 00 | 5¾ | DRLG. |

## EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 56 | STANDS D.P. | 5275.20 FT. |
| | SINGLES D.P. | FT. |
| 12 | D.C. 2⅞ I.D. 6¼ O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.00 FT. |
| 1 | RMR. BODY O.D. | 8.62 FT. |
| 3 | 6¼ 6⅛ | 7.58 FT. |
| | BIT OR C.B. | FT. |
| | Shocksub | 9.05 FT. |
| | KELLY DOWN | 35.91 FT. |
| | TOTAL | 5971.00 FT. |

WT. OF STRING 122M LBS.

BIT RECORD

| | |
|---|---|
| BIT NO. | 30 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | M88 |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 15 14 |
| SER. NO. | 359177 |
| DEPTH OUT | 5974 |
| DEPTH IN | 5799 |
| TOTAL FTG. | 175 |
| TOTAL HR. RUN | 56¼ |
| COND. OF BIT | 3-3-1 |
| REAMER NO. | |
| REAMER TYPE | |

MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 6.00 | | |
| WEIGHT | 9.8+ | | |
| VISC.-SEC | 56 | | |
| W.L.-C.C. | | | |
| FL.TR. CK | | | |
| PH | 9.5 | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5963 | 5974 | D | | Board Tally 5979.09 | 40 | 35 | 1300 | 5½ | 65 | 5½ | | S |
| | | | | Strap 5977.95 | | | | | | | | |
| | | | | Diff. No Change 1.14 | | | | | | | | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 5974 | 7¾ | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4 00 | 7 45 | 3¾ | DRLG. |
| 7 45 | 10 30 | 2¾ | DROP SURVEY & HOIST BIT #30 & Strap pipe |
| 10 30 | 10 45 | ¼ | Change Bits ✓ Blind Rams |
| 10 45 | 11 30 | ¾ | RUN IN D.C. & Pick up Stb |
| 11 30 | 12 00 | ½ | Slip 23ft DRLG Line & Cut |

## DRILLING CREW PAYROLL DATA

DATE May 28 1973
WELL NAME & NO. UNION Aklavik F-38
COMPANY UNION Oil Co. LTD.
TOOL PUSHER Barry Armstrong RIG NO. 1E

MORNING TOUR ____ P.M. ____ A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R L Hayes | 12 |
| DRKMAN | | C Campbell. | 12 |
| MTRMAN | | D McLaughlin | 12 |
| FIREMAN | | | |
| FLRMAN | | S Schumacher | 12 |
| FLRMAN | | G Garrecht | 12 |
| FLRMAN | | M Hazen | 12 |

NO. OF DAYS ____ SINCE LAST LOST-TIME ACCIDENT

DAY TOUR ____ A.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R Brundige | 12 |
| DRKMAN | | M McLaughlin | 12 |
| MTRMAN | | B Larsen | 12 |
| FIREMAN | | | |
| FLRMAN | | P Marren | 12 |
| FLRMAN | | E Englehill | 12 |
| FLRMAN | | E Nowers | 12 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR ____ P.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 71 DATE May 27/73

OPERATOR: UNION Oil of Canada CO. LTD
LEASE: UNION AKlavik
WELL NO.: F-38
FIELD OR DIST.: AKlavik
COUNTY: NWT
STATE: Canada

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD.
RIG NO.: 1E
DRILL PIPE STRING: NO. 2 SIZE 3½ 4
TOOL JOINT: TYPE THD. 3½ IF
O.D.: 5

SIGNATURE OF OPERATOR'S REPRESENTATIVE: W.K. McElroy
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry D Armstrong

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NSCO | K 380 | 14 |
| 2. | NSCO | K 380 | 14 |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | MANN | 40# K55 | 67 | 2765 | | 2760 | Cemented w/ 1500 Sks Oil well Cement. |

## TIME DISTRIBUTION–HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 7¾ | 7¾ | 7½ |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | | |
| LUBRICATE RIG | ¼ | ¼ | ✓ |
| DEVIATION SURVEY | | | ½ |
| TEST B.O.P. | ✓ | | ✓ |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| [illegible]ING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK: A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

**TIME SUMMARY (OFFICE USE ONLY)**

| | |
|---|---|
| DAY WORK | |
| HRS. W/DP | |
| HRS. WO/DP | |
| HRS. STANDBY | |
| TOTAL DAY WORK | |

**WIRE LINE RECORD**

REEL NO.
NO. OF LINES SIZE
FEET SLIPPED
FEET CUT OFF
PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.

## DAY TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 55 | STANDS D.P. | 5180.90 FT. |
| | SINGLES D.P. | FT. |
| 12 | D.C. 2⅞ I.D. 6¾ O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.62 FT. |
| 3 | SUBS 6¾ 6¼ | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | ShockSub | 9.05 FT. |
| | KELLY DOWN | 38.81 FT. |
| | TOTAL | 5862.00 FT. |
| WT. OF STRING | 122M | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 30 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | M88 |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 15 16 |
| SER. NO. | 359177 |
| DEPTH OUT | |
| DEPTH IN | 5799 |
| TOTAL FTG. | 63 |
| TOTAL HR. RUN | 22¼ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 12 00 | 3 00 | 6 00 |
| WEIGHT | 9.9 | 9.9 | 9.9 |
| VISC.-SEC | 58 | 55 | 55 |
| W.L.-C.C. | | | 9.2 |
| FL TR. CK. | | | 2/32 |
| PH | 9.0 | 9.0 | 9.0 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|

DRILLER: R L Hayes

**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 SGL.–S PAR'EL–P COM'D–C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5841 | 5862 | D | | | 35 | 35 | 1300 | 5½ | | 5½ | 65 | |
| | | | | | | | | ✓ | | ✓ | | |
| | | | | | | | | 14 | | 14 | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 00 | 5 00 | 5 | DRLG |
| 5 00 | 5 15 | ¼ | Rig servi ✓ Hydril |
| 5 15 | 8 00 | 2¾ | DRLG. |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 55 | STANDS D.P. | 5181.52 FT. |
| | SINGLES D.P. | FT. |
| 12 | D.C. 2⅞ I.D. 6¾ O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.62 FT. |
| 3 | SUBS 6¾ 6¼ | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | ShockSub | 9.05 FT. |
| | KELLY DOWN | 38.81 FT. |
| | TOTAL | 5981. FT. |
| WT. OF STRING | 122M. | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 30 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | M88 |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 15 16 |
| SER. NO. | 359177 |
| DEPTH OUT | |
| DEPTH IN | 5799 |
| TOTAL FTG. | 182 |
| TOTAL HR. RUN | 30 |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | | 12 00 | 3 00 |
| WEIGHT | 9.00 | 9.8 | 9.8 |
| VISC.-SEC | 9.8 | 58 | 59 |
| W.L.-C.C. | 55 | | |
| FLTR. CK. | | | |
| PH | | 9.0 | 9.5 |
| SD. CONT. % | 9.0 | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| SODA ASH | 300# | | |
| BENEX | 3 SKS | | |

DRILLER: R Brundridge

**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'EL–P COM'D–C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5842 | 5881 | D | | | 35 | 35 | 1300 | 5½ | | 5½ | 64 | S |
| | | | | | | | | | | | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 7 00 | 2 30 | 6½ | DRLG. |
| 2 30 | 2 45 | ¼ | RIG SERV & CK BOPS |
| 2 45 | 4 00 | 1¼ | DRLG. |

HELD SAFETY MEETING & ESCAPE BUGGY

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 55 | STANDS D.P. | 5180.90 FT. |
| 1 | SINGLES D.P. | 31.32 FT. |
| 12 | D.C. 2⅞ I.D. 6¾ O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.62 FT. |
| 3 | SUBS 6¾ 6¼ | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | ShockSub | 9.05 FT. |
| | KELLY DOWN | 31.89 FT. |
| | TOTAL | 5907.00 FT. |
| WT. OF STRING | 122M | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 20 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | M88 |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 15 14 |
| SER. NO. | 35 94128 |
| DEPTH OUT | |
| DEPTH IN | 5799 |
| TOTAL FTG. | 108 |
| TOTAL HR. RUN | 37½ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 6 00 | 9 00 | 12 00 |
| WEIGHT | 9.8 | 9.8 | 9.8 |
| VISC.-SEC | 59 | 56 | 56 |
| W.L.-C.C. | | | |
| FLTR. CK | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.–S PAR'EL–P COM'D–C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5881 | 5907 | D | | | 35 | 35 | 1200 | 5½ | 65 | 5½ | 46 | S |
| | | | | | 35 | 40 | | | | | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 5874 | 6 ½ | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4 00 | 6 00 | 2 00 | DRLG. |
| 6 00 | 6 30 | ½ | SURVEY + Rig Serv |
| 6 30 | 12 00 | 5½ | DRLG. |

## DRILLING CREW PAYROLL DATA

DATE May 27 1973
WELL NAME & NO. UNION AKlavik F-38
COMPANY UNION Oil Co. of LTD
TOOL PUSHER Barry D Armstrong RIG NO. 1E

MORNING TOUR ✓ P.M. A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R L Hayes | 12 |
| DRKMAN | | C Campbell | 12 |
| MTRMAN | | D McLaughlin | 12 |
| FIREMAN | | | |
| FLRMAN | | S Schumacher | 12 |
| FLRMAN | | C Garrecht | 12 |
| FLRMAN | | M Hazen | 12 |

NO. OF DAYS _____ SINCE LAST LOST-TIME ACCIDENT

DAY TOUR _____ A.M. _____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R Brundridge | 12 |
| DRKMAN | | M McLaughlin | 12 |
| MTRMAN | | R LARSEN | 12 |
| FIREMAN | | | |
| FLRMAN | | P MARRIEN | 12 |
| FLRMAN | | E EDGHILL | 12 |
| FLRMAN | | E MOWERS | 12 |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR _____ P.M. _____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 70 — DATE May 26/73

OPERATOR: UNION Oil of Canada Co. LTD
LEASE: UNION Aklavik
WELL NO. E-38 — FIELD OR DIST. Aklavik — COUNTY NWT — STATE Canada

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. — RIG NO. 1E

DRILL PIPE STRING: NO. 2 — SIZE 3½ — TOOL JOINT 5" O.D. — TYPE THD. 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry D Armstrong

PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NSCO | K380 | 14 |
| 2. | NSCO | K380 | 14 |
| 3. | | | |

LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | HANN | 40# K55 | 67 | 2765 | | 2760 | Cemented w/1500 sks Oil well cement. |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 3 | 6½ | 8 |
| REAMING | | 1¼ | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | 4½ | | |
| LUBRICATE RIG | ¼ | ¼ | |
| DEVIATION SURVEY | ¼ | | |
| TEST B.O.P. | ¼ | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| [illegible]ING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK: A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

## TIME SUMMARY (OFFICE USE ONLY)

DAY WORK
HRS. W/DP
HRS. WO/DP
HRS. STANDBY
TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.
NO. OF L[illegible]ES — SIZE
FEET SLIPPED
FEET CUT OFF
PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.

## MORNING TOUR

| NO. | DRILLING ASSEMBLY AT END OF TOUR | | BIT RECORD | |
|---|---|---|---|---|
| 54 | STANDS D.P. | 5088.22 FT. | BIT NO. | 29 |
| | SINGLES D.P. | FT. | SIZE | 8½ |
| 12 | D.C. 2⅞ I.D. 6¾ O.D. | 358.88 FT. | MFG. | SEC |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 FT. | TYPE | H77C |
| 1 | STB. BODY O.D. | 8.23 FT. | NOZZLE NO. | 1 1 |
| 1 | STB. BODY O.D. | 8.10 FT. | NOZZLE SIZE | 15 16 |
| 1 | RMR. BODY O.D. | 8.62 FT. | SER. NO. | 373225 |
| 3 | Reamer 6¼ 6⅝ | 7.58 FT. | DEPTH OUT | 5799 |
| | BIT OR C.B. | FT. | DEPTH IN | 5743 |
| 1 | Stockus | 9.05 FT. | TOTAL FTG. | 56 |
| | KELLY DOWN | 40.21 FT. | TOTAL HR. RUN | 19 |
| | TOTAL | 5799.00 FT. | COND. OF BIT | 620 |
| WT. OF STRING | 122M LBS. | | REAMER NO. | |
| | | | REAMER TYPE | |

MUD RECORD

| | | |
|---|---|---|
| TIME | 12⁰⁰ | 3⁰⁰ |
| WEIGHT | 9.9 | 9.9 |
| VISC.-SEC | 55 | 54 |
| W.L.-C.C. | | |
| FL TR. CK. | | |
| PH | 9.0 | 9.0 |
| SD. CONT. % | | |
| PRESSURE GRADIENT | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R L Hayes

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 SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5792 | 5799 | D | | | 40 | 35 | 1300 | 5½ X 14 | | 5½ X 14 | 64 | S |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 5795 | 6½ | | | | | | | |

| TIME LOG FROM | TIME LOG TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12⁰⁰ | 3⁰⁰ | 3 | DRLG |
| 3⁰⁰ | 3¹⁵ | ¼ | Survey + Rig Serv |
| 3¹⁵ | 5³⁰ | 2¼ | Hoist + Lay down Jars + JUNK Sub |
| 5³⁰ | 5⁴⁵ | ¼ | Change Bits ✓ Blind Rams |
| 5⁴⁵ | 8⁰⁰ | 2¼ | RUN in + Change Bottom Stb Rubber |

## EVENING TOUR

| NO. | DRILLING ASSEMBLY AT END OF TOUR | | BIT RECORD | |
|---|---|---|---|---|
| 54 | STANDS D.P. | 5088.64 FT. | BIT NO. | 30 |
| 1 | SINGLES D.P. | 31.60 FT. | SIZE | 8½ |
| 12 | D.C. 2⅞ I.D. 6¾ O.D. | 358.88 FT. | MFG. | SEC |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 FT. | TYPE | H88 |
| 1 | STB. BODY O.D. | 8.23 FT. | NOZZLE NO. | 1 2 |
| 1 | STB. BODY O.D. | 8.10 FT. | NOZZLE SIZE | 15 16 |
| 1 | RMR. BODY O.D. | 8.62 FT. | SER. NO. | 359177 |
| 3 | Reamer 6¼ 6⅝ | 7.58 FT. | DEPTH OUT | |
| | BIT OR C.B. | FT. | DEPTH IN | 5799 |
| 1 | Stockus | 9.05 FT. | TOTAL FTG. | 18 |
| | KELLY DOWN | 36.00 FT. | TOTAL HR. RUN | 6½ |
| | TOTAL | 5817 FT. | COND. OF BIT | DRLG |
| WT. OF STRING | 122M LBS. | | REAMER NO. | |
| | | | REAMER TYPE | |

MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 9⁰⁰ | 12⁰⁰ | 3⁰⁰ |
| WEIGHT | 9.9 | 9.9 | 9.9 |
| VISC.-SEC | 55 | 54 | 65 |
| W.L.-C.C. | | | |
| FL TR. CK. | | | |
| PH | 9.0 | 9.0 | 9.0 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | 1000# | SODA ASH | 1 SKS |
| GEN-EX | 2 SKS | | |
| CELLEX | 1 SKS | | |

DRILLER R Brundidge

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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5799 | 5817 | D | | | 35 | 35 | 1300 | 6½ | 64 | 5½ | | S |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

| TIME LOG FROM | TIME LOG TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8⁰⁰ | 9¼ | 1¼ | BREAK TRC + REAM 15' To Bottom. |
| 9¼ | 9³⁰ | ¼ | Rig SERV + V B.O.P. |
| 9³⁰ | 4⁰⁰ | 6½ | DRLG |

## EVENING TOUR

| NO. | DRILLING ASSEMBLY AT END OF TOUR | | BIT RECORD | |
|---|---|---|---|---|
| 54 | STANDS D.P. | 5088.22 FT. | BIT NO. | 30 |
| 2 | SINGLES D.P. | 61.25 FT. | SIZE | 8½ |
| 12 | D.C. 2⅞ I.D. 6¾ O.D. | 358.88 FT. | MFG. | SEC |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 FT. | TYPE | M88 |
| 1 | STB. BODY O.D. | 8.23 FT. | NOZZLE NO. | 1 2 |
| 1 | STB. BODY O.D. | 8.10 FT. | NOZZLE SIZE | 15 16 |
| 1 | RMR. BODY O.D. | 8.62 FT. | SER. NO. | 359177 |
| 3 | Reamer 6¼ 6⅝ | 7.58 FT. | DEPTH OUT | |
| | BIT OR C.B. | FT. | DEPTH IN | 5799 |
| 1 | Stockus | 9.05 FT. | TOTAL FTG. | 42 |
| | KELLY DOWN | 28.64 FT. | TOTAL HR. RUN | 14½ |
| | TOTAL | 5841.00 FT. | COND. OF BIT | DRLG |
| WT. OF STRING | 122M LBS. | | REAMER NO. | |
| | | | REAMER TYPE | |

MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 6⁰⁰ | 9⁰⁰ | 12⁰⁰ |
| WEIGHT | 9.9 | 9.9 | 9.9 |
| VISC.-SEC | 66 | 60 | 58 |
| W.L.-C.C. | | | |
| FL TR. CK | | | |
| PH | 9.0 | 9.0 | 9.0 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5817 | 5841 | D | | | 35 | 35 | 1300 | 5½ | | 5½ | 65 | S |

Power

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

| TIME LOG FROM | TIME LOG TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4⁰⁰ | 12⁰⁰ | 8 | DRLG. |

Change Head + Liner in #1 ~~Lube~~ side

## DRILLING CREW PATROLL DATA

DATE MAY 26 1973
WELL NAME & NO. UNION AKLAVIK E-38
COMPANY UNION Oil Co. LTD
TOOL PUSHER Barry D Armstrong — RIG NO. 1E

MORNING TOUR ( ) P.M. ( ) A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R L Hayes | 12 |
| DRKMAN | | C. Campbell | 12 |
| MTRMAN | | D. McLaughLIN | 12 |
| FIREMAN | | | |
| FLRMAN | | S Schumacher | 12 |
| FLRMAN | | G Garrecht | 12 |
| FLRMAN | | M. Hazen | 12 |

NO. OF DAYS ____ SINCE LAST LOST-TIME ACCIDENT

DAY TOUR ____ A.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R BRUNDIGE | 12 |
| DRKMAN | | M McLAUGHLIN | 12 |
| MTRMAN | | B LARSEN | 12 |
| FIREMAN | | | |
| FLRMAN | | P MARRIEN | 12 |
| FLRMAN | | E ENGHILL | 12 |
| FLRMAN | | E NOWERS | 12 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR ____ P.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 69 DATE May 25/73

OPERATOR: UNION Oil of Canada Co. LTD
LEASE: UNION AKLAVIK
WELL NO. F-38 FIELD OR DIST. AKLAVIK
COUNTY NWT STATE Canada

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. RIG NO. 1E

DRILL PIPE STRING: NO. 273 SIZE 4 TOOL JOINT 5 O.D. TYPE THD. 3½IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: W.R. MacLeod
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry D Armstrong

## PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NSCO | K 380 | 14 |
| 2. | NSCO | K 380 | 14 |
| 3. | | | |

## LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | NKK | 40# K55 | 67 | 2776 | | 2760 | CEMENT W/1500 SKS OIL well CEMENT. |
| | | | | | | | |
| | | | | | | | |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | ½ | 7¾ | 7¾ |
| REAMING | ¾ | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | 4½ | | |
| LUBRICATE RIG | ¼ | ¼ | ¼ |
| DEVIATION SURVEY | | | |
| TEST B.O.P. | ✓ | | ✓ |
| CUT OFF DRILLING LINE | ¼ | | |
| REPAIR RIG | 1¼ | | |
| [illegible]RING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | ½ | | |
| FISHING | | | |
| COMPLETION WORK: A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

## TIME SUMMARY (OFFICE USE ONLY)

| | |
|---|---|
| DAY WORK | |
| HRS. W/DP | |
| HRS. WO/DP | |
| HRS. STANDBY | |
| TOTAL DAY WORK | |

## WIRE LINE RECORD

| | |
|---|---|
| REEL NO. | |
| NO. OF LINES | SIZE |
| FEET SLIPPED | |
| FEET CUT OFF | |
| PRESENT LENGTH | |
| TON MI. OR TRIPS SINCE LAST CUT | |
| CUMULATIVE TON MI. OR TRIPS | |
| NO. OF DAYS FROM SPUD | |
| CUMULATIVE ROTATING HRS. | |

## MORNING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 53 | STANDS D.P. | 4994.07 FT. |
| 2 | SINGLES D.P. | 63.17 FT. |
| 12 | D.C. 2⅞ I.D. 6¼ O.D. | 358.88 FT. |
| 9 | D.C. 2¼ I.D. 6¼ O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.62 FT. |
| 1 | [illegible] O.D. | 8.63 FT. |
| 1 | BIT OR C.B. | 5.63 FT. |
| | Shock Sub | 9.05 FT. |
| | KELLY DOWN | 15.22 FT. |
| | TOTAL | 5744.00 FT. |
| WT. OF STRING | | 120M LBS. |

### BIT RECORD

| | |
|---|---|
| BIT NO. | 29 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | H77C |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 15 16 |
| SER. NO. | 373225 |
| DEPTH OUT | |
| DEPTH IN | 5743 |
| TOTAL FTG. | 1 |
| TOTAL HR. RUN | ½ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | | | |
| WEIGHT | | | |
| VISC.-SEC | | | |
| W.L.-C.C. | | | |
| FL.TR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER: R L Hayes

### 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. 2 LINER SIZE | PUMP NO. 2 S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5743 | 5744 | D | | | 40 | 20 | 1300 | | | 5½ | 64 | |
| | | | | | | | | | | X | | |
| | | | | | | | | | | 14 | | |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 00 | 12 15 | ¼ | Rig Serv ✓ Bops |
| 12 15 | 2 15 | 2 | Finish out W/ Magnet |
| 2 15 | 2 45 | ½ | Break off Magnet + Junk Sub + Clean out Same |
| 2 45 | 4 00 | 1¼ | Make up B.7 + RUN Collar + Flex Wt. + Pick up Reamer & Junk Sub. |
| 4 00 | 4 15 | ¼ | Slip 23' DRLG Line |
| 4 15 | 5 30 | 1¼ | Change wash pipe packing |
| 5 30 | 6 45 | 1¼ | RUN IN |
| 6 45 | 7 30 | ¾ | Ream + work JUNK sub / 7 30 / 8 00 / ½ / DRLG |

## DAY TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 53 | STANDS D.P. | 4994.07 FT. |
| 2 | SINGLES D.P. | 63.17 FT. |
| 12 | D.C. 2¾ I.D. 6¼ O.D. | 358.88 FT. |
| 9 | D.C. 2¼ I.D. 6¼ O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.62 FT. |
| 1 | [illegible] O.D. | 8.63 FT. |
| 1 | BIT OR C.B. | 5.63 FT. |
| 1 | Shock Sub | 9.05 FT. |
| | KELLY DOWN | 40 FT. |
| | TOTAL | 5767 FT. |
| WT. OF STRING | | 122 M. LBS. |

### BIT RECORD

| | |
|---|---|
| BIT NO. | 29 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | H77C |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 15 14 |
| SER. NO. | 373225 |
| DEPTH OUT | |
| DEPTH IN | 5743 |
| TOTAL FTG. | 24 |
| TOTAL HR. RUN | 8¾ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 8.00 | 11.00 | 3.00 |
| WEIGHT | 9.9 | 9.9 | 9.8 |
| VISC.-SEC | 70 | 68 | 63 |
| W.L.-C.C. | | | |
| FL.TR. CK. | | | |
| PH | 9.0 | 9.0 | 9.0 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER: R Brundidge

### 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5744 | 5767 | D | | | 40 | 35 | 1300 | 5½ | 64 | 5½ | | S |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8 00 | 8 30 | ½ | DRLG. |
| 8 30 | 8 45 | ¼ | Rig SERV + V BOPS. |
| 8 45 | 4 00 | 7¼ | DRLG |

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 54 | STANDS D.P. | 5088.22 FT. |
| . | SINGLES D.P. | FT. |
| 12 | D.C. 2¾ I.D. 6¼ O.D. | 358.88 FT. |
| 9 | D.C. 2¼ I.D. 6¼ O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.62 FT. |
| 1 | [illegible] O.D. | 8.63 FT. |
| 1 | BIT OR C.B. | 5.63 FT. |
| 1 | Shock Sub | 9.05 FT. |
| | KELLY DOWN | 33.21 FT. |
| | TOTAL | 5792.00 FT. |
| WT. OF STRING | | 122M LBS. |

### BIT RECORD

| | |
|---|---|
| BIT NO. | 29 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | H77C |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 15 14 |
| SER. NO. | 373225 |
| DEPTH OUT | |
| DEPTH IN | 5743 |
| TOTAL FTG. | 49 |
| TOTAL HR. RUN | 16 |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 6.00 | 8 00 | 11 00 |
| WEIGHT | 9.8 | 9.9 | 9.9 |
| VISC.-SEC | 61 | 58 | 55 |
| W.L.-C.C. | | | |
| FL.TR. CK. | | | |
| PH | 9.0 | 9.0 | 90 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5767 | 5792 | D | | | 40 | 35 | 1300 | 5½ | | 5½ | 64 | S |
| | | | | Change Head Rubbers on Lubside # Pump | | | | | | X | | |
| | | | | | | | | | | 14 | | |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4 00 | 5 15 | 1¼ | DRLG |
| 5 15 | 5 30 | ¼ | Rig SERV + V BARS. |
| 5 30 | 12 00 | 6½ | DRLG. |

## DRILLING CREW PAYROLL DATA

DATE May 25 1973
WELL NAME & NO. UNION AKLAVIK F-38
COMPANY UNION OIL Co. LTD.
TOOL PUSHER Barry D Armstrong RIG NO. 1E

MORNING TOUR ____ P.M. ____ A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R L Hayes | 12 |
| DRKMAN | | C Campbell | 12 |
| MTRMAN | | D McLaughLIN | 12 |
| FIREMAN | | | |
| FLRMAN | | S SChumacher | 12 |
| FLRMAN | | G Garrecht | 12 |
| FLRMAN | | M. Hazen | 12 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

DAY TOUR 8 00 A.M. 4 00 P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R BRUNDIGE | 12 |
| DRKMAN | | M McLAUGHLIN | 12 |
| MTRMAN | | R LARSEN | 12 |
| FIREMAN | | | |
| FLRMAN | | P MARREN | 12 |
| FLRMAN | | E E McHILL | 12 |
| FLRMAN | | E ROGERS | 12 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR ____ P.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 68 — DATE MAY 24/73

OPERATOR: UNION OIL CO. OF CANADA LTD.

LEASE: UNION AKLAVIK F-38

WELL NO. F-38 — FIELD OR DIST. AKLAVIK — COUNTY W.D.T. — STATE CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. — RIG NO. 1E

DRILL PIPE STRING: NO. 23 — SIZE 4 — TOOL JOINT 5" O.D. — TYPE THD. 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: W.K. McDermott

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry D. Armstrong

## PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NSCO | K-380 | 14" |
| 2. | NSCO | K-380 | 14" |
| 3. | | | |

LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | MANN. | 43# A-55 | 67 | 2765 | | 9760 | CEMENTED W/1500 SACS. DILWELL CEMENT |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 7¼ | | |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | 1½ | 6¾ | |
| LUBRICATE RIG | ¼ | | |
| DEVIATION SURVEY | | | |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| [illegible]ING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | 1½ | |
| COMPLETION WORK: A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | |

## TIME SUMMARY (OFFICE USE ONLY)

| | |
|---|---|
| DAY WORK | |
| HRS. W/DP | |
| HRS. WO/DP | |
| HRS. STANDBY | |
| TOTAL DAY WORK | |

## WIRE LINE RECORD

REEL NO.

NO. OF LINES — SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 53 | STANDS D.P. | 4993.88 | FT. |
| 2 | SINGLES D.P. | 63.17 | FT. |
| 12 | D.C. 2⅞ I.D. 6¾ O.D. | 358.98 | FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 | FT. |
| 1 | STB. BODY O.D. | 8.23 | FT. |
| 1 | STB. BODY O.D. | 8.10 | FT. |
| 1 | RMR. BODY O.D. | 8.62 | FT. |
| 3 | SUBS | 7.58 | FT. |
| 1 | JARS BIT OR C.B. | 5.63 | FT. |
| 1 | SHOCK SUB | 9.05 | FT. |
| | KELLY DOWN | 17.24 | FT. |
| | TOTAL | 5743.00 | FT. |
| WT. OF STRING | 120M | | LBS. |

### BIT RECORD

| | |
|---|---|
| BIT NO. | 28 |
| SIZE | 8½ |
| MFG. | SEC. |
| TYPE | H77C |
| NOZZLE NO. | 1 1 |
| NOZZLE SIZE | 15 16 |
| SER. NO. | 355743 |
| DEPTH OUT | R |
| DEPTH IN | E |
| TOTAL FTG. | A |
| TOTAL HR. RUN | M |
| COND. OF BIT | I |
| REAMER NO. | N |
| REAMER TYPE | G |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 17:00 | 4:00 | 6:00 |
| WEIGHT | 9.9 | 9.8 | 9.9+ |
| VISC.-SEC | 65 | 73 | 73 |
| W.L.-C.C. | | | |
| FL.TR. CK. | | | |
| PH | 9.0 | 9.0 | 9.0 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | 5 SAKS | | |
| BENNEX | 2 SAKS | | |

DRILLER C. Hopkins

### 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5743 | | | | | | | | | | | | |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 1200 | 1330 | 1½ | REAM FROM 4945-5015 |
| 1330 | 1445 | ¼ | RIG SERV. |
| 1445 | 2230 | ¾ | REAM FROM 5015-5100 |
| 2230 | 2300 | ½ | RUNN IN TO 5168 & WORK TIGHT HOLE |
| 2300 | 800 | 5 | REAM FROM 5168-5451 |

## DAY TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 53 | STANDS D.P. | 4994.07 | FT. |
| 2 | SINGLES D.P. | 63.17 | FT. |
| 12 | D.C. 2⅞ I.D. 6¾ O.D. | 358.88 | FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 | FT. |
| 1 | STB. BODY O.D. | 8.23 | FT. |
| 1 | STB. BODY O.D. | 8.10 | FT. |
| 1 | RMR. BODY O.D. | 8.62 | FT. |
| 3 | SUBS | 7.58 | FT. |
| 1 | JARS BIT OR C.B. | 5.63 | FT. |
| 1 | Shock sub | 9.05 | FT. |
| | KELLY DOWN | 17.27 | FT. |
| | TOTAL | 5743.00 | FT. |
| WT. OF STRING | 120M | | LBS. |

### BIT RECORD

| | |
|---|---|
| BIT NO. | 28 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | H77C |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 15 16 |
| SER. NO. | 355743 |
| DEPTH OUT | |
| DEPTH IN | 5743 |
| TOTAL FTG. | |
| TOTAL HR. RUN | |
| COND. OF BIT | |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 9:00 | 12:00 | |
| WEIGHT | 9.9+ | 9.9+ | |
| VISC.-SEC | 70 | 65 | |
| W.L.-C.C. | | | |
| FL.TR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R L Hayes

### 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. 2 LINER SIZE | PUMP NO. 2 S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5743 | | | | | | | 1900 | | | 5½ | 64 | S |
| | | | | | | | | | | x | | |
| | | | | | | | | | | 14 | | |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 800 | 815 | ¼ | Rig Serv V BOPS |
| 815 | 830 | ¼ | RUN IN FROM 5451 to 5703 |
| 830 | 100 | 4½ | Reaming FROM 5703 to 5743 |
| 100 | 300 | 2 | Circ. to RUN Magnet |
| 300 | 400 | 1 | HOIST |

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 53 | STANDS D.P. | 4994.07 | FT. |
| 2 | SINGLES D.P. | 63.17 | FT. |
| 12 | D.C. 2¾ I.D. 6¾ O.D. | 358.88 | FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 | FT. |
| 1 | STB. BODY O.D. | 8.23 | FT. |
| 1 | STB. BODY O.D. | 8.10 | FT. |
| 1 | RMR. BODY O.D. | 3.63 | FT. |
| 3 | SUBS | 7.58 | FT. |
| | JARS BIT OR C.B. | 5.63 | FT. |
| 1 | SHOCK SUB | 9.05 | FT. |
| | KELLY DOWN | 25 | FT. |
| | TOTAL | 5743 | FT. |
| WT. OF STRING | 120 M. | | LBS. |

### BIT RECORD

| | |
|---|---|
| BIT NO. | 28 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | H77C |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 15 14 |
| SER. NO. | 355743 |
| DEPTH OUT | 5743 |
| DEPTH IN | 5743 |
| TOTAL FTG. | |
| TOTAL HR. RUN | |
| COND. OF BIT | 3-0-1½ |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 10:00 | | |
| WEIGHT | 9.9+ | | |
| VISC.-SEC | 70 | | |
| W.L.-C.C. | | | |
| FLTR. CK | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R Brundige

### 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. 2 LINER SIZE | PUMP NO. 2 S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-E |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5743 | | | | | | | 1210 | 5½ | | 5½ | 60 | S |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 400 | 700 | 3 | HOIST BIT |
| 700 | 1000 | 3 | MAKE UP magnet & JUNK SUB & Run in |
| 1000 | 1115 | 1¼ | WORK JUNK SUB & magnet |
| 1115 | 1200 | ¾ | HOIST |

## DRILLING CREW PAYROLL DATA

DATE MAY 24/1973

WELL NAME & NO. UNION AKLAVIK F-38

COMPANY UNION OIL CO. OF CANADA LTD.

TOOL PUSHER Barry D. Armstrong — RIG NO. 1E

MORNING TOUR ▽ P.M. A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. | |
|---|---|---|---|---|
| DRILLER | | C. HOPKINS | 8 | T |
| DRKMAN | | H. KLEEN | 8 | T |
| MTRMAN | | J. LANGLOIS | 8 | T |
| FIREMAN | | | | |
| FLRMAN | | G. ALBERTSON | 8 | T |
| FLRMAN | | D. HEWKO | 8 | T |
| FLRMAN | | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

DAY TOUR ____ A.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. | |
|---|---|---|---|---|
| DRILLER | | R L Hayes | 8 | |
| DRKMAN | | C. Campbell | 8 | |
| MTRMAN | | D. McLaughlin | 8 | |
| FIREMAN | | | | |
| FLRMAN | | S Schumacher | 8 | |
| FLRMAN | | G Garrecht | 8 | |
| FLRMAN | | M. Hazen | 8 | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR ____ P.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. | |
|---|---|---|---|---|
| DRILLER | | R R Brundige | 8 | T |
| DRKMAN | | MIKE MCLAUGHLIN | 8 | T |
| MTRMAN | | B LARSEN | 8 | T |
| FIREMAN | | | | |
| FLRMAN | | PAT MARREN | 8 | T |
| FLRMAN | | E ERGHILL | 8 | T |
| FLRMAN | 110 401 944 | E NOWERS | 8 | T |
| | | E NOWERS- ~~FLOOR HAS~~ WINTER LINER | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 67 DATE MAY 23/73

OPERATOR: UNION OIL CO. OF CANADA LTD.

LEASE: UNION AKLAVIK F-38

WELL NO. F-38 | FIELD OR DIST. AKLAVIK | COUNTY NWT | STATE CANADA

CONTRACTOR: S&T DRILLING (WESTERN) CO. LTD. | RIG NO. 1E

DRILL PIPE STRING NO. 2 | SIZE 5 | TOOL JOINT 5" O.D. | TYPE THD. 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry Armstrong

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NSCO | K-380 | 14" |
| 2. | NSCO | K-380 | 14" |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | MAYN. | 42# K55 | 67 | 2765 | | 2760 | CEMENTED W/ 1500 SAKS. OILWELL CEMENT |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 3¼ | | |
| REAMING | | 3¼ | 6 |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | 2¼ | 1½ | 1¾ |
| LUBRICATE RIG | ¼ | | ¼ |
| DEVIATION SURVEY | ¼ | | |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| [illegible] | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | 13¼ | |
| DRILL STEM TEST | | | |
| OTHER W.O. MAGNET | 2 | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 5 | 11 |

## TIME SUMMARY (OFFICE USE ONLY)

| | | | |
|---|---|---|---|
| DAY WORK | | | |
| HRS. W/DP | | | |
| HRS. WO/DP | | | |
| HRS. STANDBY | | | |
| TOTAL DAY WORK | | | |

## WIRE LINE RECORD

REEL NO.

NO. OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

| NO. | DRILLING ASSEMBLY AT END OF TOUR | | |
|---|---|---|---|
| 53 | STANDS D.P. | 4993.88 | FT. |
| 2 | SINGLES D.P. | 63.17 | FT. |
| 12 | D.C. 2⅞ I.D. 6¾ O.D. | 358.88 | FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 | FT. |
| 1 | STB. BODY O.D. | 8.23 | FT. |
| 1 | STB. BODY O.D. | 8.10 | FT. |
| 1 | RMR. BODY O.D. | 8.20 | FT. |
| 3 | SUBS 6¼ 6⅝ | 7.58 | FT. |
| | BIT OR C.B. | | FT. |
| 1 | SHOCK SUB | 9.05 | FT. |
| | KELLY DOWN | 23.48 | FT. |
| | TOTAL | 5743.00 | FT. |
| WT. OF STRING | | 124M | LBS. |

**BIT RECORD**

| | | |
|---|---|---|
| BIT NO. | 27 | |
| SIZE | 8½ | |
| MFG. | SECO | |
| TYPE | M88 | |
| NOZZLE NO. | 3 | |
| NOZZLE SIZE | 16 | |
| SER. NO. | 367099 | |
| DEPTH OUT | 5743 | |
| DEPTH IN | 5394 | |
| TOTAL FTG. | 349 | |
| TOTAL HR. RUN | 78½ | |
| COND. OF BIT | 8-8-I | |
| REAMER NO. | | |
| REAMER TYPE | | |

**MUD RECORD**

| | | |
|---|---|---|
| TIME | 1200 | |
| WEIGHT | 10.0 | |
| VISC.-SEC | 63 | |
| W.L.-C.C. | | |
| FLTR. CK. | | |
| PH | 9.0 | |
| SD. CONT. % | | |
| PRESSURE GRADIENT | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER C. Hopkins

**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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5735 | 5743 | D | | CHANGE STUFFING BOX & HEAD RUBBERS #1 PUMP LUB. SIDE | 45 | 36 | 1300 | 5½ | 67 | 5½ | | S |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 5743 | 6° | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 1200 | 315 | 3¼ | DRLG. 8½" HOLE |
| 315 | 330 | ¼ | DROP SURVEY |
| 330 | 530 | 2 | HOIST & WORK TIGHT HOLE 5100'-5740' |
| 530 | 545 | ¼ | BREAK BIT & RECOVER SURVEY |
| 545 | 600 | ¼ | RIG SERV. & V BLIND RAMS |
| 600 | 800 | 2 | W.O. MAGNET 1 CONE LOST |

## EVENING TOUR

| NO. | DRILLING ASSEMBLY AT END OF TOUR | | |
|---|---|---|---|
| 53 | STANDS D.P. | 4993.88 | FT. |
| 2 | SINGLES D.P. | 63.17 | FT. |
| 12 | D.C. 2⅞ I.D. 6¾ O.D. | 358.88 | FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 | FT. |
| 1 | STB. BODY O.D. | 8.23 | FT. |
| 1 | STB. BODY O.D. | 8.10 | FT. |
| 1 | RMR. BODY O.D. | 8.62 | FT. |
| 3 | SUBS 6¼ 6⅝ | 7.58 | FT. |
| 1 | SAVER SUB | 5.63 | FT. |
| 1 | SHOCK SUB | 9.05 | FT. |
| | KELLY DOWN | 17.24 | FT. |
| | TOTAL | 5743 | FT. |
| WT. OF STRING | | 126M | LBS. |

**BIT RECORD**

| | | |
|---|---|---|
| BIT NO. | | |
| SIZE | | |
| MFG. | | |
| TYPE | | |
| NOZZLE NO. | | |
| NOZZLE SIZE | | |
| SER. NO. | | |
| DEPTH OUT | | |
| DEPTH IN | | |
| TOTAL FTG. | | |
| TOTAL HR. RUN | | |
| COND. OF BIT | | |
| REAMER NO. | | |
| REAMER TYPE | | |

**MUD RECORD**

| | | |
|---|---|---|
| TIME | | |
| WEIGHT | | |
| VISC.-SEC | | |
| W.L.-C.C. | | |
| FLTR. CK. | | |
| PH | | |
| SD. CONT. % | | |
| PRESSURE GRADIENT | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R.K. Hayes

**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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5743 | | | | NEW LINER, HEAD IN #2 PUMP. LUB. SIDE | | | | | | | | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 800 | 1000 | 2 | Make up Magnet + RUN IN |
| 1000 | 1145 | 1¼ | Break Circ + work Magnet Notable to Reach Bottom |
| 1145 | 215 | 2½ | Hoist Magnet ✓ Blind Rams |
| 215 | 400 | 1¾ | Lay down Magnet + Stab + Pick up 6 Point Reamer |

## EVENING TOUR

| NO. | DRILLING ASSEMBLY AT END OF TOUR | | |
|---|---|---|---|
| 53 | STANDS D.P. | 4993.88 | FT. |
| 2 | SINGLES D.P. | 63.17 | FT. |
| 12 | D.C. 2⅞ I.D. 6¾ O.D. | 358.88 | FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 | FT. |
| 1 | STB. BODY O.D. | 8.23 | FT. |
| 1 | STB. BODY O.D. | 8.10 | FT. |
| 1 | RMR. BODY O.D. | 8.62 | FT. |
| 3 | SUBS 6¼ 6⅝ | 7.58 | FT. |
| 1 | SAVER SUB | 5.63 | FT. |
| 1 | SHOCK SUB | 9.05 | FT. |
| | KELLY DOWN | 17.24 | FT. |
| | TOTAL | 5743 | FT. |
| WT. OF STRING | | 126M | LBS. |

**BIT RECORD**

| | | |
|---|---|---|
| BIT NO. | | |
| SIZE | | |
| MFG. | | |
| TYPE | | |
| NOZZLE NO. | | |
| NOZZLE SIZE | | |
| SER. NO. | | |
| DEPTH OUT | | |
| DEPTH IN | | |
| TOTAL FTG. | | |
| TOTAL HR. RUN | | |
| COND. OF BIT | | |
| REAMER NO. | | |
| REAMER TYPE | | |

**MUD RECORD**

| | | |
|---|---|---|
| TIME | 800 | 1000 |
| WEIGHT | 9.7 | 9.9 |
| VISC.-SEC | 70 | 69 |
| W.L.-C.C. | | |
| FLTR. CK | | |
| PH | 9.0 | 9.3 |
| SD. CONT. % | | |
| PRESSURE GRADIENT | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5743 | | | | | | | | | | | | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 400 | 415 | ¼ | Rig Serv ✓ BOPS |
| 415 | 545 | 1½ | RUN IN Collars + Pipe to 3904. |
| 545 | 830 | 2¾ | Ream IN from 3904' to 4963 |
| 830 | 845 | ¼ | Run IN To 4891 |
| 845 | 1200 | 3¼ | Ream To From 4896 To 4945 |

## DRILLING CREW PAYROLL DATA

DATE MAY 23, 1973

WELL NAME & NO. UNION AKLAVIK F-38

COMPANY UNION OIL CO. OF CANADA LTDO

TOOL PUSHER Barry Armstrong RIG NO. 1E

MORNING TOUR P.M. A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. HOPKINS | 12 |
| DRKMAN | | H. KLEEN | 12 |
| MTRMAN | | J. LANGLAIS | 12 |
| FIREMAN | | | |
| FLRMAN | | G. ALBERTSON | 12 |
| FLRMAN | | R. HEWARD | 12 |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

DAY TOUR A.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R.J. Hayes | 12 |
| DRKMAN | | C. Campbell | 12 |
| MTRMAN | | D. McLaughlin | 12 |
| FIREMAN | | | |
| FLRMAN | | S. Schumacher | 12 |
| FLRMAN | | G. Garrecht | 12 |
| FLRMAN | | M. Hazen | 12 |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

EVENING TOUR P.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 66 DATE MAY 22/73

OPERATOR: UNION OIL CO. OF CANADA LTD.

LEASE: UNION AKLAVIK F-38

WELL NO. F-38 FIELD OR DIST. AKLAVIK COUNTY NWT STATE CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. RIG NO. 1E

DRILL PIPE STRING NO. 23 SIZE 4 TOOL JOINT 5" O.D. TYPE THD. 3½ I.F.

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER Barry W. Armstrong

## PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NSCD | K-380 | 14" |
| 2. | NSCO | K-380 | 14" |
| 3. | | | |

## LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9 5/8 | MANN. | 32# K-55 | 67 | 2765 | | 2760 | CEMENTED W/1500 SACKS OTTAWA CEMENT |

## TIME DISTRIBUTION—HOURS

| | NORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | 3½ | | |
| DRILLING ACTUAL | 7¼ | 7¾ | 7½ |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | | |
| LUBRICATE RIG | ¼ | ¼ | ¼ |
| DEVIATION SURVEY | 1¼ | | 1¼ |
| TEST B.O.P. | ✓ | ✓ | ✓ |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

## TIME SUMMARY (OFFICE USE ONLY)

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.

NO. OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 52 | STANDS D.P. | 4892.98 FT. |
| 2 | SINGLES D.P. | 63.28 FT. |
| 12 | D.C. 2 7/8 I.D. 6 3/4 O.D. | 368.88 FT. |
| 9 | D.C. 2 7/8 I.D. 6 1/4 O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.20 FT. |
| 3 | ISUBS 2 7/8 I.D. 6 1/4 O.D. | 7.68 FT. |
| | BIT OR C.B. | FT. |
| 1 | SHOCK SUB | 9.05 FT. |
| | KELLY DOWN | 32.27 FT. |
| | TOTAL | 5657.00 FT. |

WT. OF STRING 123M LBS.

### BIT RECORD

| | |
|---|---|
| BIT NO. | 27 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | M88 |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 367099 |
| DEPTH OUT | |
| DEPTH IN | 5394 |
| TOTAL FTG. | 263 |
| TOTAL HR. RUN | 60 |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 1200 | 3PM | 6PM |
| WEIGHT | 9.9 | 9.9 | 9.9 |
| VISC.-SEC | 53 | 60 | 70 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | 9.0 | 9.0 | 9.0 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Gel | 10 sax. | | |
| Barites | 2 Sax | | |

DRILLER C. Hopkins

### 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'EL-P COMP.-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5605 | 5657 | D | | | 45 | 36 | 1300 | 5½ | | 5½ | 66 | S |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 5624 | 4¼ | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 1200 | 400 | 4 | DRLG. 8½" HOLE |
| 400 | 415 | ¼ | RIG SERV'D V 4" RAMS & HYDRILL |
| 415 | 430 | ¼ | SURVEY |
| 430 | 800 | 3½ | DRLG |

## DAY TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 53 | STANDS D.P. | 4993.88 FT. |
| 1 | SINGLES D.P. | 31.48 FT. |
| 12 | D.C. 2 7/8 I.D. 6 1/4 O.D. | 358.88 FT. |
| 9 | D.C. 2 7/8 I.D. 6 1/4 O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.20 FT. |
| 3 | ISUBS 2 7/8 I.D. 6 1/4 O.D. | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock Sub | 9.05 FT. |
| | KELLY DOWN | 16.17 FT. |
| | TOTAL | 5704.00 FT. |

WT. OF STRING 127M LBS.

### BIT RECORD

| | |
|---|---|
| BIT NO. | 27 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | M88 |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 367099 |
| DEPTH OUT | |
| DEPTH IN | 5394 |
| TOTAL FTG. | 310 |
| TOTAL HR. RUN | 6¾ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 9AM | 12 | 3PM |
| WEIGHT | 9.9 | 9.9 | 9.9 |
| VISC.-SEC | 70 | 68 | 65 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | 9.0 | 9.0 | 9.0 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|

DRILLER R L Hayes

### 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. 2 LINER SIZE | PUMP NO. 2 S.P.M. | METHOD RUN SGL.-S PAR'EL-P COMP.-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5657 | 5704 | D | | | 45 | 36 | 1300 | 5½ | | 5½ | 66 | S |
| | | | | | | | | X | | X | | |
| | | | | | | | | 14 | | 14 | | |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 800 | 900 | 1 | DRLG |
| 900 | 915 | ¼ | Rig Serv'd V Hydrill |
| 915 | 1400 | 6¾ | DRLG |

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 53 | STANDS D.P. | 4993.88 FT. |
| 2 | SINGLES D.P. | 63.17 FT. |
| 12 | D.C. 2 7/8 I.D. 6 1/4 O.D. | 358.88 FT. |
| 9 | D.C. 2 7/8 I.D. 6 1/4 O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.20 FT. |
| 3 | ISUBS 2 7/8 I.D. 6 1/4 O.D. | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock Sub | 9.05 FT. |
| | KELLY DOWN | 15.48 FT. |
| | TOTAL | 5735.00 FT. |

WT. OF STRING 124M LBS.

### BIT RECORD

| | |
|---|---|
| BIT NO. | 27 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | M88 |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 367099 |
| DEPTH OUT | |
| DEPTH IN | 5394 |
| TOTAL FTG. | 341 |
| TOTAL HR. RUN | 7¾ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 930 | 1100 | |
| WEIGHT | 9.9 | 9.9 | |
| VISC.-SEC | 70 | 68 | |
| W.L.-C.C. | | | |
| FLTR. CK | | | |
| PH | 9.0 | 9.0 | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|

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 SGL.-S PAR'EL-P COMP.-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5704 | 5735 | D | | | 45 | 36 | 1300 | 5½ | 63 | | | |
| | | | | | | 25 | | X | | | | |
| | | | | | | | | 14 | | | | |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 5718 | 6° | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 400 | 815 | 4¼ | DRLG. |
| 815 | 830 | ¼ | RIG SERV'D V 4" RAMS |
| 830 | 845 | ¼ | SURVEY @ 5718 |
| 845 | 1200 | 3¼ | DRLG. |

## DRILLING CREW PAYROLL DATA

DATE MAY 22, 1973

WELL NAME & NO. UNION AKLAVIK F-38

COMPANY UNION OIL CO. OF CANADA LTD.

TOOL PUSHER Barry W. Armstrong RIG NO. 1E

MORNING TOUR P.M. A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. HOPKINS | 12 |
| DRKMAN | | H. KLEIN | 12 |
| MTRMAN | | J. LAGNON | 12 |
| FIREMAN | | | |
| FLRMAN | | G. ALBERTSON | 12 |
| FLRMAN | | R. HENKO | 12 |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST-TIME ACCIDENT

DAY TOUR A.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R.L. Hayes | 12 |
| DRKMAN | | C. Campbell | 12 |
| MTRMAN | | D. McLaughlin | 12 |
| FIREMAN | | | |
| FLRMAN | | S. Schumacher | 12 |
| FLRMAN | | E. Garrecht | 12 |
| FLRMAN | | M. Hazen | 12 |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

EVENING TOUR P.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. — DATE: MAY 21/73

OPERATOR: ~~Union~~ Dome Co. of Canada Ltd.

LEASE: Union Aklavik F-38

WELL NO.: F-38

FIELD OR DIST.: AKLAVIK

COUNTY: W.W.T.

STATE: CANADA

CONTRACTOR: S&T DRILLING (WESTERN) CO. LTD.

RIG NO.: 1E

DRILL PIPE STRING: NO. 4 SIZE 3½

TOOL JOINT: 5" O.D. TYPE THD 3½ I.F.

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry D. Armstrong

PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NSCO | K-380 | 14" |
| 2. | NSCO | K-380 | 14" |
| 3. | | | |

LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9 5/8 | MAWD. | 40# K-55 | 67 | 2765 | | 2760 | CEMENTED W/1500 SACKS OF WELL CEMENT |

## TIME DISTRIBUTION — HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 8 | 7¾ | 7¾ |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | | |
| LUBRICATE RIG | | ¼ | ¼ |
| DEVIATION SURVEY | | | |
| TEST B.O.P. | | ✓ | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| RUNNING CASING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

TIME SUMMARY (OFFICE USE ONLY)

| | |
|---|---|
| DAY WORK | |
| HRS. W/DP | |
| HRS. WO/DP | |
| HRS. STANDBY | |
| TOTAL DAY WORK | |

WIRE LINE RECORD

| | |
|---|---|
| REEL NO. | |
| NO. OF LINES | SIZE |
| FEET SLIPPED | |
| FEET CUT OFF | |
| PRESENT LENGTH | |
| TON MI. OR TRIPS SINCE LAST CUT | |
| CUMULATIVE TON MI. OR TRIPS | |
| NO. OF DAYS FROM SPUD | |
| CUMULATIVE ROTATING HRS. | |

## MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 51 | STANDS D.P. | 4819.10 | FT. |
| 1 | SINGLES D.P. | 36.21 | FT. |
| 12 | D.C. 2 7/8" I.D. 6¾" O.D. | 358.88 | FT. |
| 9 | D.C. 2 7/8" I.D. 6¼" O.D. | 262.43 | FT. |
| 1 | STB. BODY O.D. | 8.23 | FT. |
| 1 | STB. BODY O.D. | 8.10 | FT. |
| 1 | RMR. BODY O.D. | 8.20 | FT. |
| 3 | SUBS (3½ I.F. 6¼) | 7.58 | FT. |
| | BIT OR C.B. | | FT. |
| 1 | SHOCK SUB. | 9.05 | FT. |
| | KELLY DOWN | 34.22 | FT. |
| | TOTAL | 5522.00 | FT. |
| WT. OF STRING | 121 M | LBS. | |

BIT RECORD

| | |
|---|---|
| BIT NO. | 27 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | M88 |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 367099 |
| DEPTH OUT | |
| DEPTH IN | 5394 |
| TOTAL FTG. | 128 |
| TOTAL HR. RUN | 37 |
| COND. OF BIT | DRG. |
| REAMER NO. | |
| REAMER TYPE | |

MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 12 00 | 4 00 | 7 00 |
| WEIGHT | 9.8 | 9.9 | 9.9 |
| VISC.-SEC | 54 | 76 | 70 |
| W.L.-C.C. | | | |
| FL.TR. CK. | | | |
| PH | 9.5 | 9.5 | 9.0 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | 10 SKS. | | |
| BENEX | 25 SKS. | | |

DRILLER: C. Hopkins

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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5483 | 5522 | D | | | 45 | 33 | 1300 | 5½ | 64 | 5½ | | S |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 00 | 8 00 | 8 | DRLG. 8½" HOLE |

## DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 51 | STANDS D.P. | 4805.10 | FT. |
| 2 | SINGLES D.P. | 61.67 | FT. |
| 12 | D.C. 2 7/8" I.D. 6¼" O.D. | 358.88 | FT. |
| 9 | D.C. 2 7/8" I.D. 6¼" O.D. | 262.43 | FT. |
| 1 | STB. BODY O.D. | 8.23 | FT. |
| 1 | STB. BODY O.D. | 8.10 | FT. |
| 1 | RMR. BODY O.D. | 8.20 | FT. |
| 3 | SUBS (3½ I.F. 6¼) | 7.58 | FT. |
| | BIT OR C.B. | | FT. |
| 1 | SHOCK SUB. | 9.05 | FT. |
| | KELLY DOWN | 35.76 | FT. |
| | TOTAL | 5566.00 | FT. |
| WT. OF STRING | 129M | LBS. | |

BIT RECORD

| | |
|---|---|
| BIT NO. | 27 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | M88 |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 367099 |
| DEPTH OUT | |
| DEPTH IN | 5394 |
| TOTAL FTG. | 172 |
| TOTAL HR. RUN | 44¾ |
| COND. OF BIT | DRG. |
| REAMER NO. | |
| REAMER TYPE | |

MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 8 00 | 11 00 | 3 00 |
| WEIGHT | 9.9 | 9.9 | 9.9 |
| VISC.-SEC | 71. | 65 | 62 |
| W.L.-C.C. | | | |
| FL.TR. CK. | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER: R L Hayes

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'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5522 | 5566 | D | | | 45 | 35 | 1300 | 5½ | 64 | 5½ | | |
| | | | | | | | | X | | X | | |
| | | | | | | | | 14 | | 14 | | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8 00 | 11 00 | 3 | DRLG. |
| 11 00 | 11 15 | ¼ | Rig Serv ✓ Pipe Rams |
| 11 15 | 4 00 | 4¾ | DRLG. |

## EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 52 | STANDS D.P. | 4897.98 | FT. |
| 1 | SINGLES D.P. | 31.68 | FT. |
| 12 | D.C. 2 7/8" I.D. 6¾" O.D. | 358.88 | FT. |
| 9 | D.C. 2 7/8" I.D. 6¼" O.D. | 262.43 | FT. |
| 1 | STB. BODY O.D. | 8.23 | FT. |
| 1 | STB. BODY O.D. | 8.10 | FT. |
| 1 | RMR. BODY O.D. | 8.20 | FT. |
| 3 | SUBS (3½ I.F. 6¼) | 7.58 | FT. |
| | BIT OR C.B. | | FT. |
| 1 | SHOCK SUB. | 9.05 | FT. |
| | KELLY DOWN | 11.87 | FT. |
| | TOTAL | 5603.80 | FT. |
| WT. OF STRING | 133 M | LBS. | |

BIT RECORD

| | |
|---|---|
| BIT NO. | 27 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | M88 |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 367099 |
| DEPTH OUT | |
| DEPTH IN | 5394 |
| TOTAL FTG. | 211 |
| TOTAL HR. RUN | 52½ |
| COND. OF BIT | DRG. |
| REAMER NO. | |
| REAMER TYPE | |

MUD RECORD

| | | | |
|---|---|---|---|
| TIME | | 9 00 | 11 00 |
| WEIGHT | | 9.9 | 8.9 |
| VISC.-SEC | | 56 | 57 |
| W.L.-C.C. | | | |
| FL.TR. CK | | | |
| PH | | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. 2 LINER SIZE | PUMP NO. 2 S.P.M. | METHOD RUN SCL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5566 | 5605 | | | | 45 | 36 | 1300 | 6½ | | 5½ | 66 | S |
| | | | | | | | | | | X | | |
| | | | | | | | | | | 14 | | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 5560 | 5½ | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4 00 | 5 00 | 1 | DRLG. |
| 5 00 | 5 15 | ¼ | Survey & Rig Serv |
| 5 15 | 12 00 | 6¾ | DRLG. |

## DRILLING CREW PAYROLL DATA

DATE ~~Union~~ MAY 21, 73

WELL NAME & NO. Union Aklavik F-38

COMPANY Union Dome Co. of Canada Ltd.

TOOL PUSHER Barry D. Armstrong RIG NO. 1E

MORNING TOUR ____ P.M. ____ A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. HOPKINS | 12 |
| DRKMAN | | H. KLEEN | 12 |
| MTRMAN | | F. LANGLOIS | 12 |
| FIREMAN | | | |
| FLRMAN | | B. ALBERTSON | 12 |
| FLRMAN | | R. HENKO | 12 |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

DAY TOUR ____ A.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R L Hayes | 12 |
| DRKMAN | | C. Campbell | 12 |
| MTRMAN | | D McLaughlin | 12 |
| FIREMAN | | | |
| FLRMAN | | S. Schumacher | 12 |
| FLRMAN | | G. Garrecht | 12 |
| FLRMAN | | M. Hazen | 12 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR ____ P.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 64 DATE MAY 20, 1973

OPERATOR: UNION OIL CO. OF CANADA LTD.
LEASE: UNION AKLAVIK F-38
WELL NO. F-38
FIELD OR DIST.: AKLAVIK
COUNTY: N.W.T.
STATE: CANADA
CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD.
RIG NO. 1E
DRILL PIPE STRING NO. 2 3 4" SIZE
TOOL JOINT 5" O.D.
TYPE THD. 3½" I.F.
SIGNATURE OF OPERATOR'S REPRESENTATIVE: John Lutz
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry Armstrong

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NSCO | K-380 | 14" |
| 2. | NSCO | K-380 | 14" |
| 3. | | | |

LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9 5/8 | MANN. | 42# K-55 | 67 | 2765 | | 2760 | CEMENTED W/1500 SACKS DOWELL CEMENT |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 7¾ | 7¾ | 7½ |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | | |
| LUBRICATE RIG | 1/4 | 1/4 | 1/4 |
| DEVIATION SURVEY | | | 1/4 |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| [illegible]ING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

## TIME SUMMARY (OFFICE USE ONLY)

DAY WORK
HRS. W/DP
HRS. WO/DP
HRS. STANDBY
TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.
NO. OF LINES SIZE
FEET SLIPPED
FEET CUT OFF
PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.

## MORNING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | | |
|---|---|---|---|
| 50 | STANDS D.P. | 4710.86 | FT. |
| 1 | SINGLES D.P. | 31.50 | FT. |
| 12 | D.C. 2 7/8" I.D. 6¾" O.D. | 358.88 | FT. |
| 9 | D.C. 2 7/8" I.D. 6¼" O.D. | 262.43 | FT. |
| 1 | STB. BODY O.D. | 8.23 | FT. |
| 1 | STB. BODY O.D. | 8.10 | FT. |
| 1 | RMR. BODY O.D. | 8.20 | FT. |
| 3 | SUBS 6¾" 6¼" | 7.58 | FT. |
| | BIT OR C.B. | | FT. |
| 1 | SHOCK SUB | 9.05 | FT. |
| | KELLY DOWN | 24.17 | FT. |
| | TOTAL | 5429.00 | FT. |

WT. OF STRING 121 M LBS.

**BIT RECORD**

| | | |
|---|---|---|
| BIT NO. | | 27 |
| SIZE | | 8½ |
| MFG. | | SEC. |
| TYPE | | M88 |
| NOZZLE | NO. | 3 |
| | SIZE | 16 |
| SER. NO. | | 367099 |
| DEPTH OUT | | |
| DEPTH IN | | 5394 |
| TOTAL FTG. | | 35 |
| TOTAL HR. RUN | | 13¾ |
| COND. OF BIT | | DRLG. |
| REAMER NO. | | |
| REAMER TYPE | | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 10⁰⁰ | 3⁰⁰ | 7⁰⁰ |
| WEIGHT | 9.9 | 9.8+ | 9.9 |
| VISC.-SEC | 58 | 54 | 85 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | 10 SACKS | | |
| BENEX | 2 SACKS | | |

DRILLER C. HOPKINS

**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'EL.-P COM'D.-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5406 | 5429 | D | | | 35 | 33 | 1300 | 5½ | 64 | 5½ | | S |
| | | | | | 45 | | | | | | | |

HELD BLOW-OUT DRILL

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12⁰⁰ | 2⁰⁰ | 2 | DRLG. 8½" HOLE |
| 2⁰⁰ | 2¹⁵ | ¼ | DIG SERV. ✓ 4" RAMS & KELLY COCK |
| 2¹⁵ | 8⁰⁰ | 5¾ | DRLG. |

## DAY TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | | |
|---|---|---|---|
| 50 | STANDS D.P. | 4710.86 | FT. |
| 2 | SINGLES D.P. | 62.89 | FT. |
| 12 | D.C. 2 7/8" I.D. 6¾" O.D. | 358.88 | FT. |
| 9 | D.C. 2 7/8" I.D. 6¼" O.D. | 262.43 | FT. |
| 1 | STB. BODY O.D. | 8.23 | FT. |
| 1 | STB. BODY O.D. | 8.10 | FT. |
| 1 | RMR. BODY O.D. | 8.20 | FT. |
| 3 | SUBS O.D. | 7.58 | FT. |
| | BIT OR C.B. | | FT. |
| 1 | SHOCK SUB | 9.05 | FT. |
| | KELLY DOWN | 15.74 | FT. |
| | TOTAL | 5454.00 | FT. |

WT. OF STRING 121 M LBS.

**BIT RECORD**

| | | |
|---|---|---|
| BIT NO. | | 27 |
| SIZE | | 8½ |
| MFG. | | SEC. |
| TYPE | | M88 |
| NOZZLE | NO. | 3 |
| | SIZE | 16 |
| SER. NO. | | 367094 |
| DEPTH OUT | | |
| DEPTH IN | | 5394 |
| TOTAL FTG. | | 80 |
| TOTAL HR. RUN | | 21½ |
| COND. OF BIT | | DRLG |
| REAMER NO. | | |
| REAMER TYPE | | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 9⁰⁰ | 12⁰⁰ | 3⁰⁰ |
| WEIGHT | 9.9 | 9.9 | 9.9 |
| VISC.-SEC | 85 | 80 | 85 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R.P. Hayes

**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'EL.-P COM'D.-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5429 | 5454 | D | | | 115 | 33 | 1300 | 5½ | 64 | 5½ | | S |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8⁰⁰ | 1⁰⁰ | 5 | DRLG. |
| 1⁰⁰ | 1¹⁵ | ¼ | Rig serv. ✓ Pipe Rams |
| 1¹⁵ | 4⁰⁰ | 2¾ | DRLG. |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | | |
|---|---|---|---|
| 51 | STANDS D.P. | 4819.10 | FT. |
| | SINGLES D.P. | | FT. |
| 12 | D.C. 2 7/8" I.D. 6¾" O.D. | 358.88 | FT. |
| 9 | D.C. 2 7/8" I.D. 6¼" O.D. | 262.43 | FT. |
| 1 | STB. BODY O.D. | 8.23 | FT. |
| 1 | STB. BODY O.D. | 8.10 | FT. |
| 1 | RMR. BODY O.D. | 8.20 | FT. |
| 3 | SUBS O.D. | 7.58 | FT. |
| | BIT OR C.B. | | FT. |
| 1 | Shock Sub | 9.05 | FT. |
| | KELLY DOWN | 15.43 | FT. |
| | TOTAL | 5483.00 | FT. |

WT. OF STRING 121 M LBS.

**BIT RECORD**

| | | |
|---|---|---|
| BIT NO. | | 27 |
| SIZE | | 8½ |
| MFG. | | SEC |
| TYPE | | M88 |
| NOZZLE | NO. | 3 |
| | SIZE | 16 |
| SER. NO. | | 367094 |
| DEPTH OUT | | |
| DEPTH IN | | 5394 |
| TOTAL FTG. | | 89 |
| TOTAL HR. RUN | | 23 |
| COND. OF BIT | | DRLG |
| REAMER NO. | | |
| REAMER TYPE | | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 8⁰⁰ 30 | 10⁰⁰ | 12⁰⁰ |
| WEIGHT | 9.9 | 9.9 | 9.9 |
| VISC.-SEC | 50 | 55 | 56 |
| W.L.-C.C. | | | |
| FLTR. CK | | | |
| PH | 9.5 | 9.5 | 9.6 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PAR'EL.-P COM'D.-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5454 | 5483 | D | | | 45 | 33 | 1300 | 5½ | 64 | 5½ | | S |

Held Blow out Drill

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 5466 | 5¼° | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4⁰⁰ | 10⁰⁰ | 6 | DRLG. 8½" HOLE |
| 10⁰⁰ | 10¹⁵ | ¼ | Rig Serv. ✓ BOPS |
| 10¹⁵ | 10³⁰ | ¼ | SURVEY |
| 10³⁰ | 12⁰⁰ | 1½ | DRLG |

SHKR. SCREEN

## DRILLING CREW PAYROLL DATA

DATE MAY 20, 1973
WELL NAME & NO. UNION AKLAVIK F-38
COMPANY UNION OIL CO. LTD.
TOOL PUSHER Barry Armstrong
RIG NO. 1E

MORNING TOUR ✓ P.M. A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. HOPKINS | 12 |
| DRKMAN | | H. KLEEN | 12 |
| MTRMAN | | J. ARNOLDUS | 12 |
| FIREMAN | | | |
| FLRMAN | | G. ALBERTSON | 12 |
| FLRMAN | | R. HENKO | 12 |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST-TIME ACCIDENT

DAY TOUR A.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R. L. Hayes | 12 |
| DRKMAN | | C. Campbell | 12 |
| MTRMAN | | D. McLaughlin | 12 |
| FIREMAN | | | |
| FLRMAN | | S. Schumacher | 12 |
| FLRMAN | | G. Garrecht | 12 |
| FLRMAN | | M. Hazen | 12 |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

EVENING TOUR P.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 63 DATE MAY 19/73

OPERATOR: UNION OIL CO. OF CANADA LTD.

LEASE: UNION ARIADNE F-38

WELL NO. F-38 | FIELD OR DIST. ARIADNE | COUNTY N.W.T. | STATE CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. | RIG NO. 1E

DRILL PIPE STRING NO. 3 SIZE 3½ | TOOL JOINT 5" O.D. TYPE THD. 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry Johnstone

## PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NSCD | K-380 | 14" |
| 2. | NSCD | K-380 | 14" |
| 3. | | | |

## LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9 5/8 | MANN. | 43.5# K-55 | 67 | 2765 | | 2760 | CEMENTED W/ 1500 SAKS DEL WELL CEMENT |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 7½ | 11¼ | 6 |
| REAMING | | | 1½ |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | 2¾ | 1¼ |
| LUBRICATE RIG | | ¼ | ¼ |
| DEVIATION SURVEY | | ¼ | |
| TEST B.O.P. | | ¼ | |
| CUT OFF DRILLING LINE | | ½ | |
| REPAIR RIG | ½ | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |

COMPLETION WORK: A. PERFORATING; B. TUBING TRIPS; C. SWABBING; D. TESTING; E. ADDITIONAL

TOTALS: 8 8 8

## TIME SUMMARY (OFFICE USE ONLY)

DAY WORK; HRS. W/DP; HRS. WO/DP; HRS. STANDBY; TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.; NO. OF LINES SIZE; FEET SLIPPED; FEET CUT OFF; PRESENT LENGTH; TON MI. OR TRIPS SINCE LAST CUT; CUMULATIVE TON MI. OR TRIPS; NO. OF DAYS FROM SPUD; CUMULATIVE ROTATING HRS.

## MORNING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 49 | STANDS D.P. | 4617.80 FT. |
| 2 | SINGLES D.P. | 81.09 FT. |
| 12 | D.C. 2 7/8 x 6 3/4 I.D. O.D. | 358.88 FT. |
| 9 | D.C. 2 7/8 x 6 1/4 I.D. O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.20 FT. |
| 3 | SUBS 6¾ & 6¼ | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock Sub | 9.05 FT. |
| | KELLY DOWN | 39.30 FT. |
| | TOTAL | 5381.07 FT. |
| WT. OF STRING | 120M | LBS. |

### BIT RECORD

| | |
|---|---|
| BIT NO. | 26 |
| SIZE | 8½ |
| MFG. | SMITH |
| TYPE | 4JS |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 18 |
| SER. NO. | MN920 |
| DEPTH OUT | |
| DEPTH IN | 5199 |
| TOTAL FTG. | 182 |
| TOTAL HR. RUN | 78 |
| COND. OF BIT | DAG. |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 1830 | 2000 | 600 |
| WEIGHT | 9.0 | 9.0 | 9.0 |
| VISC.-SEC | 50 | 55 | 54 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | | | |
| SD. CONT. % | 9.0 | 9.0 | 9.0 |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | 10 SAXS. | | |
| BENEX | 2 SAXS. | | |

DRILLER: C. Hopkins

### 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5361 | 5381 | D | | VIEW HEMOTING Pump | 24 | 33 | 1300 | 5½ | | 5½ | 70 | S |
| | | | | FLYWHEEL SIDE | | | | | | | | |

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

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 1200 | 200 | 2 | DRLG. 8½" HOLE |
| 200 | 230 | ½ | WORK ON ELECTRIC PANEL |
| 230 | 800 | 5½ | DRLG |

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 50 | STANDS D.P. | 4710.86 FT. |
| | SINGLES D.P. | FT. |
| 12 | D.C. 2 7/8 x 6 3/4 I.D. O.D. | 358.88 FT. |
| 9 | D.C. 2 7/8 x 6 1/4 I.D. O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.20 FT. |
| 3 | SUBS 6¾ & 6¼ | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock Sub | 9.05 FT. |
| | KELLY DOWN | 39.27 FT. |
| | TOTAL | 5406.00 FT. |
| WT. OF STRING | 121M | LBS. |

### BIT RECORD

| | |
|---|---|
| BIT NO. | 27 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | M88 |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 367099 |
| DEPTH OUT | |
| DEPTH IN | 5394 |
| TOTAL FTG. | 12 |
| TOTAL HR. RUN | 6 |
| COND. OF BIT | DRG. |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 730 | 1100 | |
| WEIGHT | 9.9 | 9.9 | T |
| VISC.-SEC | 54 | 60 | R |
| W.L.-C.C. | | | I |
| FLTR. CK. | | | P |
| PH | 9.5 | 9.5 | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER: T. L. Hayes

### 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5181 | 5194 | D | | | 24 | 33 | 1300 | 5½ | 69 | | | S |
| | | | | | | | | X | | | | |
| | | | | | | | | 14 | | | | |

DEVIATION RECORD: DEPTH 5394 | DEV. 4¾° | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 800 | 900 | 1 | DRLG |
| 900 | 915 | ¼ | Rig serv ✓ Pipe Rams |
| 915 | 1230 | 3¼ | DRLG |
| 1230 | 1245 | ¼ | Survey |
| 1245 | 245 | 2 | Hoist |
| 245 | 300 | ¼ | Change Bits ✓ Blind Rams |
| 300 | 330 | ½ | Slip 23' DRLG line & Cut. |
| 330 | 400 | ½ | RUN IN DC.S + Change 2nd + 3rd Stb Rubbers. |

## 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5194 | 5406 | D | | CHANGED: OIL & FILTER | 24 | 35 | 1300 | 5½ | 64 | 5½ | | S |
| | | | | H2 Cat. | 35 | | | | | | | |

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

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 400 | 415 | ¼ | Rig serv ✓ BOPS |
| 415 | 530 | 1¼ | FINISH |
| 530 | 600 | ½ | Break Circ + Clean 15' to Bottom |
| 600 | 1200 | 6 | DRLG. |

CHANGED LOWER SHKR SCREEN

## DRILLING CREW PAYROLL DATA

DATE MAY 19, 1973

WELL NAME & NO. UNION ARIADNE F-38

COMPANY UNION OIL CO. LTD.

TOOL PUSHER Barry Johnstone RIG NO. 1E

MORNING TOUR ✓ P.M. A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. | |
|---|---|---|---|---|
| DRILLER | | C. HOPKINS | 12 | |
| DRKMAN | | H. KLEEN | 12 | |
| MTRMAN | | T. LANGLOIS | 12 | |
| FIREMAN | | | | |
| FLRMAN | | G. ALBERTSON | 12 | |
| FLRMAN | | B. HENRIE | 12 | |
| FLRMAN | | | | |

NO. OF DAYS ____ SINCE LAST LOST-TIME ACCIDENT

DAY TOUR ____ A.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. | |
|---|---|---|---|---|
| DRILLER | | R. L. Hayes | 12 | |
| DRKMAN | | C. Campbell | 12 | |
| MTRMAN | | D. McLaughlin | 12 | |
| FIREMAN | | | | |
| FLRMAN | | S. Schumacher | 12 | |
| FLRMAN | | G. Garrecht | 12 | |
| FLRMAN | | M. Hazen | 12 | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR ____ P.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 62 DATE MAY 18/73

OPERATOR: UNION OIL CO. OF CANADA LTD. (UNION AKLAVIK F-38)

LEASE: UNION AKLAVIK F-38

WELL NO. F-38 | FIELD OR DIST. AKLAVIK | COUNTY N.W.T. | STATE CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. | RIG NO. 1E

DRILL PIPE STRING: NO. 253, SIZE 4" | TOOL JOINT 5" O.D., TYPE THD. 3½ I.F.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry D. Armstrong

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NSCO | K-380 | 14" |
| 2. | NSCO | K-380 | 14" |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9 5/8 | MANN | 47# K-55 | 67 | 2765 | | 2760 | CEMENTED W/ 1500 SAXS. OIL-WELL CEMENT |

**TIME DISTRIBUTION–HOURS**

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 7 11/12 | 6 3/4 | 6 3/4 |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | | |
| LUBRICATE RIG | 1/4 | 1/4 | 1/4 |
| DEVIATION SURVEY | 1/4 | | |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | 1 | 1 |
| [illegible]ING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

**TIME SUMMARY (OFFICE USE ONLY)**

DAY WORK | HRS. W/DP | HRS. WO/DP | HRS. STANDBY | TOTAL DAY WORK

**WIRE LINE RECORD**

REEL NO. | NO. OF LINES | SIZE | FEET SLIPPED | FEET CUT OFF | PRESENT LENGTH | TON MI. OR TRIPS SINCE LAST CUT | CUMULATIVE TON MI. OR TRIPS | NO. OF DAYS FROM SPUD | CUMULATIVE ROTATING HRS.

## MORNING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 49 | STANDS D.P. | 4617.80 FT. |
| 1 | SINGLES D.P. | 31.02 FT. |
| 12 | D.C. 2 7/8 x 6 3/4 I.D. O.D. | 358.88 FT. |
| 9 | D.C. 2 7/8 x 6 1/4 I.D. O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.20 FT. |
| 3 | SUBS | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | SHOCK SUB | 9.05 FT. |
| | KELLY DOWN | 11.71 FT. |
| | TOTAL | 5323.00 FT. |
| WT. OF STRING | 120 M | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 26 |
| SIZE | 8½ |
| MFG. | Smith |
| TYPE | 4JS |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 18 |
| SER. NO. | MN920 |
| DEPTH OUT | |
| DEPTH IN | 5199 |
| TOTAL FTG. | 124 |
| TOTAL HR. RUN | 57 |
| COND. OF BIT | DALC. |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 12 30 | 3:00 | 6800 |
| WEIGHT | 10.1+ | 10.1 | 10.0 |
| VISC.-SEC | 75 | 67 | 65 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | 9.5 | 9.5 | 9.0 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Gel | 10 sax | | |
| Bicnate | 2 sax | | |
| Soda Ash | 1 sax | | |

DRILLER R. Hopkins

**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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5308 | 5323 | D | | NEW STUFF BOX, HEAD, LINER & PKR. #1 - FLYWHEEL SIDE | 22 | 33 | 1300 | 5½ | 65 | 5½ | | S |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 5311 | 4/80 | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 1200 | 700 | 7 | DRLG. 8½" HOLE |
| 700 | 715 | ¼ | SURVEY |
| 715 | 730 | ¼ | RIG SERV & J 4" RAMS |
| 730 | 800 | ½ | DRLG. |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 49 | STANDS D.P. | 4617.80 FT. |
| 1 | SINGLES D.P. | 3102 FT. |
| 12 | D.C. 2 7/8 x 6 3/4 I.D. O.D. | 358.88 FT. |
| 9 | D.C. 2 7/8 x 6 1/4 I.D. O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.20 FT. |
| 3 | SUBS | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock Sub | 9.05 FT. |
| | KELLY DOWN | 36.71 FT. |
| | TOTAL | 5348.00 FT. |
| WT. OF STRING | 120M | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 26 |
| SIZE | 8½ |
| MFG. | Smith |
| TYPE | 4JS |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 18 |
| SER. NO. | MN920 |
| DEPTH OUT | |
| DEPTH IN | 5199 |
| TOTAL FTG. | 149 |
| TOTAL HR. RUN | 63¾ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 9 00 | 12 00 | 3 00 |
| WEIGHT | 10.0 | 10.0 | 10.0 |
| VISC.-SEC | 62 | 63 | 58 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | / | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER PR Hayes

**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'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5323 | 5348 | D | | | 24 | 33 | 1300 | 5½ | | 5½ | 70 | S |
| | | | | Held Safety Meeting | | | | X | | X | | |
| | | | | | | | | 14 | | 14 | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 800 | 1245 | 4¾ | DRLG |
| 1245 | 100 | ¼ | Rig Serv Hydril + Change Light plants. |
| 100 | 200 | 1 | DRLG. |
| 200 | 300 | 1 | Work on Flow Line DResser sleeves |
| 300 | 400 | 1 | DRLG. |

Change Oil + oil filters IN # 1 D379

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 49 | STANDS D.P. | 4617.80 FT. |
| 1 | SINGLES D.P. | 31.02 FT. |
| 12 | D.C. 2 7/8 x 6 3/4 I.D. O.D. | 358.88 FT. |
| 9 | D.C. 2 7/8 x 6 1/4 I.D. O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.20 FT. |
| 3 | SUBS | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock Sub | 9.05 FT. |
| | KELLY DOWN | 19.30 FT. |
| | TOTAL | 5361.00 FT. |
| WT. OF STRING | 120 M | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 26 |
| SIZE | 8½ |
| MFG. | Smith |
| TYPE | 4JS |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 18 |
| SER. NO. | MN920 |
| DEPTH OUT | |
| DEPTH IN | 5199 |
| TOTAL FTG. | 162 |
| TOTAL HR. RUN | 70½ |
| COND. OF BIT | DALC. |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 4 30 | 9 00 | |
| WEIGHT | 10.0- | 9.9+ | |
| VISC.-SEC | 54 | 47 | |
| W.L.-C.C. | | | |
| FLTR. CK | | | |
| PH | 9.5 | 9.5 | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5348 | 5361 | D | | | 94 | 33 | 1300 | 5½ | | 5½ | 70 | S |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 400 | 600 | 2 | DRLG. |
| 600 | 615 | ¼ | Rig Serv Hydril |
| 615 | 1030 | 4¼ | DRLG. |
| 1030 | 1130 | 1 | Work On Elect. Panel |
| 1130 | 1200 | ½ | DRLG |

**DRILLING CREW PAYROLL DATA**

DATE MAY 18, 1973

WELL NAME & NO. UNION AKLAVIK F-38

COMPANY UNION OIL CO. OF CAN. LTD.

TOOL PUSHER Barry D. Armstrong RIG NO. 1E

MORNING TOUR P.M. A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. HOPKINS | 12 |
| DRKMAN | | H. KLEEN | 12 |
| MTRMAN | | J. LANGLOIS | 12 |
| FIREMAN | | | 12 |
| FLRMAN | | G. ALBERTSON | 12 |
| FLRMAN | | R. HEWKO | 12 |
| FLRMAN | | | 12 |

NO. OF DAYS SINCE LAST LOST-TIME ACCIDENT

DAY TOUR A.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R. L. Hayes | 12 |
| DRKMAN | | C. Campbell | 12 |
| MTRMAN | | D. McLaughlin | 12 |
| FIREMAN | | | |
| FLRMAN | | S. Schumacher | 12 |
| FLRMAN | | G. Gerrecht | 12 |
| FLRMAN | | M. Hazen | 12 |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

EVENING TOUR P.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 61 DATE MAY 17/73

OPERATOR: Union Oil Co. Of Canada Ltd.

LEASE: Union Arlavik F-38

WELL NO. F-38 FIELD OR DIST. ~~Wildcat~~ Arlavik COUNTY N.W.T. STATE Canada

CONTRACTOR: S & T Drilling (Western) Co. Ltd. RIG NO. 1E

DRILL PIPE STRING: NO. 253 SIZE 4" TOOL JOINT 5" O.D. TYPE THD. 3½ I.F.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry D. Armstrong

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NSCO | K-380 | 14" |
| 2. | NSCO | K-380 | 14" |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | Mann | 40# K-55 | 67 | 2765 | | 2760 | Cemented w/1500 Sks Oilwell Cement |

**TIME DISTRIBUTION—HOURS**

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 8 | 7¾ | 7½ |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | | |
| LUBRICATE RIG | | ¼ | |
| DEVIATION SURVEY | | | |
| TEST B.O.P. | | ✓ | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | ½ |
| [illegible]ING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

**TIME SUMMARY (OFFICE USE ONLY)**

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

**WIRE LINE RECORD**

REEL NO.

NO. OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 48 | STANDS D.P. | 4524.00 FT. |
| 2 | SINGLES D.P. | 62.23 FT. |
| 12 | D.C. 2⅞ I.D. 6¾ O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ I.D. 6½ O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.20 FT. |
| 3 | SUBS 6¼ | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock Sub | 9.05 FT. |
| | KELLY DOWN | 32.30 FT. |
| | TOTAL | 5276.00 FT. |
| WT. OF STRING | 120M | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 26 |
| SIZE | 8½ |
| MFG. | Sec. |
| TYPE | 4JS |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 18 |
| SER. NO. | MN920 |
| DEPTH OUT | |
| DEPTH IN | 5199 |
| TOTAL FTG. | 77 |
| TOTAL HR. RUN | 34¼ |
| COND. OF BIT | Drlg. |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 100 | 400 | 700 |
| WEIGHT | 10.2 | 10.2 | 10.2 |
| VISC.-SEC | 55 | 72 | 70 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | 9.05 | 9.05 | 9.05 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Gel | 10 | Sks. | |
| Benex | 2 | Sks. | |

DRILLER: C. Hopkins

**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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5258 | 5276 | D | | Changed Complete Head #1 Pump Flywheel Side | 92 | 33 | 1300 | 6½ | | 5½ | 65 | S |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 1200 | 800 | 8 | Drlg. 8½" Hole |
| | | | Change Shaker Screen-Top |
| | | | Change Head & Liner #2 Pump S.P.M. |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 49 | STANDS D.P. | 4617.80 FT. |
| | SINGLES D.P. | FT. |
| 12 | D.C. 2⅞ I.D. 6¾ O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.20 FT. |
| 3 | SUBS O.D. | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock Sub | 9.05 FT. |
| | KELLY DOWN | 13.73 FT. |
| | TOTAL | 5294.00 FT. |
| WT. OF STRING | 120M | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 26 |
| SIZE | 8½ |
| MFG. | Smith |
| TYPE | 4JS |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 18 |
| SER. NO. | MN920 |
| DEPTH OUT | |
| DEPTH IN | 5199 |
| TOTAL FTG. | 95 |
| TOTAL HR. RUN | 42 |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 900 | 1200 | 300 |
| WEIGHT | 10.1+ | 10.1+ | 10.1+ |
| VISC.-SEC | 62 | 65 | 64 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER: R L Hayes

**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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5276 | 5294 | D | | | 23 | 33 | 1300 | 5½ X 14 | 69 | | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 800 | 145 | 5¾ | DRLG. |
| 145 | 200 | ¼ | Rig Serv. & Pipe Rams |
| 200 | 400 | 2 | DRLG |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 26 |
| SIZE | 8½ |
| MFG. | Smith |
| TYPE | 4JS |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 18 |
| SER. NO. | MN920 |
| DEPTH OUT | |
| DEPTH IN | 5199 |
| TOTAL FTG. | 109 |
| TOTAL HR. RUN | 41½ |
| COND. OF BIT | DRLG. |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 800 | 1000 | |
| WEIGHT | 10.2 | 10.2 | |
| VISC.-SEC | 58 | 56 | |
| W.L.-C.C. | | | |
| FLTR. CK | | | |
| PH | 9.5 | 9.5 | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5294 | 5308 | D | | | 92 | 33 | 1300 | 5½ | 65 | 5½ | | S |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 400 | 430 | ½ | Work on Electrical Equip & Rig Serv. |
| 430 | 600 | 7½ | DRLG |

## DRILLING CREW PAYROLL DATA

DATE MAY 17, 1973

WELL NAME & NO. Union Arlavik F-38

COMPANY ~~Union Oil Co. Ltd.~~

TOOL PUSHER Barry D. Armstrong RIG NO. 1E

**MORNING TOUR** P.M. A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. Hopkins | 12 |
| DRKMAN | | H. Kiefn | 12 |
| MTRMAN | | J. Langlois | 12 |
| FIREMAN | | | |
| FLRMAN | | G. Albertson | 12 |
| FLRMAN | | B. Henko | 12 |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

**DAY TOUR** A.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R L Hayes | 12 |
| DRKMAN | | C---Campbell | 12 |
| MTRMAN | | D McLaughlin | 12 |
| FIREMAN | | | |
| FLRMAN | | S. Schumacher | 12 |
| FLRMAN | | G. Garrecht | 12 |
| FLRMAN | | M. Hazen | 12 |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

**EVENING TOUR** P.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| | | E. Graumann | T |
| | | E. Armstrong | T |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 60 DATE MAY 16/73

OPERATOR: UNION OIL CO. OF CANADA LTD.
LEASE: UNION AKLAVIK F-38
WELL NO.: F-38
FIELD OR DIST.: AKLAVIK
COUNTY: N.W.T.
STATE: CANADA

CONTRACTOR: S&T DRILLING (WESTERN) CO. LTD.
RIG NO.: 1E

DRILL PIPE STRING: NO. 233 SIZE 4"
TOOL JOINT: 5" O.D. TYPE THD. 3½ I.F.

SIGNATURE OF OPERATOR'S REPRESENTATIVE:
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: E.W. Graumann

PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NSCD | K-380 | 14" |
| 2. | NSCD | K-380 | 14" |
| 3. | | | |

LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9 5/8 | MANN. | 40# K-55 | 67 | 2765 | | 1760 | CEMENTED W/150 SAXS. OILWELL CEMENT |
| | | | | | | | |
| | | | | | | | |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 8 | 7¾ | 7½ |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | | |
| LUBRICATE RIG | | ¼ | ¼ |
| DEVIATION SURVEY | | | ¼ |
| TEST B.O.P. | | V | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| RING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK: A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

TIME SUMMARY (OFFICE USE ONLY)

| | |
|---|---|
| DAY WORK | |
| HRS. W/DP | |
| HRS. WO/DP | |
| HRS. STANDBY | |
| TOTAL DAY WORK | |

## WIRE LINE RECORD

REEL NO.
NO. OF LINES SIZE
FEET SLIPPED
FEET CUT OFF
PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.

## MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 48 | STANDS D.P. | 4558.00 FT. | |
| | SINGLES D.P. | FT. | |
| 12 | D.C. 2 7/8 I.D. 6 3/4 O.D. | 358.88 FT. | |
| 9 | D.C. 2 7/8 I.D. 6 1/4 O.D. | 262.43 FT. | |
| 1 | STB. BODY O.D. | 8.23 FT. | |
| 1 | STB. BODY O.D. | 8.10 FT. | |
| 1 | RMR. BODY O.D. | 8.20 FT. | |
| 3 | SUBS, 1 6 3/4 & 1 6 1/4 | 7.58 FT. | |
| | BIT OR C.B. | FT. | |
| 1 | SHOCK SUB | 9.05 FT. | |
| | KELLY DOWN | 34.53 FT. | |
| | TOTAL | 5722.00 FT. | |
| WT. OF STRING | 118 | LBS. | |

BIT RECORD

| | |
|---|---|
| BIT NO. | 26 |
| SIZE | 8½ |
| MFG. | SMITH |
| TYPE | 4JS |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 18 |
| SER. NO. | MN920 |
| DEPTH OUT | |
| DEPTH IN | 5199 |
| TOTAL FTG. | 23 |
| TOTAL HR. RUN | 11 |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 12 00 | 3 00 | 6 00 |
| WEIGHT | 10.6 | 10.6 | 10.6 |
| VISC.-SEC | 61 | 58 | 67 |
| W.L.-C.C. | | | |
| FL.TR. CK. | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Gel | 10 sax | | |
| Soda Ash | 1 sax | | |
| Bennex | 2 sax | | |

DRILLER: C. Hopkins

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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5205 | 5222 | D | | | 22 | 25 | 1300 | 5½ | | 5½ | 65 | S |
| | | | | | | 28 | | | | | | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 00 | 8 00 | 8 | DRLG. 8½" HOLE |

## EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 48 | STANDS D.P. | 4524.00 FT. | |
| 1 | SINGLES D.P. | 31.08 FT. | |
| 12 | D.C. 2 7/8 I.D. 6 3/4 O.D. | 358.88 FT. | |
| 9 | D.C. 2 7/8 I.D. 6 1/4 O.D. | 262.43 FT. | |
| 1 | STB. BODY O.D. | 8.23 FT. | |
| 1 | STB. BODY O.D. | 8.10 FT. | |
| 1 | RMR. BODY O.D. | 8.20 FT. | |
| 3 | SUBS, 1 6 3/4 & 1 6 1/4 | 7.58 FT. | |
| | BIT OR C.B. | FT. | |
| 1 | Shock Sub | 9.05 FT. | |
| | KELLY DOWN | 23.45 FT. | |
| | TOTAL | 5240.00 FT. | |
| WT. OF STRING | 120M | LBS. | |

BIT RECORD

| | |
|---|---|
| BIT NO. | 26 |
| SIZE | 8½ |
| MFG. | Smith |
| TYPE | 4JS |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 18 |
| SER. NO. | MN920 |
| DEPTH OUT | |
| DEPTH IN | 5199 |
| TOTAL FTG. | 41 |
| TOTAL HR. RUN | 18¾ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 9 00 | 12 00 | 3 00 |
| WEIGHT | 10.6 | 10.6 | 10.5 |
| VISC.-SEC | 62 | 59 | 58 |
| W.L.-C.C. | | | |
| FL.TR. CK. | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER: R.L. Hayes

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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5222 | 5240 | D | | | 24 | 33 | 1200 | 5½ | 69 | | | |
| | | | | | | | | X | | | | |
| | | | | | | | | 14 | | | | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8 00 | 10 00 | 2 | DRLG |
| 10 00 | 10 15 | ¼ | Rig Serv ✓ Hydril |
| 10 15 | 4 00 | 5¾ | DRLG |

## DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 48 | STANDS D.P. | 4524.00 FT. | |
| 1 | SINGLES D.P. | 31.08 FT. | |
| 12 | D.C. 2 7/8 I.D. 6 3/4 O.D. | 358.88 FT. | |
| 9 | D.C. 2 7/8 I.D. 6 1/4 O.D. | 262.43 FT. | |
| 1 | STB. BODY O.D. | 8.23 FT. | |
| 1 | STB. BODY O.D. | 8.10 FT. | |
| 1 | RMR. BODY O.D. | 8.20 FT. | |
| 3 | SUBS, 1 6 3/4 & 1 6 1/4 | 7.58 FT. | |
| | BIT OR C.B. | FT. | |
| 1 | Shock Sub | 9.05 FT. | |
| | KELLY DOWN | 23.45 FT. | |
| | TOTAL | 5240.00 FT. | |
| WT. OF STRING | 120M | LBS. | |

BIT RECORD

| | |
|---|---|
| BIT NO. | 26 |
| SIZE | 8½ |
| MFG. | Smith |
| TYPE | 4JS |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 18 |
| SER. NO. | MN920 |
| DEPTH OUT | |
| DEPTH IN | 5199 |
| TOTAL FTG. | 41 |
| TOTAL HR. RUN | 18¾ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 6 00 | 10 00 | |
| WEIGHT | 10.2 | 10.2 | |
| VISC.-SEC | 52 | 47 | |
| W.L.-C.C. | | | |
| FL.TR. CK | | | |
| PH | 9.5 | 9.5 | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | 20 SAX. | | |
| BENEX | 4 SAX | | |

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. 2 LINER SIZE | PUMP NO. 2 S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5240 | 5258 | | | | 24 | 33 | 1300 | 5½ | | 5½ | 65 | |
| | | | | | | | | | | X | | |
| | | | | | | | | | | 14 | | |

DEVIATION RECORD: DEPTH 5248 DEV. 4¾

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4 00 | 11 30 | 7½ | DRLG |
| 11 30 | 11 45 | ¼ | RIG SERV. & 4" RAMS |
| 11 45 | 12 00 | ¼ | SURVEY |

## DRILLING CREW PAYROLL DATA

DATE MAY 16, 1973
WELL NAME & NO. UNION AKLAVIK F-38
COMPANY UNION OIL CO. LTD.
TOOL PUSHER E.W. Graumann RIG NO. 1E

MORNING TOUR ____ P.M. ____ A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. HOPKINS | 12 |
| DRKMAN | | H. KIEFN | 12 |
| MTRMAN | | J. LANGLOIS | 12 |
| FIREMAN | | | |
| FLRMAN | | G. ALBERTSON | 12 |
| FLRMAN | | R. HENKO | 12 |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

DAY TOUR ____ A.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R.L. Hayes | 12 |
| DRKMAN | | C. Campbell | 12 |
| MTRMAN | | D. McLaughlin | 12 |
| FIREMAN | | | |
| FLRMAN | | S. Schumacher | 12 |
| FLRMAN | | G. Garrecht | 12 |
| FLRMAN | | M Hazen | 12 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR ____ P.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 59 — DATE MAY 15/73

OPERATOR: UNION OIL CO. OF CANADA LTD.

LEASE: UNION AKLAVIK F-38

WELL NO. F-38 — FIELD OR DIST. AKLAVIK — COUNTY N.W.T. — STATE CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. — RIG NO. 1E

DRILL PIPE STRING NO. 3 SIZE 4 — TOOL JOINT 5" O.D. TYPE THD. 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: E W Kraemann

## PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NSCD | K-380 | 14" |
| 2. | NSCD | K-380 | 14" |
| 3. | | | |

## LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | MANN | 32# K-55 | 67 | 2765 | | 2760 | CEMENTED W/1500 SAXS DIESEL CEMENT |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 5¼ | 5½ | 3 |
| REAMING | | ¼ | ½ |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | 3½ | 3 | 4½ |
| LUBRICATE RIG | | ¼ | ¼ |
| DEVIATION SURVEY | ¼ | | |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| [illegible]RING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

## TIME SUMMARY (OFFICE USE ONLY)

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.

NO. OF LINES — SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 47 | STANDS D.P. | 4430.93 FT. |
| 2 | SINGLES D.P. | 62.37 FT. |
| 12 | D.C. 2 7/8 I.D. x 6 3/4 O.D. | 358.88 FT. |
| 9 | D.C. 2 7/8" I.D. x 6 1/4" O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.20 FT. |
| 3 | SUBS 6 1/4" O.D. | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock Sub | 9.05 FT. |
| | KELLY DOWN | 12.77 FT. |
| | TOTAL | 5188.00 FT. |
| WT. OF STRING | | 118M LBS. |

### BIT RECORD

| | |
|---|---|
| BIT NO. | 24 |
| SIZE | 8½ |
| MFG. | SEC. |
| TYPE | M44J |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 913612 |
| DEPTH OUT | 5188 |
| DEPTH IN | 5167 |
| TOTAL FTG. | 20 |
| TOTAL HR. RUN | 10¼ |
| COND. OF BIT | 8-2-1 |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | |
|---|---|---|
| TIME | 100 | 300 |
| WEIGHT | 10.7 | 10.6 |
| VISC.-SEC | 62 | 60 |
| W.L.-C.C. | | |
| FL TR. CK. | | |
| PH | 9.5 | 9.5 |
| SD. CONT. % | | |
| PRESSURE GRADIENT | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER C. Hopkins

### 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5176 | 5188 | D | | | 50 | 35 | 1300 | 5½ | 67 | | | S |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 5188 | 4 3/4° | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 1200 | 515 | 5¾ | DRLG 8½" HOLE |
| 515 | 530 | ¼ | DROP SURVEY |
| 530 | 730 | 2 | HOIST |
| 730 | 745 | 1¼ | CHANGE BITS RECOVER SURVEY & V RIDING RAMS |
| 745 | 800 | ¼ | RUN IN D.C. & CHANGE 2nd STB RUBBER |

## DAY TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 48 | STANDS D.P. | 4524.00 FT. |
| | SINGLES D.P. | FT. |
| 12 | D.C. 2 7/8 I.D. x 6 3/4 O.D. | 358.88 FT. |
| 9 | D.C. 2 7/8 I.D. x 6 1/4 O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.20 FT. |
| 3 | SUBS 6 1/4" O.D. | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shocksub | 9.05 FT. |
| | KELLY DOWN | 12.53 FT. |
| | TOTAL | 5199.00 FT. |
| WT. OF STRING | | 118M LBS. |

### BIT RECORD

| | |
|---|---|
| BIT NO. | 25 |
| SIZE | 8½ |
| MFG. | SEC. |
| TYPE | DTMJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 352502 |
| DEPTH OUT | 5199 |
| DEPTH IN | 5188 |
| TOTAL FTG. | 11 |
| TOTAL HR. RUN | 5½ |
| COND. OF BIT | 4 2 1 |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | |
|---|---|---|
| TIME | 1100 | 200 |
| WEIGHT | 10.6 | 10.6 |
| VISC.-SEC | 65 | 63 |
| W.L.-C.C. | | |
| FL TR. CK. | | |
| PH | 9.5 | 9.5 |
| SD. CONT. % | | |
| PRESSURE GRADIENT | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R.L. Hayes

### 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5188 | 5199 | D | | | 40 | 40 | 1300 | 5½ X 1H | 66 | | | |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 5199 | 4½° | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 800 | 815 | ¼ | RIG SERVICE |
| 815 | 930 | 1¼ | FINISH IN |
| 930 | 945 | ¼ | Break Circ + Clean 3 FT of fill |
| 943 | 315 | 5½ | DRLG |
| 315 | 400 | ¾ | DROP Survey & HOIST. |

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 48 | STANDS D.P. | 4524.00 FT. |
| | SINGLES D.P. | FT. |
| 12 | D.C. 2 7/8 I.D. x 6 3/4 O.D. | 358.88 FT. |
| 9 | D.C. 2 7/8 I.D. x 6 1/4 O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.20 FT. |
| 3 | SUBS 6 1/4" O.D. | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shocksub | 9.05 FT. |
| | KELLY DOWN | 17.53 FT. |
| | TOTAL | 5205.00 FT. |
| WT. OF STRING | | 118M LBS. |

### BIT RECORD

| | |
|---|---|
| BIT NO. | 26 |
| SIZE | 8½ |
| MFG. | Smith |
| TYPE | HTS |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 18 |
| SER. NO. | HN920 |
| DEPTH OUT | |
| DEPTH IN | 5199 |
| TOTAL FTG. | 6 |
| TOTAL HR. RUN | 3 |
| COND. OF BIT | DBIC |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | |
|---|---|---|
| TIME | 1000 | |
| WEIGHT | 10.6 | |
| VISC.-SEC | 62 | |
| W.L.-C.C. | | |
| FL TR. CK | | |
| PH | 9.5 | |
| SD. CONT. % | | |
| PRESSURE GRADIENT | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5199 | 5205 | D | | | 90 | 10 15 22 | 1300 | 5½ | | 5½ | 65 | S |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 400 | 415 | ¼ | Rig Serv |
| 415 | 545 | 1½ | Finish out |
| 645 | 600 | ¼ | Change Bit & Blind Rams |
| 600 | 630 | ½ | RUN IN DC's ~~Change out old Rubber~~ |
| 630 | 830 | 2 | RUN IN |
| 830 | 900 | ½ | ~~DRLG 8½" HOLE~~ BREAK CIRC & CLEAN 6' FILL |
| 900 | 1200 | 3 | DRLG 8½" HOLE |

## DRILLING CREW PAYROLL DATA

DATE MAY 15/73

WELL NAME & NO. UNION AKLAVIK F-38

COMPANY UNION OIL CO. LTD

TOOL PUSHER E W Kraemann — RIG NO. 1E

### MORNING TOUR ____ P.M. ____ A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. HOPKINS | 12 |
| DRKMAN | | H. KLEEN | 12 |
| MTRMAN | | J. LANGLOIS | 12 |
| FIREMAN | | | |
| FLRMAN | | G. ALGERSON | 12 |
| FLRMAN | | R. HEWKO | 12 |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST-TIME ACCIDENT

### DAY TOUR ____ A.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R. L. Hayes | 12 |
| DRKMAN | | C. Campbell | 12 |
| MTRMAN | | D. McLaughlin | 12 |
| FIREMAN | | | |
| FLRMAN | | S. Schumacher | 12 |
| FLRMAN | | G. Garrecht | 12 |
| FLRMAN | | M. Hazen | 12 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

### EVENING TOUR ____ P.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 58 DATE MAY 14/73

OPERATOR: UNION OIL CO. OF CANADA LTD.

LEASE: UNION AKLAVIK F-38

WELL NO. F-38 | FIELD OR DIST. AKLAVIK | COUNTY N.W.T. | STATE CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. | RIG NO. 1E

DRILL PIPE STRING: NO. 253 SIZE 4 | TOOL JOINT O.D. TYPE THD. 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: E W Baumann

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NSCO | K-380 | 14" |
| 2. | NSCO | K-380 | 14" |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9 5/8 | MANN | 40# K-55 | 67 | 2765 | | 2760 | CEMENTED W/1500 SAKS. OILWELL CEMENT |
| | | | | | | | |
| | | | | | | | |

**TIME DISTRIBUTION—HOURS**

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 7¾ | 5¼ | 5 |
| REAMING | | | ¼ |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | 1¾ | 2¼ |
| LUBRICATE RIG | ¼ | ¼ | ¼ |
| DEVIATION SURVEY | | ¼ | |
| TEST B.O.P. | | ✓ | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | ½ | |
| RIGGING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK: A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

**TIME SUMMARY (OFFICE USE ONLY)**

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

**WIRE LINE RECORD**

REEL NO.

NO. OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 47 | STANDS D.P. | 4430.93 FT. |
| 1 | SINGLES D.P. | 31.58 FT. |
| 12 | D.C. 2⅞ x 6¾ I.D. O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ x 6¼ I.D. O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.20 FT. |
| 3 | SUBS 2¼ x 6¼ O.D. | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | SHOCK SUB | 9.08 FT. |
| | KELLY DOWN | 32.02 FT. |
| | TOTAL | 5156 FT. |
| WT. OF STRING | 118M | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 23 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | M44N |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 913604 |
| DEPTH OUT | |
| DEPTH IN | 5116 |
| TOTAL FTG. | 40 |
| TOTAL HR. RUN | 7¾ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| TIME | 10⁰⁰ | 4⁰⁰ | 6300 |
|---|---|---|---|
| WEIGHT | 10.5 | 10.7 | 10.7 |
| VISC.-SEC | 62 | 65 | 107 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Baroid | 80 sax | | |
| Bonnex | 2 sax | | |

DRILLER C. Hopkins

**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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5116 | 5156 | D | | | 45 | 15 | 1300 | 5½ | 66 | 5½ | | S |
| | | | | | 50 | 30 | | | | | | |
| | | | | | 55 | 35 | | | | | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12⁰⁰ | 3³⁰ | 3½ | DRLG. 8½" HOLE |
| 3³⁰ | 3⁴⁵ | ¼ | RIG SERV. & 4" RAMS |
| 3⁴⁵ | 8⁰⁰ | 4¼ | DRLG |

## DAY TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 47 | STANDS D.P. | 4430.93 FT. |
| 2 | SINGLES D.P. | 62.37 FT. |
| 12 | D.C. 2⅞ x 6¾ I.D. O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.20 FT. |
| 3 | SUBS 6¾ 2¼ | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock Sub | 9.05 FT. |
| | KELLY DOWN | 11.23 FT. |
| | TOTAL | 5167.00 FT. |
| WT. OF STRING | 118M | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 23 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | M44N |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 913604 |
| DEPTH OUT | 5167 |
| DEPTH IN | 5116 |
| TOTAL FTG. | 51 |
| TOTAL HR. RUN | 13 |
| COND. OF BIT | 8 3 1 |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| TIME | 9⁰⁰ | 12⁰⁰ |
|---|---|---|
| WEIGHT | 10.7 | 10.7 |
| VISC.-SEC | 62 | 63 |
| W.L.-C.C. | | |
| FLTR. CK. | | |
| PH | 9.5 | 9.5 |
| SD. CONT. % | | |
| PRESSURE GRADIENT | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R P Hayes

**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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5156 | 5167 | | | | 50 | 40 | 1300 | 5½ | 66 | | | |
| | | | | | | | | X | | | | |
| | | | | | | | | 14 | | | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 5155 | 4¾° | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8⁰⁰ | 12⁰⁰ | 4 | DRLG. |
| 12⁰⁰ | 12¹⁵ | ¼ | Rig Serv. ✓ BOPS |
| 12¹⁵ | 12³⁰ | ¼ | Survey |
| 12³⁰ | 1⁰⁰ | ½ | Maintenance to electrial Panel. |
| 1⁰⁰ | 2¹⁵ | 1¼ | DRLG. |
| 2¹⁵ | 4⁰⁰ | 1¾ | HOIST |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 47 | STANDS D.P. | 4430.93 FT. |
| 2 | SINGLES D.P. | 62.37 FT. |
| 12 | D.C. 2⅞ x 6¾ I.D. O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ x 6¼ I.D. O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.20 FT. |
| 3 | SUBS 6¾ 2¼ | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock Sub | 9.05 FT. |
| | KELLY DOWN | 9.77 FT. |
| | TOTAL | 5176.00 FT. |
| WT. OF STRING | 118M | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 24 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | MHHL |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 913612 |
| DEPTH OUT | |
| DEPTH IN | 5167 |
| TOTAL FTG. | 9 |
| TOTAL HR. RUN | 5 |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| TIME | 8⁰⁰ 30 |
|---|---|
| WEIGHT | 10.7 |
| VISC.-SEC | 62 |
| W.L.-C.C. | |
| FLTR. CK | |
| PH | 9.5 |
| SD. CONT. % | |
| PRESSURE GRADIENT | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. 2 LINER SIZE | PUMP NO. 2 S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5167 | 5176 | | | | 50 | 30 | 1300 | 5½ | 66 | | | |
| | | | | | | 35 | | X | | | | |
| | | | | | | | | 14 | | | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4⁰⁰ | 4¹⁵ | ¼ | FINISH OUT W/ BIT # 23 |
| 4¹⁵ | 4³⁰ | ¼ | Change Bits ✓ Blind Rams |
| 4³⁰ | 4⁴⁵ | ¼ | Rig Serv |
| 4⁴⁵ | 6³⁰ | 1¾ | RIH W/ + Change Bottom Stb Rubber |
| 6³⁰ | 7⁰⁰ | ½ | Break Circ + Clean Sump |
| 7⁰⁰ | 12⁰⁰ | 5 | DRLG 8½" HOLE |

## DRILLING CREW PAYROLL DATA

DATE MAY 14/73

WELL NAME & NO. UNION AKLAVIK F-38

COMPANY UNION OIL CO LTD

TOOL PUSHER E W Baumann RIG NO. 1E

**MORNING TOUR** P.M. A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. HOPKINS | 12 |
| DRKMAN | | H. KLEIN | 12 |
| MTRMAN | | J. LANGLOIS | 12 |
| FIREMAN | | | |
| FLRMAN | | G. ALBERTSON | 12 |
| FLRMAN | | R. HENKO | 12 |
| FLRMAN | | | |

NO. OF DAYS _____ SINCE LAST LOST-TIME ACCIDENT

**DAY TOUR** A.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R. L. Hayes | 12 |
| DRKMAN | | C. Campbell | 12 |
| MTRMAN | | D McLaughlin | 12 |
| FIREMAN | | | |
| FLRMAN | | S Schumacher | 12 |
| FLRMAN | | G Gerrecht | 12 |
| FLRMAN | | M Hazen | 12 |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

**EVENING TOUR** P.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 52 DATE May 8/73

OPERATOR: UNION Oil Co. LTD
LEASE: UNION AKlavik K-38
WELL NO.: K-38
FIELD OR DIST.: AKlavik
COUNTY: NWT
STATE: CaNada
CONTRACTOR: S.& T DRILLING (WESTERN) CO., LTD.
RIG NO.: 1E
SIGNATURE OF OPERATOR'S REPRESENTATIVE: M.R. McIntosh
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: E.W. Traumann

DRILL PIPE STRING: NO. 22, SIZE 4
TOOL JOINT: 5 O.D., TYPE THD. 3½ IF

PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NSCO | K 380 | 14 |
| 2. | NSCO | K 380 | 14 |
| 3. | | | |

LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | MANN | 40#K55 | 67 | 2765 | | 2760 | Cem W/1500 SKS |
| | * | | | | | | oil well Cement |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 6¼ | 7¼ | 7½ |
| REAMING | ¼ | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | 1¼ | | |
| LUBRICATE RIG | ¼ | ¼ | ¼ |
| DEVIATION SURVEY | | ½ | ½ |
| TEST O.P. | / | / | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| WORKING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK: A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

## TIME SUMMARY (OFFICE USE ONLY)

DAY WORK
HRS. W/DP
HRS. WO/DR
HRS. STANDBY
TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.
NO. OF LINES — SIZE
FEET SLIPPED
FEET CUT OFF
PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.

## DAY TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 44 | STANDS D.P. | 4147.46 | FT. |
| | SINGLES D.P. | | FT. |
| 12 | D.C. 2 7/8 I.D. 6 3/4 O.D. | 358.88 | FT. |
| 9 | D.C. 2 7/8 I.D. 6 1/4 O.D. | 262.43 | FT. |
| 1 | STB. BODY O.D. | 8.23 | FT. |
| 1 | STB. BODY O.D. | 8.10 | FT. |
| 1 | RMR. BODY O.D. | 8.20 | FT. |
| 3 | SUBS 6 3/4 6 1/4 | 7.58 | FT. |
| | BIT OR C.B. | | FT. |
| 1 | Shock Sub | 9.05 | FT. |
| | KELLY DOWN | 39.07 | FT. |
| | TOTAL | 4849.00 | FT. |
| WT. OF STRING | | 111M | LBS. |

### BIT RECORD

| | |
|---|---|
| BIT NO. | 18 |
| SIZE | 8½ |
| MFG. | Sec |
| TYPE | DS-J |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 368628 |
| DEPTH OUT | |
| DEPTH IN | 4819 |
| TOTAL FTG. | 30 |
| TOTAL HR. RUN | 6¼ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 4⁰⁰ | 5⁰⁰ | 6³⁰ |
| WEIGHT | 10.6 | 10.6 | 10.6 |
| VISC.-SEC | 62 | 60 | 58 |
| W.L.-C.C. | | | |
| FL.TR. CK. | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Gel | 4 | | |
| Benex | 1 | | |

DRILLER R L Hayes

### 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 SGL.-S PAR'EL-P COMP.-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4819 | 4849 | D | | | 30 | 30 | 1300 | 5½ | | 5½ | 64 | |
| | | | | | | | 1350 | X | | X | 68 | |
| | | | | | | | | 14 | | 14 | | |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12⁰⁰ | 12¹⁵ | ¼ | Rig Serv |
| 12¹⁵ | 1³⁰ | 1¼ | RUNIN W/Bit # 18 |
| 1³⁰ | 1⁴⁵ | ¼ | Break Circ + Clean 2 ft fill |
| 1⁴⁵ | 8⁰⁰ | 6¼ | DRLG. |
| | | | |
| | | | Held Blow out DRill |

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 44 | STANDS D.P. | 4147.46 | FT. |
| 2 | SINGLES D.P. | 62.22 | FT. |
| 12 | D.C. 2 7/8 x 6 3/4 O.D. | 358.88 | FT. |
| 9 | D.C. 2 7/8 x 6 1/4 O.D. | 262.43 | FT. |
| 1 | STB. BODY O.D. | 8.23 | FT. |
| 1 | STB. BODY O.D. | 8.10 | FT. |
| 1 | RMR. BODY O.D. | 8.20 | FT. |
| 3 | SUBS 6 3/4 x 6 1/4 | 7.58 | FT. |
| | BIT OR C.B. | | FT. |
| 1 | Shock Sub | 9.05 | FT. |
| | KELLY DOWN | 12.85 | FT. |
| | TOTAL | 4885.00 | FT. |
| WT. OF STRING | | 111M | LBS. |

### BIT RECORD

| | |
|---|---|
| BIT NO. | 18 |
| SIZE | 8½ |
| MFG. | Sec. |
| TYPE | DSJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 368628 |
| DEPTH OUT | |
| DEPTH IN | 4819 |
| TOTAL FTG. | 66 |
| TOTAL HR. RUN | 13½ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 9⁰⁰ | 12⁰⁰ | 3:00 |
| WEIGHT | 10.5+ | 10.6 | 10.6 |
| VISC.-SEC | 55 | 91 | 93 |
| W.L.-C.C. | | | |
| FL.TR. CK. | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | 10 SKS. | | |
| BENEX | 2 SKS. | | |
| SODA ASH | 1 SK. | | |

DRILLER C. Hopkins

### FOOTAGE 36

| 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 SGL.-S PAR'EL-P COMP.-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4849 | 4885 | D | | | 30 | 30 | 1300 | 5½ | | 5½ | 65 | S |
| | | | | | | 35 | | | | | | |
| | | | | | | 38 | | | | | | |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 4840 | 3 1/8° | | 4970 | 3½ | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8⁰⁰ | 8⁴⁵ | ¾ | DRIG. 8½" Hole |
| 8⁴⁵ | 9⁰⁰ | ¼ | Rig Srvd & 4" Rams |
| 9⁰⁰ | 9¹⁵ | ¼ | Survey |
| 9¹⁵ | 9⁴⁵ | 5½ | DRILL |
| 9⁴⁵ | 3⁰⁰ | ¼ | Survey |
| 3⁰⁰ | 4⁰⁰ | 1 | DRILL |

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 45 | STANDS D.P. | 4241.63 | FT. |
| | SINGLES D.P. | | FT. |
| 12 | D.C. 2 7/8 x 6 3/4 O.D. | 358.88 | FT. |
| 9 | D.C. 2 7/8 x 6 1/4 O.D. | 262.43 | FT. |
| 1 | STB. BODY O.D. | 8.23 | FT. |
| 1 | STB. BODY O.D. | 8.10 | FT. |
| 1 | RMR. BODY O.D. | 8.20 | FT. |
| 3 | SUBS 6 3/4 x 6 1/4 | 7.58 | FT. |
| | BIT OR C.B. | | FT. |
| 1 | Shock Sub | 9.05 | FT. |
| | KELLY DOWN | 16.90 | FT. |
| | TOTAL | 4992.00 | FT. |
| WT. OF STRING | | 111M | LBS. |

### BIT RECORD

| | |
|---|---|
| BIT NO. | 18 |
| SIZE | 8½ |
| MFG. | Sec. |
| TYPE | DSJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 368628 |
| DEPTH OUT | |
| DEPTH IN | 4819 |
| TOTAL FTG. | 112 |
| TOTAL HR. RUN | 21 |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 6³⁰ | 8⁰⁰ | 11³⁰ |
| WEIGHT | 10.5+ | 10.5+ | 10.5+ |
| VISC.-SEC | 72 | 70 | 70 |
| W.L.-C.C. | | | |
| FL.TR. CK | | | |
| PH | 9.5+ | 9.5+ | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R L Hayes

### 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'EL-P COM'D.-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4885 | 4921 | D | | | 30 | 38 | 1300 | 5½ | | 5½ | 66 | S |
| | | | | | 35 | 35 | | | | | | |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 4902 | 3½ | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4⁰⁰ | 8⁰⁰ | 4 | DRIG 8½" Hole |
| 8⁰⁰ | 8³⁰ | ½ | Survey & Rig Serv. |
| 8³⁰ | 12⁰⁰ | 3½ | DRLG. |

## DRILLING CREW PAYROLL DATA

DATE May 8 1973
WELL NAME & NO. UNION AKlavik K-38
COMPANY UNION Oil Co LTD
TOOL PUSHER E&J Traumann RIG NO. 1E

MORNING TOUR ____ P.M. ____ A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R L Hayes | 12 |
| DRKMAN | | E Sywenky | 12 |
| MTRMAN | | B Larsen | 12 |
| FIREMAN | | | |
| FLRMAN | | E Edgehill | 12 |
| FLRMAN | | B Taylor | 12 |
| FLRMAN | | M Hazen | 12 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

DAY TOUR ____ A.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C Hopkins | 12 |
| DRKMAN | | H Klein | 12 |
| MTRMAN | | J Langlois | 12 |
| FIREMAN | | | |
| FLRMAN | | C Abraham | 12 |
| FLRMAN | | A Henao | 12 |
| FLRMAN | | J Greenland | 9 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR ____ P.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 55 DATE MAY 15/73

OPERATOR: UNION OIL CO. OF CANADA LTD.
LEASE: UNION AKLAVIK F-38
WELL NO. F-38 FIELD OR DIST. AKLAVIK
COUNTY N.W.T. STATE CANADA
CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. RIG NO. 1E
DRILL PIPE STRING NO. 3 1/4 SIZE TOOL JOINT 5" O.D. TYPE THD. 3 1/2 IF
SIGNATURE OF OPERATOR'S REPRESENTATIVE
SIGNATURE OF CONTRACTOR'S TOOL PUSHER E.W. Kaumann

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NSCD | K-380 | 14" |
| 2. | NSCD | K-380 | 14" |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9 5/8 | MANN | 40# K-55 | 67 | 2765 | | 2760 | CEMENTED W/1500 SAKS DIFWELL CEMENT |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 5 1/4 | 5 1/2 | 3 |
| REAMING | | 1/4 | 1/2 |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | 2 1/2 | 2 | 4 1/2 |
| LUBRICATE RIG | | 1/4 | 1/4 |
| DEVIATION SURVEY | 1/4 | | |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| [illegible]ING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

## TIME SUMMARY (OFFICE USE ONLY)

| | | | |
|---|---|---|---|
| DAY WORK | | | |
| HRS. W/DP | | | |
| HRS. WO/DP | | | |
| HRS. STANDBY | | | |
| TOTAL DAY WORK | | | |

## WIRE LINE RECORD

REEL NO.
NO. OF LINES SIZE
FEET SLIPPED
FEET CUT OFF
PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.

## MORNING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | | |
|---|---|---|---|
| 47 | STANDS D.P. | 4430.93 | FT. |
| 2 | SINGLES D.P. | 62.37 | FT. |
| 12 | D.C. 2 7/8" I.D. x 6 3/4" O.D. | 358.88 | FT. |
| 9 | D.C. 2 7/8" I.D. x 6 1/4" O.D. | 262.53 | FT. |
| 1 | STB. BODY O.D. | 8.23 | FT. |
| 1 | STB. BODY O.D. | 8.10 | FT. |
| 1 | RMR. BODY O.D. | 8.20 | FT. |
| 3 | SUBS 2 1/4" x 6 1/4" | 7.58 | FT. |
| | BIT OR C.B. | | FT. |
| 1 | Shock Sub | 9.03 | FT. |
| | KELLY DOWN | 28.77 | FT. |
| | TOTAL | 5188.50 | FT. |
| WT. OF STRING | | 118M | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 24 |
| SIZE | 8 1/2 |
| MFG. | SEC. |
| TYPE | M44J |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 913612 |
| DEPTH OUT | 5180 |
| DEPTH IN | 5167 |
| TOTAL FTG. | 20 |
| TOTAL HR. RUN | 10 1/4 |
| COND. OF BIT | 8-2-1 |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | |
|---|---|---|
| TIME | 1[illegible]00 | 3 00 |
| WEIGHT | 10.7 | 10.6+ |
| VISC.-SEC | 62 | 60 |
| W.L.-C.C. | | |
| FL.TR. CK. | | |
| PH | 9.5 | 9.5 |
| SD. CONT. % | | |
| PRESSURE GRADIENT | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER C. Hopkins

**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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5176 | 5188 | D | | | 50 | 35 | 1300 | 5 1/2 | 67 | | | S |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 5188 | 4 3/4 | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 00 | 5 15 | 5 1/4 | DRLG 8 1/2" HOLE |
| 5 15 | 5 30 | 1/4 | DROP SURVEY |
| 5 30 | 7 30 | 2 | HOIST |
| 7 30 | 7 45 | 1/4 | CHANGE BITS REMOVE SURVEY & V BLIND RAMS |
| 7 45 | 8 00 | 1/4 | RUN IN D.J. & CHANGE 2nd STR. RUBBER |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | | |
|---|---|---|---|
| 48 | STANDS D.P. | 4524.00 | FT. |
| | SINGLES D.P. | | FT. |
| 12 | D.C. 2 7/8 I.D. x 6 3/4 O.D. | 358.88 | FT. |
| 9 | D.C. 2 7/8 I.D. x 6 1/4 O.D. | 262.53 | FT. |
| 1 | STB. BODY O.D. | 8.23 | FT. |
| 1 | STB. BODY O.D. | 8.10 | FT. |
| 1 | RMR. BODY O.D. | 8.20 | FT. |
| 3 | SUBS 2 1/4" x 6 1/4" | 7.58 | FT. |
| | BIT OR C.B. | | FT. |
| 1 | Shocks Sub | 9.05 | FT. |
| | KELLY DOWN | 12.53 | FT. |
| | TOTAL | 5199.00 | FT. |
| WT. OF STRING | | 118M | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 25 |
| SIZE | 8 1/2 |
| MFG. | SEC. |
| TYPE | DMJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 352502 |
| DEPTH OUT | 5199 |
| DEPTH IN | 5188 |
| TOTAL FTG. | 11 |
| TOTAL HR. RUN | 5 1/2 |
| COND. OF BIT | 4 2 1 |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | |
|---|---|---|
| TIME | 11 00 | 2 00 |
| WEIGHT | 10.6 | 10.6 |
| VISC.-SEC | 65 | 63 |
| W.L.-C.C. | | |
| FL.TR. CK. | | |
| PH | 9.5 | 9.5 |
| SD. CONT. % | | |
| PRESSURE GRADIENT | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R.L. Hayes

**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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5188 | 5199 | D | | | 40 | 40 | 1300 | 5 1/2 X 14 | 66 | | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 5199 | 4 1/2° | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8 00 | 8 15 | 1/4 | Rig Service |
| 8 15 | 9 30 | 1 1/4 | Finish in |
| 9 30 | 9 45 | 1/4 | Break Circ + Clean 3 FT of fill. |
| 9 45 | 3 15 | 5 1/2 | DRLG. |
| 3 15 | 4 00 | 3/4 | DRop Survey + HOIST. |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | | |
|---|---|---|---|
| 48 | STANDS D.P. | 4574.00 | FT. |
| | SINGLES D.P. | | FT. |
| 12 | D.C. 2 7/8 I.D. x 6 3/4 O.D. | 358.88 | FT. |
| 9 | D.C. 2 7/8 I.D. x 6 1/4 O.D. | 262.43 | FT. |
| 1 | STB. BODY O.D. | 8.23 | FT. |
| 1 | STB. BODY O.D. | 8.10 | FT. |
| 1 | RMR. BODY O.D. | 8.20 | FT. |
| 3 | SUBS 2 1/4" x 6 1/4" | 7.58 | FT. |
| | BIT OR C.B. | | FT. |
| 1 | SHOCKS SUB | 9.05 | FT. |
| | KELLY DOWN | 12.53 | FT. |
| | TOTAL | 5205.00 | FT. |
| WT. OF STRING | | 118M | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 26 |
| SIZE | 8 1/2 |
| MFG. | Smith |
| TYPE | HJS |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 18 |
| SER. NO. | MN920 |
| DEPTH OUT | |
| DEPTH IN | 5199 |
| TOTAL FTG. | 6 |
| TOTAL HR. RUN | 3 |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | |
|---|---|---|
| TIME | 10 00 | |
| WEIGHT | 10.6+ | |
| VISC.-SEC | 62 | |
| W.L.-C.C. | | |
| FL.TR CK | | |
| PH | 9.5 | |
| SD. CONT. % | | |
| PRESSURE GRADIENT | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5199 | 5205 | D | | | 22 15 22 | 10 | 1300 | 5 1/2 | | 5 1/2 | 65 | S |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4 00 | 4 15 | 1/4 | Rig Serv |
| 4 15 | 5 45 | 1 3/4 | Finish out |
| 5 45 | 6 00 | 1/4 | Change Bit V Blind Rams |
| 6 00 | 6 30 | 1/2 | RUN IN DC'S Change ~~Stripper Rubber~~ |
| 6 30 | 8 30 | 2 | RunIN |
| 8 30 | 9 00 | 1/2 | ~~DRLG 8 1/2" HOLE~~ BREAK CIRC & CLEAN 6 FT fill |
| 9 00 | 12 00 | 3 | DRLG 8 1/2" HOLE |

## DRILLING CREW PAYROLL DATA

DATE MAY 15/73
WELL NAME & NO. UNION AKLAVIK F-38
COMPANY UNION OIL CO. LTD.
TOOL PUSHER E.W. Kaumann RIG NO. 1E

**MORNING TOUR** P.M. A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. HOPKINS | 12 |
| DRKMAN | | H. KLEEN | 12 |
| MTRMAN | | T. LANGLOIS | 12 |
| FIREMAN | | | |
| FLRMAN | | G. ALBERTSON | 12 |
| FLRMAN | | R. HENKO | 12 |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST-TIME ACCIDENT

**DAY TOUR** A.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R.L. Hayes | 12 |
| DRKMAN | | C. Campbell | 12 |
| MTRMAN | | D. McLaughlin | 12 |
| FIREMAN | | | |
| FLRMAN | | S. Schumacher | 12 |
| FLRMAN | | C. Garrecht | 12 |
| FLRMAN | | M. Hazen | 12 |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

**EVENING TOUR** P.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 58 DATE MAY 14/73

OPERATOR: UNION OIL CO. OF CANADA LTD.

LEASE: UNION AKLAVIK F-38

WELL NO. F-38 FIELD OR DIST. AKLAVIK COUNTY N.W.T. STATE CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. RIG NO. 1E

DRILL PIPE STRING NO. 253 SIZE 4 TOOL JOINT O.D. TYPE THD. 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER E W Baumann

PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NOCO | K-380 | 14" |
| 2. | NOCO | K-380 | 14" |
| 3. | | | |

LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9 5/8 | MANN | 42# K-55 | 67 | 2765 | | 2760 | CEMENTED W/ 1500 SKS. OIL WELL CEMENT |

## TIME DISTRIBUTION – HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILL – ACTUAL | 7¾ | 5¼ | 5 |
| REAMING | | | 1/4 |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | 1¾ | 2¼ |
| LUBRICATE RIG | 1/4 | ¼ | 1/4 |
| DEVIATION SURVEY | | ¼ | |
| TEST B.O.P. | | ✓ | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | ½ | |
| RIGGING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

## TIME SUMMARY (OFFICE USE ONLY)

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.

NO. OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

| NO. | DRILLING ASSEMBLY AT END OF TOUR | | |
|---|---|---|---|
| 47 | STANDS D.P. | 4430.93 | FT. |
| 1 | SINGLES D.P. | 31.58 | FT. |
| 12 | D.C. 2 7/8 x 6 3/4 I.D. O.D. | 358.88 | FT. |
| 9 | D.C. 2 7/8 x 6 1/4 I.D. O.D. | 262.43 | FT. |
| 1 | STB. BODY O.D. | 8.23 | FT. |
| 1 | STB. BODY O.D. | 8.10 | FT. |
| 1 | RMR. BODY O.D. | 8.20 | FT. |
| 3 | SUBS 2 3/4 x 6 1/4 O.D. | 7.58 | FT. |
| | BIT OR C.B. | | FT. |
| 1 | SHOCK SUB | 9.08 | FT. |
| | KELLY DOWN | 32.02 | FT. |
| | TOTAL | 5156 | FT. |
| WT. OF STRING | | 118M | LBS. |

| BIT RECORD | | |
|---|---|---|
| BIT NO. | 23 | |
| SIZE | 8½ | |
| MFG. | SEC | |
| TYPE | M44N | |
| NOZZLE NO. | 3 | |
| NOZZLE SIZE | 16 | |
| SER. NO. | 913604 | |
| DEPTH OUT | | |
| DEPTH IN | 5116 | |
| TOTAL FTG. | 40 | |
| TOTAL HR. RUN | 7¾ | |
| COND. OF BIT | DRLG | |
| REAMER NO. | | |
| REAMER TYPE | | |

| MUD RECORD | | | |
|---|---|---|---|
| TIME | 100 | 400 | 6300 |
| WEIGHT | 10.5 | 10.7 | 10.7 |
| VISC.-SEC | 62 | 65 | 107 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Barite | 80 sax | | |
| Bonnex | 2 sax | | |

DRILLER C. Hopkins

| 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'EL-P COMP'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5116 | 5156 | D | | | 45 | 15 | 1300 | 5½ | 66 | 5½ | | S |
| | | | | | 60 | 30 | | | | | | |
| | | | | | 55 | 35 | | | | | | |

| DEVIATION RECORD | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

| TIME LOG FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 1200 | 330 | 3½ | DRLG. 8½" HOLE |
| 330 | 345 | 1/4 | RIG SERV. & V 4" RAMS |
| 345 | 800 | 4¼ | DRLG |

## DAY TOUR

| NO. | DRILLING ASSEMBLY AT END OF TOUR | | |
|---|---|---|---|
| 47 | STANDS D.P. | 4430.93 | FT. |
| 2 | SINGLES D.P. | 62.37 | FT. |
| 12 | D.C. 2 7/8 I.D. 6 3/4 O.D. | 358.88 | FT. |
| 9 | D.C. 2 7/8 I.D. 6 1/4 O.D. | 262.43 | FT. |
| 1 | STB. BODY O.D. | 8.23 | FT. |
| 1 | STB. BODY O.D. | 8.10 | FT. |
| 1 | RMR. BODY O.D. | 8.20 | FT. |
| 3 | SUBS 2 3/4 x 6 1/4 | 7.58 | FT. |
| | BIT OR C.B. | | FT. |
| 1 | Shock Sub | 9.05 | FT. |
| | KELLY DOWN | 11.23 | FT. |
| | TOTAL | 5167.00 | FT. |
| WT. OF STRING | | 118M | LBS. |

| BIT RECORD | | |
|---|---|---|
| BIT NO. | 23 | |
| SIZE | 8½ | |
| MFG. | SEC | |
| TYPE | M44N | |
| NOZZLE NO. | 3 | |
| NOZZLE SIZE | 16 | |
| SER. NO. | 913604 | |
| DEPTH OUT | 5167 | |
| DEPTH IN | 5116 | |
| TOTAL FTG. | 51 | |
| TOTAL HR. RUN | 13 | |
| COND. OF BIT | 831 | |
| REAMER NO. | | |
| REAMER TYPE | | |

| MUD RECORD | | | |
|---|---|---|---|
| TIME | 900 | 1200 | |
| WEIGHT | 10.7 | 10.7 | |
| VISC.-SEC | 62 | 63 | |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | 9.5 | 9.5 | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R L Hayes

| 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'EL-P COMP'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5156 | 5167 | | | | 50 | 40 | 1300 | 5½ | 66 | | | |
| | | | | | | | | X | | | | |
| | | | | | | | | 14 | | | | |

| DEVIATION RECORD | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|---|
| | 5155 | 4¾° | | | | | | | |

| TIME LOG FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 800 | 1200 | 4 | DRLG. |
| 1200 | 1215 | 1/4 | Rig Serv ✓ Bops |
| 1215 | 1230 | 1/4 | Survey |
| 1230 | 100 | 1/2 | Maintenance to electrical Panel. |
| 100 | 215 | 1¼ | DRLG. |
| 215 | 400 | 1¾ | HOIST |

## EVENING TOUR

| NO. | DRILLING ASSEMBLY AT END OF TOUR | | |
|---|---|---|---|
| 47 | STANDS D.P. | 4430.93 | FT. |
| 2 | SINGLES D.P. | 62.37 | FT. |
| 12 | D.C. 2 7/8 x 6 3/4 I.D. O.D. | 358.88 | FT. |
| 9 | D.C. 2 7/8 x 6 1/4 I.D. O.D. | 262.43 | FT. |
| 1 | STB. BODY O.D. | 8.23 | FT. |
| 1 | STB. BODY O.D. | 8.10 | FT. |
| 1 | RMR. BODY O.D. | 8.20 | FT. |
| 3 | SUBS 2 3/4 x 6 1/4 | 7.58 | FT. |
| | BIT OR C.B. | | FT. |
| 1 | Shock Sub | 9.05 | FT. |
| | KELLY DOWN | 9.09 | FT. |
| | TOTAL | 5176.00 | FT. |
| WT. OF STRING | | 118M | LBS. |

| BIT RECORD | | |
|---|---|---|
| BIT NO. | 24 | |
| SIZE | 8½ | |
| MFG. | SEC | |
| TYPE | M44L | |
| NOZZLE NO. | 3 | |
| NOZZLE SIZE | 16 | |
| SER. NO. | 913612 | |
| DEPTH OUT | | |
| DEPTH IN | 5167 | |
| TOTAL FTG. | 9 | |
| TOTAL HR. RUN | 5 | |
| COND. OF BIT | DRLG | |
| REAMER NO. | | |
| REAMER TYPE | | |

| MUD RECORD | | | |
|---|---|---|---|
| TIME | 800 | 1200 | |
| WEIGHT | 10.7 | | |
| VISC.-SEC | 62 | | |
| W.L.-C.C. | | | |
| FLTR. CK | | | |
| PH | 9.5 | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. 2 LINER SIZE | PUMP NO. 2 S.P.M. | METHOD RUN SGL.-S PAR'EL-P COMP'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5167 | 5176 | | | | 50 | 30 | 1200 | 5½ | 66 | | | |
| | | | | | | 35 | | X | | | | |
| | | | | | | | | 14 | | | | |

| DEVIATION RECORD | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

| TIME LOG FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 400 | 415 | 1/4 | FINISH OUT W/ BIT # 23 |
| 415 | 430 | 1/4 | Change Bits ✓ Blind Rams |
| 430 | 445 | 1/4 | Rig Serv |
| 445 | 630 | 1¾ | RUN IN + Change Bottom stb Rubber |
| 630 | 700 | 1/2 | Break Circ + Clean S.F. |
| 700 | 1200 | 5 | Drlg 8½" Hole |

## DRILLING CREW PAYROLL DATA

DATE MAY 14/73

WELL NAME & NO. UNION AKLAVIK F-38

COMPANY UNION OIL CO LTD

TOOL PUSHER E W Baumann RIG NO. 1E

MORNING TOUR P.M. A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. HOPKINS | 12 |
| DRKMAN | | H KLEIN | 12 |
| MTRMAN | | J LONGLOIS | 12 |
| FIREMAN | | | |
| FLRMAN | | A ALBERTSON | 12 |
| FLRMAN | | R HENKO | 12 |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST-TIME ACCIDENT

DAY TOUR A.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R L Hayes | 12 |
| DRKMAN | | C. Campbell | 12 |
| MTRMAN | | D McLaughlin | 12 |
| FIREMAN | | | |
| FLRMAN | | S Schumacher | 12 |
| FLRMAN | | G Garrecht | 12 |
| FLRMAN | | M Hazen | 12 |

NO. OF DAYS SINCE LAST LOST-TIME ACCIDENT

EVENING TOUR P.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST-TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 57 DATE MAY 13/73

OPERATOR: UNION OIL CO. OF CANADA
LEASE: UNION AKLAVIK F-38
WELL NO. F-38 FIELD OR DIST. AKLAVIK COUNTY N.W.T. STATE CANADA
CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. RIG NO. 1E
DRILL PIPE STRING NO. 2 SIZE 5" TOOL JOINT O.D. 6 1/4" TYPE THD. 3 1/2 IF
SIGNATURE OF OPERATOR'S REPRESENTATIVE
SIGNATURE OF CONTRACTOR'S TOOL PUSHER E W Hausmann

PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NSCO | K-380 | 14" |
| 2. | NSCO | K-380 | 14" |
| 3. | | | |

LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9 5/8 | MANN | 43# K-55 | 67 | 2765 | | 2760 | CEMENTED W/1500 SAXS. DILWELL CEMENT |

## TIME DISTRIBUTION–HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | - | - | - |
| DRILLING ACTUAL | 3 1/4 | 7 1/2 | 2 1/4 |
| REAMING | 1/2 | | 1/4 |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | 3 3/4 | | 5 |
| LUBRICATE RIG | | 1/4 | 1/4 |
| DEVIATION SURVEY | 1/4 | 1/4 | 1/4 |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | 1/4 |
| REPAIR RIG | | | |
| RIG SERVICE | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

## TIME SUMMARY (OFFICE USE ONLY)

DAY WORK
HRS. W/DP
HRS. WO/DP
HRS. STANDBY
TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.
NO. OF LINES SIZE
FEET SLIPPED
FEET CUT OFF
PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.

## MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 46 | STANDS D.P. | 4336.69 FT. |
| 2 | SINGLES D.P. | 62.86 FT. |
| 12 | D.C. 2 7/8 I.D. 6 3/4 O.D. | 358.88 FT. |
| 9 | D.C. 2 7/8 I.D. 6 1/4 O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.20 FT. |
| 3 | SUBS 6 3/4 & 6 1/4 | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | SHOCK SUB | 9.05 FT. |
| | KELLY DOWN | 23.98 FT. |
| | TOTAL | 5086.00 FT. |
| WT. OF STRING | 118 M | LBS. |

BIT RECORD

| BIT NO. | 21 | 22 |
|---|---|---|
| SIZE | 8 1/2 | 8 1/2 |
| MFG. | H.W. | SEC. |
| TYPE | X07 | DMJ |
| NOZZLE NO. | 3 | 3 |
| NOZZLE SIZE | 16 | 16 |
| SER. NO. | 63941 | 352462 |
| DEPTH OUT | 5081 | |
| DEPTH IN | 5067 | 5081 |
| TOTAL FTG. | 14 | 5 |
| TOTAL HR. RUN | 6 1/2 | 1 1/2 |
| COND. OF BIT | 5-1-1 | DRLG |
| REAMER NO. | | |
| REAMER TYPE | | |

MUD RECORD

| | | |
|---|---|---|
| TIME | 1.00 | 7.00 |
| WEIGHT | 10.5+ | 10.5+ |
| VISC.-SEC | 67 | 72 |
| W.L.-C.C. | | |
| FLTR. CK. | | |
| PH | 9.5 | 9.5 |
| SD. CONT. % | | |
| PRESSURE GRADIENT | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| BAROID 410 | 5 SAXS. | | |
| BENEX | 1 SAX. | | |

DRILLER C. Hopkins

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'EL–P CON'D–C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5078 | 5086 | D | | | 45 | 38 | 1300 | 5 1/2 | | 5 1/2 | 67 | S |
| | | | | | 40 | 20 | | X | | X | | |
| | | | | | 45 | 40 | | 14 | | 14 | | |

DEVIATION RECORD: DEPTH 5081 DEV. 4 1/4° DIRECTION

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12.00 | 2.00 | 2 | DRLG. 8 1/2' HOLE |
| 2.00 | 2.15 | 1/4 | DROP SURVEY & RIG SERVICE |
| 2.15 | 4.00 | 1 3/4 | HOIST W/BIT #1 |
| 4.00 | 4.15 | 1/4 | RECOVER SURVEY, CHANGE BITS & J BLIND RAMS |
| 4.15 | 5.00 | 3/4 | RUN IN D.C.'S & CHANGE STB RUBBERS - 1ST & 2ND |
| 5.00 | 6.00 | 1 | RUN IN D.P. |
| 6.00 | 6.30 | 1/2 | BREAK CIRC. & CLEAN FROM 5071 - 5081 |
| 6.30 | 8.00 | 1 1/2 | DRLG. |

## DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 47 | STANDS D.P. | 4430.93 FT. |
| | SINGLES D.P. | FT. |
| 12 | D.C. 2 7/8 I.D. 6 3/4 O.D. | 358.88 FT. |
| 9 | D.C. 2 7/8 I.D. 6 1/4 O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.20 FT. |
| 3 | SUBS 6 3/4 & 6 1/4 | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | SHOCK SUB | 9.05 FT. |
| | KELLY DOWN | 16.60 FT. |
| | TOTAL | 5110.00 FT. |
| WT. OF STRING | 118 M | LBS. |

BIT RECORD

| BIT NO. | 22 | |
|---|---|---|
| SIZE | 8 1/2 | |
| MFG. | SEC | |
| TYPE | DMJ | |
| NOZZLE NO. | 3 | |
| NOZZLE SIZE | 16 | |
| SER. NO. | 352462 | |
| DEPTH OUT | | |
| DEPTH IN | 5081 | |
| TOTAL FTG. | 29 | |
| TOTAL HR. RUN | 9 | |
| COND. OF BIT | DRLG | |
| REAMER NO. | | |
| REAMER TYPE | | |

MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 9.00 | 12.00 | 2.00 |
| WEIGHT | 10.6 | 10.6 | 10.6 |
| VISC.-SEC | 65 | 62 | 58 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R L Hayes

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'EL–P CON'D–C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5086 | 5110 | D | | | 45 | 40 | 1300 | 5 1/2 | 5 | 5 1/2 | 63 | |
| | | | | | | | | X | | X | | |
| | | | | | | | | 14 | | 14 | | |

DEVIATION RECORD: DEPTH 5095 DEV. 4 1/4° DIRECTION

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8.00 | 1.00 | 5 | DRLG |
| 1.00 | 1.15 | 1/4 | Rig Serv & Bops |
| 1.15 | 1.30 | 1/4 | Survey |
| 1.30 | 4.00 | 2 1/2 | DRLG. |

## EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 47 | STANDS D.P. | 4430.93 FT. |
| | SINGLES D.P. | FT. |
| 12 | D.C. 2 7/8 I.D. 6 3/4 O.D. | 358.88 FT. |
| 9 | D.C. 2 7/8 I.D. 6 1/4 O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.20 FT. |
| 3 | SUBS 6 3/4 & 6 1/4 | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | SHOCK SUB | 9.05 FT. |
| | KELLY DOWN | 22.60 FT. |
| | TOTAL | 5110.00 FT. |
| WT. OF STRING | 118 M | LBS. |

BIT RECORD

| BIT NO. | 22 | 23 |
|---|---|---|
| SIZE | 8 1/2 | 8 1/2 |
| MFG. | SEC | SEC |
| TYPE | DMJ | MUWD |
| NOZZLE NO. | 3 | 3 |
| NOZZLE SIZE | 16 | 12 |
| SER. NO. | 352462 | 913604 |
| DEPTH OUT | 5116 | |
| DEPTH IN | 5081 | 5116 |
| TOTAL FTG. | 35 | |
| TOTAL HR. RUN | 11 1/4 | |
| COND. OF BIT | 4-2-1 | |
| REAMER NO. | | |
| REAMER TYPE | | |

MUD RECORD

| | |
|---|---|
| TIME | 5.00 |
| WEIGHT | 10.6 |
| VISC.-SEC | 70 |
| W.L.-C.C. | |
| FLTR. CK | |
| PH | |
| SD. CONT. % | |
| PRESSURE GRADIENT | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Gel | 10 SKS | | |
| RENEX | 9 SKS | | |

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. 2 LINER SIZE | PUMP NO. 2 S.P.M. | METHOD RUN SGL.–S PAR'EL–P COM'D–C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5110 | 5116 | D | | | 45 | 40 | 1300 | 5 1/2 | | 5 1/2 | | |
| | | | | | | | | X | | X | | |
| | | | | | | | | 14 | | 14 | | |

DEVIATION RECORD: DEPTH 5116 DEV. 4° DIRECTION

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4.00 | 6.15 | 2 1/4 | DRLG |
| 6.15 | 6.30 | 1/4 | Rig Serv & Survey |
| 6.30 | 9.15 | 2 3/4 | HOIST |
| 9.15 | 9.30 | 1/4 | CHANGE BITS, RECOVER SURVEY & J BLIND RAMS |
| 9.30 | 10.30 | 1 | RUN IN D.C.'S |
| 10.30 | 10.45 | 1/4 | SLIP 33' DRLG. LINE |
| 10.45 | 11.45 | 1 | RUN IN D.P. |
| 11.45 | 12.00 | 1/4 | BREAK CIRC. & CLEAN 6' FILL |

## DRILLING CREW PAYROLL DATA

DATE MAY 13, 1973
WELL NAME & NO. UNION AKLAVIK F-38
COMPANY UNION OIL CO. LTD.
TOOL PUSHER E W Hausmann RIG NO.

MORNING TOUR P.M. A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. HOPKINS | 12 |
| DRKMAN | | H. KLEIN | 12 |
| MTRMAN | | T. LANGLOIS | 12 |
| FIREMAN | | | |
| FLRMAN | | G. ROBERTSON | 12 |
| FLRMAN | | B. HEWKO | 12 |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

DAY TOUR A.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R L Hayes | 12 |
| DRKMAN | | C. Campbell | 12 |
| MTRMAN | | D. McLaughlin | 12 |
| FIREMAN | | | |
| FLRMAN | | S. Schumacher | 12 |
| FLRMAN | | G. Garrecht | 12 |
| FLRMAN | | M. HOLDEN | 12 |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

EVENING TOUR P.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 56 DATE MAY 12/73

OPERATOR: UNION OIL CO. OF CANADA
LEASE: UNION AKLAVIK F-38
WELL NO.: F-38
FIELD OR DIST.: AKLAVIK
COUNTY: N.W.T.
STATE: CANADA
CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD.
RIG NO.: 1E
DRILL PIPE STRING: NO. 3 SIZE 3½ 4
TOOL JOINT: 5" O.D. TYPE THD. 3½ IF
SIGNATURE OF OPERATOR'S REPRESENTATIVE:
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: E.W. Braumann

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NSCO | K-380 | 14" |
| 2. | NSCO | K-380 | 14" |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9 5/8 | MANN | 42# K55 | 67 | 9765 | | 2760 | CEMENTED W/ 1500 SAKS. OILWELL CEMENT |

**TIME DISTRIBUTION—HOURS**

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 8 | 8½ | 4½ |
| REAMING | | 2½ | 3½ |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | 3¾ | |
| LUBRICATE RIG | | ¼ | ¼ |
| DEVIATION SURVEY | | ¼ | |
| TEST B.O.P. | | ¼ | |
| CUT OFF DRILLING LINE | | ½ | |
| REPAIR RIG | | | |
| REAMING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

**TIME SUMMARY (OFFICE USE ONLY)**

| | |
|---|---|
| DAY WORK | |
| HRS. W/DP | |
| HRS. WO/DP | |
| HRS. STANDBY | |
| TOTAL DAY WORK | |

**WIRE LINE RECORD**

| | |
|---|---|
| REEL NO. | |
| NO. OF LINES | SIZE |
| FEET SLIPPED | |
| FEET CUT OFF | |
| PRESENT LENGTH | |
| TON MI. OR TRIPS SINCE LAST CUT | |
| CUMULATIVE TON MI. OR TRIPS | |
| NO. OF DAYS FROM SPUD | |
| CUMULATIVE ROTATING HRS. | |

## MORNING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 46 | STANDS D.P. | 4336.69 FT. |
| 31 | SINGLES D.P. | .24 FT. |
| 9 | D.C. 7⅞ I.D. x 6¼ O.D. | 262.43 FT. |
| 2 | D.C. 7⅞ I.D. x 6 3/4 O.D. | 358.88 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.20 FT. |
| 3 | SUBS, 6⅝ REG. | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | STOCK SUB | 9.05 FT. |
| | KELLY DOWN | 36.60 FT. |
| | TOTAL | 5066.00 FT. |
| WT. OF STRING | 112 M | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 20 |
| SIZE | 8½ |
| MFG. | HW |
| TYPE | XDR |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | EL975 |
| DEPTH OUT | |
| DEPTH IN | 5015 |
| TOTAL FTG. | 41 |
| TOTAL HR. RUN | 12½ |
| COND. OF BIT | DRG |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| TIME | 12:00 | 4:00 | 6:30 |
|---|---|---|---|
| WEIGHT | 10.5# | 10.5# | 10.5 |
| VISC.-SEC | 73 | 78 | 76 |
| W.L.-C.C. | — | | |
| FLTR. CK. | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

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

DRILLER: C. Hopkins

**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 SOL—S PAR'EL—P COM'D—C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5045 | 5066 | D | | | 50 | 30 | 1300 | 5½ | | 5½ | 68 | S |
| | | | | HELD SAFETY MEETING | | 35 | | | | | | |
| | | | | | | 40 | | | | | | |

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

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12:00 | 8:00 | 8 | DRLG. 8½" HOLE |

**DRILLING CREW PAYROLL DATA**

DATE MAY 12, 1973
WELL NAME & NO. UNION AKLAVIK E-38
COMPANY UNION OIL CO. LTD.
TOOL PUSHER E.W. Braumann RIG NO. 1E

MORNING TOUR ____ P.M. ____ A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. HOPKINS | 12 |
| DRKMAN | | H. KLEIN | 12 |
| MTRMAN | | J. LAPOINTE | 12 |
| FIREMAN | | | |
| FLRMAN | | G. ALBERTSON | 12 |
| FLRMAN | | R. HOWARD | 12 |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST-TIME ACCIDENT

## DAY TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 46 | STANDS D.P. | 4336.69 FT. |
| 1 | SINGLES D.P. | 31.24 FT. |
| 12 | D.C. 2⅞ I.D. 6¾ O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 FT. |
| 1 | STB. BOL. O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.20 FT. |
| 3 | SUBS, 6⅝ REG. | 7.58 FT. |
| | BIT OR C.B. | FT. |
| | Stock Sub | 9.05 FT. |
| | KELLY DOWN | 50[illegible]60 FT. |
| | TOTAL | 5067.00 FT. |
| WT. OF STRING | 112M | LBS. |

**BIT RECORD**

| | | |
|---|---|---|
| BIT NO. | 20 | 21 |
| SIZE | 8½ | 8½ |
| MFG. | HW | HW |
| TYPE | XDR | XD7 |
| NOZZLE NO. | 3 | 3 |
| NOZZLE SIZE | 16 | 16 |
| SER. NO. | EL975 | 53941 |
| DEPTH OUT | 5067 | |
| DEPTH IN | 5015 | 5067 |
| TOTAL FTG. | 52 | |
| TOTAL HR. RUN | 17 | |
| COND. OF BIT | 6 3 0 | |
| REAMER NO. | | |
| REAMER TYPE | | |

**MUD RECORD**

| TIME | | | |
|---|---|---|---|
| WEIGHT | | | |
| VISC.-SEC | | | |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

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

DRILLER: R L Hayes

**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 SOL—S PAR'EL—P COM'D—C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5066 | 5067 | D | | | 50 | 40 | 1300 | 5½ | | 5½ | 67 | |
| | | | | | | | | X | | X | | |
| | | | | | | | | 14 | | 14 | | |

DEVIATION RECORD: DEPTH 5065 / DEV. 4° / DIRECTION / DEPTH / DEV. / DIRECTION / DEPTH / DEV. / DIRECTION

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8:00 | 8:30 | ½ | DRLG. 1:30 / 4:00 / 2½ Break Circ & Clean Bridges From 5040 to 5065 |
| 8:30 | 8:45 | ¼ | Rig Serv |
| 8:45 | 9:00 | ¼ | Survey |
| 9:00 | 10:00 | 2¾ | Hoist |
| 10:00 | 11:15 | 1¼ | Change Bits ✓ Blind Rams |
| 11:15 | 11:45 | ½ | RUN IN DCS + Change Bottom Stb Rubber |
| 11:45 | 12:15 | ½ | Slip 23FT DRLG Line + Cut |
| 12:15 | 1:30 | 1¼ | RUN in hole |

**DRILLING CREW PAYROLL DATA**

DAY TOUR ____ A.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R. L. Hayes | 12 |
| DRKMAN | | C. Campbell | 12 |
| MTRMAN | | D. McLaughlin | 12 |
| FIREMAN | | | |
| FLRMAN | | S. Schumacher | 12 |
| FLRMAN | | G. Correcht | 12 |
| FLRMAN | | M. Hazen | 12 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 46 | STANDS D.P. | 4336.69 FT. |
| 2 | SINGLES D.P. | 62.86 FT. |
| 12 | D.C. 2⅞ I.D. 6¾ O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.20 FT. |
| 3 | SUBS, 6⅝ REG. | 7.58 FT. |
| | BIT OR C.B. | FT. |
| | Stock Sub | 9.05 FT. |
| | KELLY DOWN | 1598 FT. |
| | TOTAL | 5078.00 FT. |
| WT. OF STRING | 118M | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 21 |
| SIZE | 8½ |
| MFG. | HW |
| TYPE | XD7 |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 53941 |
| DEPTH OUT | |
| DEPTH IN | 5067 |
| TOTAL FTG. | 11 |
| TOTAL HR. RUN | 4½ |
| COND. OF BIT | DRG |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| TIME | 4:00 | 7:00 | 10:00 |
|---|---|---|---|
| WEIGHT | 10.5 | 10.5 | 10.5 |
| VISC.-SEC | 72 | 70 | 69 |
| W.L.-C.C. | | | |
| FLTR. CK | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

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

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. 2 LINER SIZE | PUMP NO. 2 S.P.M. | METHOD RUN SOL—S PAR'EL—P COM'D—C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5067 | 5078 | D | | NEW Rod & Packing #2 | 45 | 38 | 1300 | 5½ | 67 | 5½ | 68 | S |
| | | | | Pump FLYWHEEL SIDE | | | | | | | | |

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

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4:00 | 7:15 | 3¼ | Reaming Bridges From 5056' to 5060' + Ream From 5060'-67' |
| 7:15 | 9:45 | 2½ | DRLG 8½" HOLE |
| 9:45 | 10:00 | ¼ | Rig Serv. + U 4" Rams |
| 10:00 | 12:00 | 2 | DRLG |

**DRILLING CREW PAYROLL DATA**

EVENING TOUR ____ P.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

DAILY DRILLING REPORT — REPORT NO. 55 — DATE MAY 11/73

OPERATOR: UNION OIL CO. OF CANADA LTD
LEASE: UNION AKLAVIK F-38
WELL NO. F-38 — FIELD OR DIST. AKLAVIK — COUNTY N.W.T. — STATE CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. — RIG NO. 1E
DRILL PIPE STRING NO. 2 SIZE 5 — TOOL JOINT SIZE 4 O.D. — TYPE THD. 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE
SIGNATURE OF CONTRACTOR'S TOOL PUSHER

PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | WSCO | K-380 | 14" |
| 2. | " | " | " |
| 3. | | | |

LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝B | MANN | 42*K55 | 67 | 2765 | | 2760 | CEMTED W/1500 SKS DIWELL CEMENT. |

TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | ½ | | |
| DRILLING ACTUAL | 7½ | 2 | 7½ |
| REAMING | | 1 | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | 4 | |
| LUBRICATE RIG | 1/4 | 1/4 | 1/4 |
| DEVIATION SURVEY | 1/4 | | 1/4 |
| TEST B.O.P. | ✓ | 1/4 | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| RING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER WOO | | 1/2 | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

TIME SUMMARY (OFFICE USE ONLY)

| | |
|---|---|
| DAY WORK | |
| HRS. W/DP | |
| HRS. WO/DP | |
| HRS. STANDBY | |
| TOTAL DAY WORK | |

WIRE LINE RECORD

| | |
|---|---|
| REEL NO. | |
| NO. OF LINES / SIZE | |
| FEET SLIPPED | |
| FEET CUT OFF | |
| PRESENT LENGTH | |
| TON MI. OR TRIPS SINCE LAST CUT | |
| CUMULATIVE TON MI. OR TRIPS | |
| NO. OF DAYS FROM SPUD | |
| CUMULATIVE ROTATING HRS. | |

## MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 46 | STANDS D.P. | 4336.69 FT. |
| | SINGLES D.P. | FT. |
| 12 | D.C. 9⅞ x 6¾ I.D. O.D. | 358.88 FT. |
| 9 | D.C. 9⅞ x 6½ I.D. O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.20 FT. |
| 3 | SUBS 6¼ 6½ | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock Sub | 9.05 FT. |
| | KELLY DOWN | 12.84 FT. |
| | TOTAL | 5017.00 FT. |
| WT. OF STRING | 111M | LBS. |

BIT RECORD

| | |
|---|---|
| BIT NO. | 19 |
| SIZE | 8½ |
| MFG. | SEC. |
| TYPE | DMT |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 351865 |
| DEPTH OUT | |
| DEPTH IN | 4975 |
| TOTAL FTG. | 37 |
| TOTAL HR. RUN | 11¾ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 1200 | 300 | 630 |
| WEIGHT | 10.7 | 10.5+ | 10.5+ |
| VISC.-SEC | 65 | 55 | 54 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | 9.5+ | 9.5+ | 9.5+ |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | 10 SAX. | | |
| BENEX | 2 SAX. | | |

DRILLER O. Hopkins

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 SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4984 | 5012 | D | | | 45 | 30 | 1300 | 5½ | 63 | 5½ | | S |
| | | | | | 60 | 40 | | | | | | |
| | | | | | 45 | 30 | 1750 @ | 73 | | | | |

DEVIATION RECORD: DEPTH 4998 — DEV. 0

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 1200 | 530 | 5½ | DRLG. 8½" HOLE |
| 530 | 545 | ¼ | RIG SERV. & ✓ 4" RAMS |
| 545 | 600 | ¼ | SURVEY |
| 600 | 800 | 2 | DRLG |

## EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 46 | STANDS D.P. | 4336.69 FT. |
| | SINGLES D.P. | FT. |
| 12 | D.C. 9⅞ x 6¾ I.D. O.D. | 358.88 FT. |
| 9 | D.C. 9⅞ I.D. 6½ O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.20 FT. |
| 3 | SUBS 6¼ 6½ | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock sub | 9.05 FT. |
| | KELLY DOWN | 14.84 FT. |
| | TOTAL | 5019.00 FT. |
| WT. OF STRING | 112M | LBS. |

BIT RECORD

| | | |
|---|---|---|
| BIT NO. | 19 | 20 |
| SIZE | 8½ | 8½ |
| MFG. | Sec | HW |
| TYPE | DMT | XDR |
| NOZZLE NO. | 3 | 3 |
| NOZZLE SIZE | 16 | 16 |
| SER. NO. | 351865 | LE975 |
| DEPTH OUT | 5015 | |
| DEPTH IN | 4975 | 5015 |
| TOTAL FTG. | 40 | 4 |
| TOTAL HR. RUN | 12¾ | 1 |
| COND. OF BIT | 530 | DRLG |
| REAMER NO. | | |
| REAMER TYPE | | |

MUD RECORD

| | | | |
|---|---|---|---|
| TIME | | | |
| WEIGHT | | | |
| VISC.-SEC | | | |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R L Hayes

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 SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5012 | 5019 | D | | | 45 | 35 | 1300 | 5½ | 66 | 5½ | | S |
| | | | | | 30 | 25 | 1325 | X | 66 | X | | |
| | | | | | 40 | 25 | | 14 | | 14 | | |

DEVIATION RECORD: DEPTH 5014

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 800 | 900 | 1 | DRLG. |
| 900 | 915 | ¼ | Rig Serv + Survey MISS RUN |
| 915 | 1015 | 2 | Hoist |
| 1115 | 1200 | ¾ | Change Bits + W.O.O. ✓ Blind Rams |
| 1200 | 1245 | ¾ | Run in DCS + Change Stb. |
| 1245 | 200 | 1¼ | Run in Hole |
| 200 | 300 | 1 | Reaming 10 FT under guage hole |
| 300 | 400 | 1 | DRLG. |

## EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 46 | STANDS D.P. | 4336.69 FT. |
| 1 | SINGLES D.P. | 31.24 FT. |
| 12 | D.C. 9⅞ x 6¾ I.D. O.D. | 358.88 FT. |
| 9 | D.C. 9⅞ I.D. 6½ O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.20 FT. |
| 3 | SUBS 6¼ 6½ | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock sub | 9.05 FT. |
| | KELLY DOWN | 14.60 FT. |
| | TOTAL | 5045.00 FT. |
| WT. OF STRING | 112M | LBS. |

BIT RECORD

| | |
|---|---|
| BIT NO. | 20 |
| SIZE | 8½ |
| MFG. | HW |
| TYPE | XDR |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | FL975 |
| DEPTH OUT | |
| DEPTH IN | 5015 |
| TOTAL FTG. | 30 |
| TOTAL HR. RUN | 8½ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 400 | 700 | 900 |
| WEIGHT | 10.5+ | 10.5+ | 10.5+ |
| VISC.-SEC | 62 | 58 | 52 |
| W.L.-C.C. | | | |
| FLTR. CK | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | 10 SAX | | |
| BENEX | 2 SAX. | | |

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. 2 LINER SIZE | PUMP NO. 2 S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5019 | 5045 | D | | | 50 | 25 | 1900 | 5½ | 68 | 5½ | | S |
| | | | | | 50 | 30 | 1300 | X | | X | 67 | |
| | | | | | | | | 14 | | 14 | | |

DEVIATION RECORD: DEPTH 5031 — DEV. 3/8

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 400 | 1030 | 6½ | DRLG. |
| 1030 | 1045 | ¼ | RIG SERV & ✓ 4" RAMS |
| 1045 | 1100 | ¼ | SURVEY |
| 1100 | 1200 | 1 | DRLG. |
| | | 8 | |

DRILLING CREW PAYROLL DATA

DATE MAY 11, 1973
WELL NAME & NO. UNION AKLAVIK F-38
COMPANY UNION OIL CO LTD.
TOOL PUSHER _____ RIG NO. 1E

MORNING TOUR ☀ P.M. _____ A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C HOPKINS | 12 |
| DRKMAN | | H. KLEEN | 12 |
| MTRMAN | | ✓ LAWLOIS | 12 |
| FIREMAN | | | |
| FLRMAN | | G ALBERTSON | 12 |
| FLRMAN | | B HENKO | 12 |
| FLRMAN | | ✓ GREENLAND | 8 |

NO. OF DAYS _____ SINCE LAST LOST-TIME ACCIDENT

DAY TOUR _____ A.M. _____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R L Hayes | 12 |
| DRKMAN | | C. Campbell | 12 |
| MTRMAN | | D McLaughlin | 12 |
| FIREMAN | | | |
| FLRMAN | | STAN Schumacher | 12 |
| FLRMAN | | G Garrecht | 12 |
| FLRMAN | | M. Hazen | 12 |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR _____ P.M. _____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 54 DATE May 10/79

OPERATOR: UNION Oil Co of Canada LTD.
LEASE: UNION Aklavik F-38
WELL NO. F-38 FIELD OR DIST. Aklavik
COUNTY NWT STATE Canada
CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. RIG NO. 1E
DRILL PIPE STRING NO. 2 SIZE 4 TOOL JOINT 5 O.D. TYPE THD. 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: John Watts
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: E W Assumann

PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NSCO | K 380 | 14 |
| 2. | NSCO | K 380 | 14 |
| 3. | | | |

LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9 5/8 | MANN | 40# K55 | 67 | 2765 | | 2760 | Cem w/1500 sks |
| | | | | | | | Oil well Cement |

## TIME DISTRIBUTION - HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | ½ |
| DRILLING ACTUAL | | | 3¾ |
| REAMING | | | ½ |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | 2¾ | 3¼ | 2¾ |
| LUBRICATE RIG | ¼ | | ¼ |
| DEVIATION SURVEY | ¾ | | |
| TEST B.O.P. | ¼ | | |
| CUT OFF DRILLING LINE | | | ¼ |
| REPAIR RIG | | | |
| RING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | 4¾ | 4¾ | |
| OTHER | ¼ | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

TIME SUMMARY (OFFICE USE ONLY)

| | | | |
|---|---|---|---|
| DAY WORK | | | |
| HRS. W/DP | | | |
| HRS. WO/DP | | | |
| HRS. STANDBY | | | |
| TOTAL DAY WORK | | | |

## WIRE LINE RECORD

| | |
|---|---|
| REEL NO. | |
| NO. OF LINES | SIZE |
| FEET SLIPPED | |
| FEET CUT OFF | |
| PRESENT LENGTH | |
| TON MI. OR TRIPS SINCE LAST CUT | |
| CUMULATIVE TON MI. OR TRIPS | |
| NO. OF DAYS FROM SPUD | |
| CUMULATIVE ROTATING HRS. | |

## MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| | STANDS D.P. | | FT. |
| | SINGLES D.P. | | FT. |
| | D.C. I.D. | O.D. | FT. |
| | D.C. I.D. | O.D. | FT. |
| | STB. BODY | O.D. | FT. |
| | STB. BODY | O.D. | FT. |
| | RMR. BODY | O.D. | FT. |
| | SUBS | O.D. | FT. |
| | BIT OR C.B. | | FT. |
| | | | FT. |
| | KELLY DOWN | | FT. |
| | TOTAL | | FT. |
| | WT. OF STRING | | LBS. |

BIT RECORD

| | |
|---|---|
| BIT NO. | |
| SIZE | |
| MFG. | |
| TYPE | |
| NOZZLE NO. | |
| NOZZLE SIZE | |
| SER. NO. | |
| DEPTH OUT | |
| DEPTH IN | |
| TOTAL FTG. | |
| TOTAL HR. RUN | |
| COND. OF BIT | |
| REAMER NO. | |
| REAMER TYPE | |

MUD RECORD

| | |
|---|---|
| TIME | |
| WEIGHT | |
| VISC.-SEC | |
| W.L.-C.C. | |
| FL.TR. CK. | |
| PH | |
| SD. CONT. % | |
| PRESSURE GRADIENT | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R L Hayes

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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4975 | | | | | | | | | | | | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 00 | 12 30 | ½ | HOIST |
| 12 30 | 12 45 | ¼ | Recover Survey BBL. |
| 12 45 | 1 00 | ¼ | Rig Serv Close Blind Rams |
| 1 00 | 3 00 | 2 | Pickup + Make up Test Tools |
| 3 00 | 5 15 | 2¼ | RUN IN DST #1 + Pickup 4 Singles |
| 5 15 | 5 30 | ¼ | Head up Test |
| 5 30 | 8 00 | 2½ | Testing - 4950 - 4975 |

## EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 45 | STANDS D.P. | 4241.63 | FT. |
| 2 | SINGLES D.P. | 63.52 | FT. |
| 12 | D.C. 2¾ I.D. | 6¾ O.D. 358.88 | FT. |
| 9 | D.C. 2¾ I.D. | 6¼ O.D. 262.43 | FT. |
| 1 | STB. BODY | O.D. 8.23 | FT. |
| 1 | STB. BODY | O.D. 8.10 | FT. |
| 1 | RMR. BODY | O.D. 8.30 | FT. |
| 3 | SUBS | 11 O.D. 7.58 | FT. |
| | BIT OR C.B. | | FT. |
| 1 | Stockrub | 9.05 | FT. |
| | KELLY DOWN | 16.38 | FT. |
| | TOTAL | 4984.00 | FT. |
| | WT. OF STRING | 112M | LBS. |

BIT RECORD

| | |
|---|---|
| BIT NO. | 19 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | DMJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 351865 |
| DEPTH OUT | |
| DEPTH IN | 4975 |
| TOTAL FTG. | 9 |
| TOTAL HR. RUN | 3¾ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

MUD RECORD

| | |
|---|---|
| TIME | 11 00 |
| WEIGHT | 10.5 |
| VISC.-SEC | 63 |
| W.L.-C.C. | |
| FL.TR. CK | |
| PH | 9.5 |
| SD. CONT. % | |
| PRESSURE GRADIENT | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R L Hayes

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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4975 | 4984 | D | | | 40 | 30 | 1300 | 5½ X | 63 | 5½ | | |
| | | | | | | | | 1425 | 14 | 73½ | | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4 00 | 4 15 | ¼ | Rig Serv |
| 4 15 | 4 45 | ½ | Break DOWN TEST Tools + laydown 4 BLIND Rams |
| 4 45 | 5 00 | ¼ | SLIP LINE |
| 5 00 | 6 00 | 1 | Pick up Stockrub + Stab + Change Rubbers. |
| 6 00 | 7 15 | 1¼ | RUN IN |
| 7 45 | 8 15 | ½ | Break Circ + Clean 35 PT |
| 8 15 | 12 00 | 3¾ | DRLG |

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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4975 | | | | FREEFLOW - 10 MIN | | | | | | | | |
| | | | | I.S.I. - 60 MIN | | | | | | | | |
| | | | | F.F. - 120 MIN. | | | | | | | | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8 00 | 11 00 | 3 | TESTING W/BT |
| 11 00 | 11 15 | ¼ | Pull Loose + Break Down Hard |
| 11 15 | 2 30 | 3¼ | Hoist W/DST #1 |
| 2 30 | 3 30 | 1 | Recover Recorders + WOD. |
| 3 30 | 4 00 | ½ | Break Test Tool |

## DRILLING CREW PAYROLL DATA

DATE May 10 1979
WELL NAME & NO. UNION Aklavik F-38
COMPANY UNION Oil Co. LTD
TOOL PUSHER _____ RIG NO. 1E

MORNING TOUR _____ P.M. _____ A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. | |
|---|---|---|---|---|
| DRILLER | | R L Hayes | 16 | |
| DRKMAN | | E Sywenky | 8 | T |
| MTRMAN | | B. Larsen | 8 | T |
| FIREMAN | | | | |
| FLRMAN | | E Edglund | 8 | T |
| FLRMAN | | B. Taylor | 8 | T |
| FLRMAN | | M. Hazen | 16 | |

NO. OF DAYS _____ SINCE LAST LOST-TIME ACCIDENT

DAY TOUR _____ A.M. _____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. | |
|---|---|---|---|---|
| DRILLER | | C. HOPKINS | 8 | |
| DRKMAN | | R. KLEEN | 8 | |
| MTRMAN | | T. LANGLOIS | 8 | |
| FIREMAN | | | | |
| FLRMAN | | G. ALBERTSON | 8 | |
| FLRMAN | | D. HENKO | 8 | |
| FLRMAN | | T. GREENLAND | 8 | |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR _____ P.M. _____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. | |
|---|---|---|---|---|
| DRILLER | | | | |
| DRKMAN | | C Campbell | 8 | T |
| MTRMAN | | D McLaughlin | 8 | T |
| FIREMAN | | | | |
| FLRMAN | | STAN. Schumacher | 8 | T |
| FLRMAN | 621 381 177 | Gerald GARRECHT | 8 | T |
| FLRMAN | | | | |

Alberta Health Care # 3978637945
Gerald Garrecht

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 33 DATE May 9/73

OPERATOR: UNION Oil Co LTD.

LEASE: UNION AKlavik F-38

WELL NO. F-38 FIELD OR DIST. AKlavik COUNTY NWT STATE Canada

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. RIG NO. 1E

DRILL PIPE STRING NO. 2 SIZE 4 TOOL JOINT 5 O.D. TYPE THD. 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: W R McGrath

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: E C Baumann

## PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NSCO | K 380 | 14 |
| 2. | NSCO | K 380 | 14 |
| 3. | | | |

## LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | HANN | 40# K55 | 67 | 2765 | | 2760 | Cem W/1500 SKS |
| | | | | | | | Oil well cement |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 7½ | 3¼ | 3 |
| REAMING | | | |
| COND. MUD & CIRCULATING SAMPLE | | ¾ | 1¾ |
| TRIPS | | | 3 |
| LUBRICATE RIG | ¼ | | |
| DEVIATION SURVEY | ¼ | | ¼ |
| TEST B.O.P. | ✓ | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| RING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

## TIME SUMMARY (OFFICE USE ONLY)

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.

NO. OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 45 | STANDS D.P. | 4241.63 FT. |
| 1 | SINGLES D.P. | 31.80 FT. |
| 12 | D.C. 9" x 6¼" I.D. 2⅞ O.D. | 358.88 FT. |
| 9 | D.C. 9" x 6¼" I.D. 2⅞ O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.20 FT. |
| 3 | SUBS 6¼" O.D. | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock Sub | 9.05 FT. |
| | KELLY DOWN | 20.10 FT. |
| | TOTAL | 4956.00 FT. |
| | WT. OF STRING 111M | LBS. |

### BIT RECORD

| | |
|---|---|
| BIT NO. | 18 |
| SIZE | 8½ |
| MFG. | Sec |
| TYPE | DSJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 368628 |
| DEPTH OUT | |
| DEPTH IN | 4819 |
| TOTAL FTG. | 137 |
| TOTAL HR. RUN | 28½ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 3:00 | 5:00 | 7:00 |
| WEIGHT | 105+ | 10.5+ | 10.5+ |
| VISC.-SEC | 69 | 67 | 66 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R L Hayes

### FOOTAGE

| FROM | TO | DR.-D RM.-R CORE.-C | CORE NO. |
|---|---|---|---|
| 4931 | 4956 | D | |

### 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 SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|
| 35 | 35 | 1300 | 5½ | | 5½ | 66 | |
| 30 | 25 | 1300 | X | 67 | X | | |
| | | | 14 | | 14 | | |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 4935 | ¼° | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 00 | 2 00 | 2 | DRLG. |
| 2 00 | 2 15 | ¼ | Rig Serv |
| 2 15 | 2 30 | ¼ | Survey |
| 2 30 | 8 00 | 5½ | DRLG |

## DAY TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 45 | STANDS D.P. | 4141.63 FT. |
| 1 | SINGLES D.P. | 31.80 FT. |
| 12 | D.C. 9" x 6¼" I.D. 2⅞ O.D. | 358.88 FT. |
| 9 | D.C. 9" x 6¼" I.D. 2⅞ O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. STB. BODY O.D. | 8.20 FT. |
| 3 | SUBS 6¼" O.D. | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock Sub | 9.05 FT. |
| | KELLY DOWN | 39.10 FT. |
| | TOTAL | 4965.00 FT. |
| | WT. OF STRING 111M | LBS. |

### BIT RECORD

| | |
|---|---|
| BIT NO. | 18 |
| SIZE | 8½ |
| MFG. | Sec. |
| TYPE | DSJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 368628 |
| DEPTH OUT | |
| DEPTH IN | 4819 |
| TOTAL FTG. | 149 |
| TOTAL HR. RUN | 35¼ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 8:30 | 11:30 | 2:00 |
| WEIGHT | 10.5 | 10.7+ | 10.8 |
| VISC.-SEC | 70 | 70 | 72 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | 9.5+ | 9.5+ | 9.5+ |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| CAUSTIC | 1 SAX, | | |
| BAROID | 5 SAXS. | | |
| BENEX | 2 SAX | | |

DRILLER C. Hopkins

### FOOTAGE 9

| FROM | TO | DR.-D RM.-R CORE.-C | CORE NO. |
|---|---|---|---|
| 4956 | 4965 | D | |

### 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|
| 30 | 25 | 1300 | 5½ | | 5½ | 66 | S |
| | 35 | | | | | | |
| | 40 | | | | | | |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8 00 | 1 30 | 5½ | DRLG. 8½" HOLE |
| 1 30 | 2 15 | ¾ | CIRC. SAMPLE @ 4965 |
| 2 15 | 4 00 | 1¾ | DRLG |

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 45 | STANDS D.P. | 4241.63 FT. |
| 1 | SINGLES D.P. | 31.80 FT. |
| 12 | D.C. 9" x 6¼" O.D. 2⅞ | 368.88 FT. |
| 9 | D.C. 9" x 6¼" O.D. 2⅞ | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. STB. BODY O.D. | 8.20 FT. |
| 3 | SUBS 6¼" O.D. | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock Sub | 9.05 FT. |
| | KELLY DOWN | 39.10 FT. |
| | TOTAL | 4975.00 FT. |
| | WT. OF STRING 111M | LBS. |

### BIT RECORD

| | |
|---|---|
| BIT NO. | 18 |
| SIZE | 8½ |
| MFG. | SEC. |
| TYPE | DSJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 368628 |
| DEPTH OUT | 4975 |
| DEPTH IN | 4819 |
| TOTAL FTG. | 156 |
| TOTAL HR. RUN | 38¾ |
| COND. OF BIT | 431 |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 4:00 | | |
| WEIGHT | 10.8 | | |
| VISC.-SEC | 72 | | |
| W.L.-C.C. | | | |
| FLTR. CK | | | |
| PH | 9.5+ | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER

### FOOTAGE

| FROM | TO | DR.-D RM.-R CORE.-C | CORE NO. |
|---|---|---|---|
| 4968 | 4975 | D | |

### FORMATION (SHOW CORE RECOVERY)

| ROTARY RPM | WT. ON BIT 1000# | PUMP PRESS | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. 2 LINER SIZE | PUMP NO. 2 S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|
| 30 | 40 | 1300 | 5½ | | 5½ | 66 | S |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 4975 | ¾° | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4 00 | 7 00 | 3 | DRLG 8½" HOLE |
| 7 00 | 7 45 | ¾ | CIRC SAMPLE |
| 7 45 | 9 00 | 1¼ | 10 STAND DUMMY TRIP |
| 9 00 | 10 00 | 1 | CIRC to TEST. |
| 10 00 | 10 15 | ¼ | Survey |
| 10 15 | 12 00 | 1¾ | HOIST |

## DRILLING CREW PAYROLL DATA

DATE May 9 1973

WELL NAME & NO. UNION AKlavik F-38

COMPANY UNION Oil Co. LTD.

TOOL PUSHER E C Baumann RIG NO. 1E

### MORNING TOUR ____ P.M. ____ A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R L Hayes | 12 |
| DRKMAN | | E Sawenky | 12 |
| MTRMAN | | B. Larsen | 12 |
| FIREMAN | | | |
| FLRMAN | | E Edgehill | 12 |
| FLRMAN | | B. Taylor | 12 |
| FLRMAN | | M. Hazen | 12 |

NO. OF DAYS ____ SINCE LAST LOST-TIME ACCIDENT

### DAY TOUR ____ A.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. Hopkins | 12 |
| DRKMAN | | H. Kleen | 12 |
| MTRMAN | | I. Langlois | 12 |
| FIREMAN | | | |
| FLRMAN | | G. Albertson | 12 |
| FLRMAN | | R. Hewko | 12 |
| FLRMAN | | T. Greenwood | 12 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

### EVENING TOUR ____ P.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 52 DATE May 8/73

OPERATOR: UNION Oil Co. LTD

LEASE: UNION Aklavik K-38

WELL NO. K-38 FIELD OR DIST. Aklavik

COUNTY NWT STATE Canada

CONTRACTOR: S.& T DRILLING (WESTERN) CO. LTD. RIG NO. 1E

DRILL PIPE STRING NO. 12 SIZE 4 TOOL JOINT O.D. 5 TYPE THD. 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: M.R. McFarlane

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: G.W. Kraemann

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NSCO | K 380 | 14 |
| 2. | NSCO | K 380 | 14 |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | MANN | 40#K55 | 67 | 2765 | | 2760 | Cem W/1500 SKS |
| | | | | | | | Oil well Cement |

**TIME DISTRIBUTION—HOURS**

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 6¼ | 7¼ | 7½ |
| REAMING | ¼ | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | 1¼ | | |
| LUBRICATE RIG | ¼ | ¼ | ¼ |
| DEVIATION SURVEY | | ½ | ½ |
| TEST B.O.P. | / | / | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| RING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |

COMPLETION WORK: A. PERFORATING; B. TUBING TRIPS; C. SWABBING; D. TESTING; E. ADDITIONAL

TOTALS 8 8 8

**TIME SUMMARY (OFFICE USE ONLY)**

DAY WORK; HRS. W/DP; HRS. WO/DR; HRS. STANDBY; TOTAL DAY WORK

**WIRE LINE RECORD**

REEL NO.; NO. OF LINES SIZE; FEET SLIPPED; FEET CUT OFF; PRESENT LENGTH; TON MI. OR TRIPS SINCE LAST CUT; CUMULATIVE TON MI. OR TRIPS; NO. DAYS FROM SPUD; CUMULATIVE ROTATING HRS.

## DAY TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 44 | STANDS D.P. | 4147.46 FT. |
| | SINGLES D.P. | FT. |
| 12 | D.C. 2⅞ I.D. 6¾ O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.20 FT. |
| 3 | SUBS 6¼ | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Stock Sub | 9.05 FT. |
| | KELLY DOWN | 39.07 FT. |
| | TOTAL | 4849.00 FT. |
| | WT. OF STRING 111M | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 18 |
| SIZE | 8½ |
| MFG. | Sec |
| TYPE | DS-J |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 368628 |
| DEPTH OUT | |
| DEPTH IN | 4819 |
| TOTAL FTG. | 30 |
| TOTAL HR. RUN | 6¼ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 4:00 | 5:00 | 6:30 |
| WEIGHT | 10.6 | 10.6 | 10.6 |
| VISC.-SEC | 62 | 60 | 58 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Gel | 7 | | |
| Benex | 1 | | |

DRILLER R L Hayes

**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'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4819 | 4849 | D | | | 30 | 30 | 1300 | 5½ | | 5½ | 64 | |
| | | | | | | | 1350 | X | | X | 68 | |
| | | | | | | | | 14 | | 14 | | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 00 | 12 15 | ¼ | Rig Serv |
| 12 15 | 1 30 | 1¼ | RUNin W/Bit # 18 |
| 1 30 | 1 45 | ¼ | Break Circ + Clean 2 ft fill |
| 1 45 | 8 00 | 6¼ | DRLG. |

Held Blow out DRill

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 44 | STANDS D.P. | 4147.46 FT. |
| 2 | SINGLES D.P. | 62.22 FT. |
| 12 | D.C. 2⅞ x 6¼ O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ x 6¼ O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.20 FT. |
| 3 | SUBS 6¼ | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Stock Sub | 9.05 FT. |
| | KELLY DC | 12.85 FT. |
| | TOTAL | 4885.00 FT. |
| | WT. OF STRING 111M | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 18 |
| SIZE | 8½ |
| MFG. | SEC. |
| TYPE | DS-J |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 368629 |
| DEPTH OUT | |
| DEPTH IN | 4819 |
| TOTAL FTG. | 66 |
| TOTAL HR. RUN | 13½ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 9:00 | 12 00 | 3:00 |
| WEIGHT | 10.5+ | 10.6 | 10.6 |
| VISC.-SEC | 65 | 91 | 93 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | 10 SAX. | | |
| BENEX | 2 SAX | | |
| SODA ASH | 1 SAX. | | |

DRILLER C. Hopkins

**FOOTAGE** 36

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4849 | 4885 | D | | | 30 | 30 | 1300 | 5½ | | 5½ | 65 | S |
| | | | | | | 35 | | | | | | |
| | | | | | | 38 | | | | | | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 4840 | 3 1/8° | | 4870 | 3½ | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8 00 | 8 45 | ¾ | Drlg. 8½" Hole |
| 8 45 | 9 00 | ¼ | Pick Stab & 14" Rams |
| 9 00 | 9 15 | ¼ | Survey |
| 9 15 | 2 45 | 5½ | Drill |
| 2 45 | 3 00 | ¼ | Survey |
| 3 00 | 4 00 | 1 | Drill |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 45 | STANDS D.P. | 4241.63 FT. |
| | SINGLES D.P. | FT. |
| 12 | D.C. 2⅞ x 6¾ O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ x 6¼ O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.20 FT. |
| 3 | SUBS 6¼ | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Stock Sub | 9.05 FT. |
| | KELLY DOWN | 16.90 FT. |
| | TOTAL | 4992.00 FT. |
| | WT. OF STRING 111M | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 18 |
| SIZE | 8½ |
| MFG. | SEC. |
| TYPE | DS-J |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 368628 |
| DEPTH OUT | |
| DEPTH IN | 4819 |
| TOTAL FTG. | 112 |
| TOTAL HR. RUN | 21 |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 6 30 | 800 | 11 30 |
| WEIGHT | 10.5+ | 10.5+ | 10.5+ |
| VISC.-SEC | 72 | 70 | 70 |
| W.L.-C.C. | | | |
| FLTR. CK | | | |
| PH | 9.5+ | 9.5+ | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R L Hayes

**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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4885 | 4921 | D | | | 30 | 38 | 1300 | 5½ | | 5½ | 66 | S |
| | | | | | 35 | 35 | | | | | | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 4907 | 3½ | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4 00 | 8 00 | 4 | Drlg 8½" Hole |
| 8 00 | 8 30 | ½ | Survey + Rig Serv |
| 8 30 | 12 00 | 3½ | DRLG. |

**DRILLING CREW PAYROLL DATA**

DATE May 8 1973

WELL NAME & NO. UNION Aklavik K-38

COMPANY UNION Oil Co LTD

TOOL PUSHER G.W. Kraemann RIG NO. 1E

MORNING TOUR P.M. A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R L Hayes | 12 |
| DRKMAN | | E Synenky | 12 |
| MTRMAN | | B Larsen | 12 |
| FIREMAN | | | |
| FLRMAN | | E Edgehill | 12 |
| FLRMAN | | R Taylor | 12 |
| FLRMAN | | M Hazen | 12 |

NO. OF DAYS SINCE LAST LOST-TIME ACCIDENT

DAY TOUR A.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C Hopkins | 12 |
| DRKMAN | | H Klein | 12 |
| MTRMAN | | J Knagiss | 12 |
| FIREMAN | | | |
| FLRMAN | | C Albertson | 12 |
| FLRMAN | | D Henao | 12 |
| FLRMAN | | J Greenland | 4 |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

EVENING TOUR P.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 51 DATE May 7/73

OPERATOR: UNION Oil Co. LTD

LEASE: UNION AKlavik K-38

WELL NO. K-38 FIELD OR DIST. AKlavik COUNTY NWT STATE Canada

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. RIG NO. 1E

DRILL PIPE STRING NO. 3 SIZE 4 TOOL JOINT 5 O.D. TYPE THD. 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: W. McInnis

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: E.W. Braumann

## PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NSCO | K 380 | 14 |
| 2. | NSCO | K380 | 14 |
| 3. | | | |

## LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | MANN | 40# K55 | 67 | 2765 | | 2760 | Cem 1500 sks |
| | | | | | | | Oil well cement |

## TIME DISTRIBUTION–HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 7¾ | 7½ | 5¼ |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | | 2¼ |
| LUBRICATE RIG | ¼ | ¼ | ¼ |
| DEVIATION SURVEY | | ¼ | ¼ |
| TEST B.O.P. | J | J | J |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| CORING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK: A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

## TIME SUMMARY (OFFICE USE ONLY)

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.

NO. OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 43 | STANDS D.P. | 4052.74 FT. |
| 1 | SINGLES D.P. | 31.70 FT. |
| 12 | D.C. 2⅞ I.D. 6¾ O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.20 FT. |
| 3 | SUBS 6¾ 6¼ | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock | 9.05 FT. |
| | KELLY DOWN | 37.09 FT. |
| | TOTAL | 4784.00 FT. |

WT. OF STRING 111M LBS.

### BIT RECORD

| | |
|---|---|
| BIT NO. | 17 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | M44N |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 913618 |
| DEPTH OUT | |
| DEPTH IN | 4727 |
| TOTAL FTG. | 57 |
| TOTAL HR. RUN | 19½ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 1 00 | 3 00 | 6 00 |
| WEIGHT | 10.6+ | 10.6+ | 10.6+ |
| VISC.-SEC | 85 | 84 | 84 |
| W.L.-C.C. | | | |
| FL.TR. CK. | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R L Hayes

### FOOTAGE

| FROM | TO | DR.-D RM.-R CORE.-C | CORE NO. |
|---|---|---|---|
| 4767 | 4784 | D | |

### 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 SGL.–S PAR'EL-P COM'D-C

| 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 |
|---|---|---|---|---|---|---|---|
| 82 | 15 | 1350 | 5½ | | 5½ | 66 | |
| | | 1300 | X | 6 | X | | |
| | | | 14 | | 14 | | |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 00 | 3 00 | 3 | DRLG |
| 3 00 | 3 15 | ¼ | Rig Serv V Bops & Change Pumps |
| 3 15 | 8 00 | 4¾ | DRLG. |

## DAY TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 43 | STANDS D.P. | 4062.74 FT. |
| 2 | SINGLES D.P. | 63.40 FT. |
| 12 | D.C. 2⅞ I.D. 6¾ O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.20 FT. |
| 3 | SUBS 6¾ 6¼ | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock Sub | 9.05 FT. |
| | KELLY DOWN | 28.34 FT. |
| | TOTAL | 4804.00 FT. |

WT. OF STRING 111 M LBS.

### BIT RECORD

| | |
|---|---|
| BIT NO. | 17 |
| SIZE | 8½ |
| MFG. | SEC. |
| TYPE | M44W |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 913618 |
| DEPTH OUT | |
| DEPTH IN | 4727 |
| TOTAL FTG. | 77 |
| TOTAL HR. RUN | 27 |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 9 00 | 12 00 | 3 00 |
| WEIGHT | 10.6 | 10.6+ | 10.6 |
| VISC.-SEC | 83 | 75 | 68 |
| W.L.-C.C. | | | |
| FL.TR. CK. | | | |
| PH | 9.5+ | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| N/A | | | |

DRILLER C. Hopkins

### FOOTAGE

| FROM | TO | DR.-D RM.-R CORE.-C | CORE NO. |
|---|---|---|---|
| 4784 | 4804 | D | |

### FORMATION (SHOW CORE RECOVERY)

HELD BLOW-OUT DRILL

| 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 |
|---|---|---|---|---|---|---|---|
| 82 | 15 | 1300 | 5½ | 65 | 5½ | | S |
| 65 | 22 ~~25~~ | | X | | X | | |
| | | | 14 | | 14 | | |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 4777 | 3¼ ° | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8 00 | 10 30 | 2½ | DRLG. 8½" HOLE |
| 10 30 | 10 45 | ¼ | Rig Service, 4" Rams & Kelly Cock |
| 10 45 | 11 00 | ¼ | Survey |
| 11 00 | 4 00 | 5 | DRLG |

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 43 | STANDS D.P. | 4052.74 FT. |
| 2 | SINGLES D.P. | 63.40 FT. |
| 12 | D.C. 2⅞ I.D. 6¾ O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. BODY O.D. | 8.20 FT. |
| 3 | SUBS 6¾ 6¼ | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock Sub | 9.05 FT. |
| | KELLY DOWN | 40.39 FT. |
| | TOTAL | 4819.00 FT. |

WT. OF STRING 111M LBS.

### BIT RECORD

| | | |
|---|---|---|
| BIT NO. | 17 | 18 |
| SIZE | 8½ | 8½ |
| MFG. | SEC. | SEC |
| TYPE | M44W | DS-J |
| NOZZLE NO. | 3 | 3 |
| NOZZLE SIZE | 16 | 16 |
| SER. NO. | 913618 | 368678 |
| DEPTH OUT | 4819 | |
| DEPTH IN | 4727 | 4819 |
| TOTAL FTG. | 92 | |
| TOTAL HR. RUN | 32¼ | |
| COND. OF BIT | 421 | |
| REAMER NO. | | |
| REAMER TYPE | | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 4 00 | 7 00 | 9 00 |
| WEIGHT | 10.6+ | 10.6 | 10.6 |
| VISC.-SEC | 65 | 62 | 62 |
| W.L.-C.C. | | | |
| FL.TR. CK | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R L Hayes

### FOOTAGE

| FROM | TO | DR.-D RM.-R CORE.-C | CORE NO. |
|---|---|---|---|
| 4804 | 4819 | D | |

### 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 |
|---|---|---|---|---|---|---|---|
| 65 | 22 | 1300 | 5½ | 67 | 5½ | | S |
| | | 1300 | | | | 66 | |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 4809 | 3° | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4 00 | 9 15 | 5¼ | DRLG 8½" HOLE |
| 9 15 | 9 30 | ¼ | Servey + Rig Serv |
| 9 30 | 11 15 | 1¾ | HOIST |
| 11 15 | 11 30 | ¼ | Change Bits V Blind Rams |
| 11 30 | 12 00 | ½ | Run IN. |

## DRILLING CREW PAYROLL DATA

DATE May 7/73

WELL NAME & NO. UNION AKlavik F-38

COMPANY UNION Oil Co. LTD

TOOL PUSHER E.W. Braumann RIG NO. 1E

### MORNING TOUR ____ P.M. ____ A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R L Hayes | 12 |
| DRKMAN | | E Symonsky | 12 |
| MTRMAN | | B Larsen | 12 |
| FIREMAN | | | |
| FLRMAN | | E Edghill | 12 |
| FLRMAN | | J Taylor | 12 |
| FLRMAN | | M Hazen | 12 |

NO. OF DAYS ____ SINCE LAST LOST-TIME ACCIDENT

### DAY TOUR ____ A.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. Hopkins | 12 |
| DRKMAN | | H. Kleen | 12 |
| MTRMAN | | T. Langlois | 12 |
| FIREMAN | | | |
| FLRMAN | | G. Robertson | 12 |
| FLRMAN | | R. Hewko | 12 |
| FLRMAN | | J. Greenland | 12 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

### EVENING TOUR ____ P.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 50 DATE MAY 6/73

OPERATOR: UNION Oil Co. LTD
LEASE: UNION AKLAVIK F-38
WELL NO. F-38 FIELD OR DIST. AKLAVIK COUNTY NWT STATE Canada
CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. RIG NO. 1E
DRILL PIPE STRING NO. 2 SIZE 4 TOOL JOINT O.D. 5 TYPE THD. 3½ IF
SIGNATURE OF OPERATOR'S REPRESENTATIVE: W. R. McSheffrey
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: E. C. Baumann

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NSCO | K 380 | 14 |
| 2. | NSCO | K 380 | 14 |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | MANN | 40# K55 | 67 | 2765 | | 2760 | Cem. W/1500 sks Oil Well Cement |

**TIME DISTRIBUTION—HOURS**

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 5¾ | 4¼ | 7½ |
| REAMING | | ¼ | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | 1¼ | 3 | |
| LUBRICATE RIG | ¾ | ¼ | ¼ |
| DEVIATION SURVEY | ¾ | | ¼ |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | ¼ | |
| REPAIR RIG | | | |
| BORING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

**TIME SUMMARY (OFFICE USE ONLY)**

DAY WORK
HRS. W/DP
HRS. WO/DP
HRS. STANDBY
TOTAL DAY WORK

**WIRE LINE RECORD**

REEL NO.
NO. OF LINES SIZE
FEET SLIPPED
FEET CUT OFF
PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.

## MORNING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 43 | STANDS D.P. | 4053.04 FT. |
| | SINGLES D.P. | FT. |
| 12 | D.C. 2⅞ I.D. 6¾ O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. STB. BODY O.D. | 8.20 FT. |
| 3 | PBGS. 6¼ | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock Sub | 9.05 FT. |
| | KELLY DOWN | 11.79 FT. |
| | TOTAL | 4727.00 FT. |
| WT. OF STRING | 111M | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 16 |
| SIZE | 8½ |
| MFG. | SMITH |
| TYPE | M44N |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 913608 |
| DEPTH OUT | 4727 |
| DEPTH IN | 4568 |
| TOTAL FTG. | 159 |
| TOTAL HR. RUN | 39¾ |
| COND. OF BIT | 1-2-1 |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 2:30 | 5:30 | 7:00 |
| WEIGHT | 10.5+ | 10.5 | 10.5 |
| VISC.-SEC | 62 | 62 | 62 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Barites | 20 sks | | |
| Benex | 1 sk | | |

DRILLER R L Hayes

**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 SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4708 | 4727 | D | | | 65 | 20 | 1300 | 5½ | 66 | 5½ | 66 | |
| | | | | | | | 1300 | X | | X | 66 | |
| | | | | | | | | 14 | | 14 | | |

| DEVIATION RECORD | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|---|
| | 4714 | 3⅛° | | 4720 | 3¼° | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12:00 | 4:15 | 4¼ | DRLG |
| 4:15 | 4:30 | ¼ | Rig serv / BOPS |
| 4:30 | 5:15 | ¾ | Survey Miss Run + Re Run. |
| 5:15 | 6:45 | 1½ | DRLG. |
| 6:45 | 8:00 | 1¼ | Hoist + Survey |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 43 | STANDS D.P. | 4053.04 FT. |
| 1 | SINGLES D.P. | 31.70 FT. |
| 12 | D.C. 2⅞ x 6¾ I.D. O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ x 6¼ I.D. O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. STB. BODY O.D. | 8.20 FT. |
| 3 | PBGS. 6¼ | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock Sub | 9.05 FT. |
| | KELLY DOWN | 20.09 FT. |
| | TOTAL | 4767.00 FT. |
| WT. OF STRING | 111M | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 17 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | M44N |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 913618 |
| DEPTH OUT | |
| DEPTH IN | 4727 |
| TOTAL FTG. | 40 |
| TOTAL HR. RUN | 11¾ |
| COND. OF BIT | DRLG. |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 2:00 | | |
| WEIGHT | 10.5 | | |
| VISC.-SEC | 60 | | |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | 9.5 | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Gel | 10 SAX. | | |
| Benex | 2 SAX. | | |
| Soda Ash | 2 SAX. | | |

DRILLER Q. Robin

**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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4727 | 4747 | D | | | 50 | 15 | 1300 | 5½ | 70 | 5½ | | S |
| | | | | | 65 | 20 | | | | X | | |
| | | | | | | | | | | 14 | | |

| DEVIATION RECORD | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8:00 | 8:45 | ¾ | Hoist w/ Bit # 16 |
| 8:45 | 9:15 | ½ | Change Bits & Recover Survey - V Blind Rams |
| 9:15 | 10:00 | ¾ | Change Stb. Rbrs & Run In D.C.'s |
| 10:00 | 10:15 | ¼ | Slip 23' Drlg. Line |
| 10:15 | 10:30 | ¼ | Rig Serv. |
| 10:30 | 11:30 | 1 | Run In D.P. |
| 11:30 | 11:45 | ¼ | Break Circ. & Clean Loose Fill 3' |
| 11:45 | 4:00 | 4¼ | Drlg. 8½" Hole |

## 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4747 | 4767 | D | | | 65 | 20 | 1300 | 5½ | 69 | 5½ | | S |
| | | | | | | 15 | | | | | | |

| DEVIATION RECORD | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|---|
| | 4746 | 3½ | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4:00 | 5:45 | 1¾ | Drlg. 8½" Hole |
| 5:45 | 6:00 | ¼ | Survey |
| 6:00 | 6:15 | ¼ | Rig Serv & V 4" Rams |
| 6:15 | 12:00 | 5¾ | Drill |

## DRILLING CREW PAYROLL DATA

DATE May 6 1973
WELL NAME & NO. UNION AKLAVIK F-38
COMPANY UNION Oil Co. LTD
TOOL PUSHER E. C. Baumann RIG NO. 1E

MORNING TOUR P.M. A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R.L. HAYES | 12 |
| DRKMAN | | E. SYWENKY | 12 |
| MTRMAN | | B. LARSEN | 12 |
| FIREMAN | | | |
| FLRMAN | | E. EDGHILL | 12 |
| FLRMAN | | B. TAYLOR | 12 |
| FLRMAN | | M. HAZEN | 12 |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

DAY TOUR A.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R. HODGINS | 12 |
| DRKMAN | | H. KLEEN | 12 |
| MTRMAN | | F. LABELLE | 12 |
| FIREMAN | | | |
| FLRMAN | | G. ALBERTSON | 12 |
| FLRMAN | | R. HENRY | 12 |
| FLRMAN | | T. GREENLAND | 12 |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

EVENING TOUR P.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 49 — DATE May 5 '73

OPERATOR: Union Oil Co Ltd.

LEASE: Union Aklavik

WELL NO. 1-38 — FIELD OR DIST. Aklavik — COUNTY N.W.T. — STATE Canada

CONTRACTOR: S & T Drilling (Western) Co. Ltd. — RIG NO. 1E

DRILL PIPE STRING: NO. 2, SIZE 4 — TOOL JOINT O.D. 5 — TYPE THD 3½ FH

SIGNATURE OF OPERATOR'S REPRESENTATIVE: W.K. McIntosh

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: E.O. Graumann

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NAT | K380 | 14 |
| 2. | NAT | K380 | 14 |
| 3. | | | |

**LAST CASING · TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | M44N | 40# K55 | 67 | 2765.08 | | 2760 | CEM W/1500 SKS |
| | | | | | | | OAL WELL CEM. |

**DRILLING CREW PAYROLL DATA**

DATE May 5 '73

WELL NAME & NO. Union Aklavik 1-38

COMPANY Union Oil Co Ltd.

TOOL PUSHER E.O. Graumann — RIG NO. 1E

MORNING TOUR 12 P.M. 8 A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. | |
|---|---|---|---|---|
| DRILLER | | A BRUNDIGE | 8 | T |
| DRKMAN | | E SYWESH Ky | 12 | |
| MTRMAN | | B LARSEN. | 12 | |
| FIREMAN | | | | |
| FLRMAN | | E E OGHILL | 12 | |
| FLRMAN | | B TAYLOR. | 12 | |
| FLRMAN | | | | |

NO. OF DAYS _____ SINCE LAST LOST-TIME ACCIDENT

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 7¼ | 12¼ | 7¾ |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | | |
| LUBRICATE RIG | ¼ | ¼ | ¼ |
| DEVIATION SURVEY | ¼ | ¼ | ¼ |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | ¼ | | |
| REAMING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK: A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.

NO. OF LINES — SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 42 | STANDS D.P. | 3938.16 FT. |
| | SINGLES D.P. | FT. |
| 12 | D.C. 2⅞ I.D. 6¾ O.D. | 358.88 FT. |
| 9 | D.C. 2¾ I.D. 6¼ O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | SHR. STB. BODY O.D. | 8.20 FT. |
| 3 | SUBS 2¾ 2¼ | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock Sub | 9.05 FT. |
| | KELLY DOWN | 30.82 FT. |
| | TOTAL | 4650 FT. |

WT. OF STRING 110 LBS.

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 14 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | M44N |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 913608 |
| DEPTH OUT | |
| DEPTH IN | 4598 |
| TOTAL FTG. | 52 |
| TOTAL HR. RUN | 19 |
| COND. OF BIT | ORlg |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| TIME | 2:00 | 5:00 | 7:00 |
|---|---|---|---|
| WEIGHT | 10.7 | 10.6 | 10.5 |
| VISC.-SEC | 70 | 65 | 60 |
| W.L.-C.C. | | | 10.0 |
| FL.TR. CK. | | | 2/32 |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER B Brundige

**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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4424 | 4650 | D | | | 65 | 20 | 1300 | 5½ | 68 | 5½ | 68 | S |

DEVIATION RECORD: DEPTH 4620 — DEV. 3°

| TIME LOG FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12:00 | 1:00 | 1 1/4 | DRLg. 8½ HOLE |
| 1:00 | 1:30 | ¼ | SURVEY. |
| 1:30 | 1:45 | ¼ | Rig SERV + U BOP. |
| 1:45 | 6:15 | 4 1/2 | DRLg 8½ HOLE. |
| 6:15 | 6:30 | ¼ | REPLACE AIR VALVE. |
| 6:30 | 8:00 | 1½ | DRLg 8½ HOLE |

## DAY TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 42 | STANDS D.P. | 3958.40 FT. |
| 1 | SINGLES D.P. | 31.32 FT. |
| 12 | D.C. 2⅞ x 6¾ I.D. O.D. | 358.88 FT. |
| 9 | D.C. 2¾ x 6¼ I.D. O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | SHR. STB. BODY O.D. | 8.20 FT. |
| 3 | SUBS 2¾ 2¼ | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock Sub | 9.05 FT. |
| | KELLY DOWN | 27.81 FT. |
| | TOTAL | 4680.00 FT. |

WT. OF STRING 111 M LBS.

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 16 |
| SIZE | 8½ |
| MFG. | SEC. |
| TYPE | M44N |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 913608 |
| DEPTH OUT | |
| DEPTH IN | 4598 |
| TOTAL FTG. | 92 |
| TOTAL HR. RUN | 26½ |
| COND. OF BIT | DRLG. |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| TIME | 8:30 | 12:00 | 3:00 |
|---|---|---|---|
| WEIGHT | 10.5 | 10.6 | 10.6+ |
| VISC.-SEC | 57 | 87 | 85 |
| W.L.-C.C. | | | |
| FL.TR. CK. | | | |
| PH | 9.0 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Gel | 10sk | cellex R | 1 sk |
| Soda. A | 2 sk | Dextrid | 4 sk |
| Benex | 2 sk | | |

DRILLER C. Hopkins

**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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4650 | 4680 | D | | | 65 | 20 | 1300 | 5½ | 69 | 5½ | | S |

DEVIATION RECORD: DEPTH 4660 — DEV. 3 1/8°

| TIME LOG FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8:00 | 10:30 | 2½ | DRLG 8½" Hole |
| 10:30 | 10:45 | ¼ | Rig Seal, 4" Arms & Kelly Cock |
| 10:45 | 11:00 | ¼ | Survey |
| 11:00 | 4:00 | 5 | DRILL |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 42 | STANDS D.P. | 3958.40 FT. |
| 1 | SINGLES D.P. | 62.74 FT. |
| 12 | D.C. 2⅞ x 6¾ I.D. O.D. | 358.88 FT. |
| 9 | D.C. 2¾ x 6¼ I.D. O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | SHR. STB. BODY O.D. | 8.20 FT. |
| 3 | SUBS 2¾ 2¼ | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock Sub | 9.05 FT. |
| | KELLY DOWN | 31.44 FT. |
| | TOTAL | 4708.00 FT. |

WT. OF STRING 111 M LBS.

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 16 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | M44N |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 913608 |
| DEPTH OUT | |
| DEPTH IN | 4568 |
| TOTAL FTG. | 110 |
| TOTAL HR. RUN | 34 |
| COND. OF BIT | ORlG |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| TIME | 7:00 | 9:00 | 11:00 |
|---|---|---|---|
| WEIGHT | 10.5+ | 10.5+ | 10.5+ |
| VISC.-SEC | 85 | 65 | 63 |
| W.L.-C.C. | | | |
| FL.TR. CK | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4680 | 4708 | D | | | 65 | 20 | 1300 | 5½ | 70 | 5½ | | S |

DEVIATION RECORD: DEPTH 4683 — DEV. 3½°

| TIME LOG FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4:00 | 8:00 | 4 | DRLG. 8½" HOLE |
| 8:00 | 8:08 | ¼ | Rig Seal & U.B.O.P. |
| 8:15 | 8:30 | ¼ | Survey |
| 8:30 | 12:00 | 3½ | DRILL |

DRILLING CREW PAYROLL DATA

DAY TOUR _____ A.M. _____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. | |
|---|---|---|---|---|
| DRILLER | | C. HOPKINS | 16 | |
| DRKMAN | | H. KLEEN | 12 | |
| MTRMAN | | J. LANGLOIS | 12 | |
| FIREMAN | | | | |
| FLRMAN | | Q. ALBERTSON | 12 | |
| FLRMAN | | B. MARSH | 4 | T |
| FLRMAN | | J. GREENLAND | 12 | |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

DRILLING CREW PAYROLL DATA

EVENING TOUR _____ P.M. _____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. | |
|---|---|---|---|---|
| DRILLER | | R L Hayes | | T |
| DRKMAN | | | | |
| MTRMAN | | | | |
| FIREMAN | | | | |
| FLRMAN | | | | |
| FLRMAN | | Morris Hazen | | T |
| FLRMAN | | | | |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 48 — DATE MAY 4/73

OPERATOR: Union Oil Co LTD. — LEASE: Union AKLAVIK — WELL NO. F38 — FIELD OR DIST.: AKLAVIK — COUNTY: N.W.T. — STATE: CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. — RIG NO. 1E

DRILL PIPE STRING: NO. 3, SIZE 4½ — TOOL JOINT O.D. 5 — TYPE THD. 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: W.K. McTaggart

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry D Armstrong

## PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NAT | K380 | 14 |
| 2. | NAT | K380 | 14 |
| 3. | | | |

## LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | m44n | 40# H40 | 47 | 2746 | | 2760 | CEM 2nd 1300 SKS |
| | | | | | | | OIL WELL CEM. |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 6 | 4¼ | 7½ |
| REAMING | | ¼ | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | 1½ | 9½ | |
| LUBRICATE RIG | ¼ | | ¼ |
| DEVIATION SURVEY | ¼ | | |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| [illegible] | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | ¼ |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 6 | 8 | 8 |

## TIME SUMMARY (OFFICE USE ONLY)

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.

NO. OF LINES — SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 41 | STANDS D.P. | 3870.80 FT. |
| 1 | SINGLES D.P. | 31.26 FT. |
| 21 | D.C. 2¼ I.D. 6¼ O.D. | 618.25 FT. |
| | D.C. I.D. O.D. | FT. |
| 1 | STB. BODY O.D. | 8.19 FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | RMR. STB. BODY O.D. | 8.30 FT. |
| 1 | SUBS O.D. | 3.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock Sub | 8.46 FT. |
| | KELLY DOWN | 26.59 FT. |
| | TOTAL | 4568 FT. |

WT. OF STRING 110 LBS.

### BIT RECORD

| | |
|---|---|
| BIT NO. | 15 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | M44L |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 913601 |
| DEPTH OUT | 4568 |
| DEPTH IN | 4529 |
| TOTAL FTG. | 39 |
| TOTAL HR. RUN | 11¾ |
| COND. OF BIT | T1-B1-A1-4 |
| REAMER NO. | 9-1-1 |
| REAMER TYPE | |

### MUD RECORD

| | | |
|---|---|---|
| TIME | 2⁰⁰ | 4³⁰ |
| WEIGHT | 10.6 | 10.6+ |
| VISC.-SEC | 59. | 59. |
| W.L.-C.C. | | |
| FL.TR. CK. | | |
| PH | 9.0+ | 9.0+ |
| SD. CONT. % | | |
| PRESSURE GRADIENT | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER: R Brundige

### 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'EL-P COMP'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4550 | 4568 | | | | 70 | 22 | 1300 | 5½ | 70 | 5½ | | S |
| | | | | | 75 | 18 | | | | | | |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 4548 | 3½ | | 4568 | 3⅛ | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12⁰⁰ | 2⁰⁰ | 2 | DRLG 8½ HOLE |
| 2⁰⁰ | 2¹⁵ | ¼ | SURVEY. |
| 2¹⁵ | 2³⁰ | ¼ | RIG SERV & TEST BOP |
| 2³⁰ | 6³⁰ | 4 | DRLG 8½ HOLE |
| 6³⁰ | 8⁰⁰ | 1½ | DROP SURVEY & HOIST BIT #15 |

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 41 | STANDS D.P. | 3963.86 FT. |
| 1 | SINGLES D.P. | 31.26 FT. |
| 12 | D.C. 2¼ I.D. 6¾ O.D. | 358.88 FT. |
| 9 | D.C. 2⅞ I.D. 6¼ O.D. | 262.43 FT. |
| 1 | STB. BODY O.D. | 8.23 FT. |
| 1 | STB. BODY O.D. | 8.10 FT. |
| 1 | RMR. STB. BODY O.D. | 8.20 FT. |
| 9 | SUBS O.D. | 7.58 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock Sub | 9.05 FT. |
| | KELLY DOWN | 33.41 FT. |
| | TOTAL | 4591.00 FT. |

WT. OF STRING 110M LBS.

### BIT RECORD

| | |
|---|---|
| BIT NO. | 16 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | M44N |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 913608 |
| DEPTH OUT | |
| DEPTH IN | 4598 |
| TOTAL FTG. | 13 |
| TOTAL HR. RUN | 4¼ |
| COND. OF BIT | RR1 |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | |
|---|---|---|
| TIME | 9⁰⁰ | |
| WEIGHT | 10.6+ | |
| VISC.-SEC | 57 | |
| W.L.-C.C. | | |
| FL.TR. CK. | | |
| PH | 9.0 | |
| SD. CONT. % | | |
| PRESSURE GRADIENT | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | 10 SAKS | | |
| SODA ASH | 2 SAKS | | |
| BEN-EX | 2 SAKS | | |

DRILLER: C. Hopkins

### 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ~~4568~~ | | D | | STRAP 4598.64 | 50 | 10 | 1300 | 5½ | 70 | 5½ | | |
| 4578 | 4591 | | | BOARD 4589.59 CORR. MADE | | 15 | | | | | | |
| | | | | DIFF 9.05 LONGER | 65 | 20 | | | | | | |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8⁰⁰ | 9³⁰ | 1½ | STRAP PIPE & HOIST |
| 9³⁰ | 9⁴⁵ | ¼ | CHANGE BITS & RECOVER SURVEY |
| 9⁴⁵ | 11³⁰ | 1¾ | RUN IN HOLE W/BIT #16 |
| 11³⁰ | 11⁴⁵ | ¼ | REAM CIRC & CLEAN 5' FILL LOOSE |
| 11⁴⁵ | 4⁰⁰ | 4¼ | DRLG 8½" HOLE — ROUGH DRLG |
| | | | DOUBLE STRAPPED PIPE. FOUND HOLE 19' DEEPER |
| | | | CORRECTION MADE — W.K. McTaggart |

## EVENING TOUR

### BIT RECORD

| | |
|---|---|
| BIT NO. | 16 |
| SIZE | 8½ |
| MFG. | SEC. |
| TYPE | M44N |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 913608 |
| DEPTH OUT | |
| DEPTH IN | 4598 |
| TOTAL FTG. | 26 |
| TOTAL HR. RUN | 17¾ |
| COND. OF BIT | DRL4 |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 5⁰⁰ | 9⁰⁰ | 11³⁰ |
| WEIGHT | 10.7+ | 10.7 | 10.7 |
| VISC.-SEC | 85 | 80 | 75 |
| W.L.-C.C. | | | |
| FL.TR. CK | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4591 | 4624 | D | | | 65 | 20 | 1300 | 5½ | 70 | 5½ | | S |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4⁰⁰ | 5⁰⁰ | 1 | DRLG 8½" HOLE |
| 5⁰⁰ | 5¹⁵ | ¼ | RIG SERV & TEST BOPE |
| 5¹⁵ | 6⁴⁵ | 1½ | DRLG |
| 6⁴⁵ | 7⁰⁰ | ¼ | WORK ON WIRELINE |
| 7⁰⁰ | 12⁰⁰ | 5 | DRLG |

## DRILLING CREW PAYROLL DATA

DATE MAY 4/73

WELL NAME & NO. Union AKLAVIK F-38

COMPANY Union Oil Co LTD.

TOOL PUSHER Barry D Armstrong — RIG NO. 1E

### MORNING TOUR — P.M. — A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R BRUNDIGE | 12 |
| DRKMAN | | E SYRUNIK | 12 |
| MTRMAN | | B LARSEN | 12 |
| FIREMAN | | | |
| FLRMAN | | E EDGHILL | 12 |
| FLRMAN | | B TAYLOR | 12 |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST-TIME ACCIDENT

### DAY TOUR — A.M. — P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. HOPKINS | 12 |
| DRKMAN | | N. KLEEN | 12 |
| MTRMAN | | T. LANGLAIS | 12 |
| FIREMAN | | | |
| FLRMAN | | G. ALBERTSON | 12 |
| FLRMAN | | B. MARSH | 12 |
| FLRMAN | | J. GREENLAND | 12 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

### EVENING TOUR — P.M. — P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 47 — DATE MAY 3/73

OPERATOR: Union Oil Co Ltd.
LEASE: Union Hkhavik
WELL NO.: F38
FIELD OR DIST.: Aklavik
COUNTY: [illegible]
STATE: Canada

CONTRACTOR: S & T Drilling (Western) Co. Ltd.
RIG NO.: 1E
DRILL PIPE STRING: NO. 3, SIZE —
TOOL JOINT: 5 O.D., TYPE THD. 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: W.K. McLatchie
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry Armstrong

## PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NAT | K380 | 14 |
| 2. | NAT | K380 | 14 |
| 3. | | | |

## LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | Quanex | 40# K55 | 67 | 2760' | 2760 | 2760 | CEM 2nd 1300 SKS |
| | | | | | | | DIL with CEM |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 7½ | 4½ | 5¾ |
| REAMING | | | ¼ |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | 3 | 1¼ |
| LUBRICATE RIG | ¼ | ½ | ¼ |
| DEVIATION SURVEY | ¼ | ½ | |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | ¼ |
| REPAIR RIG | | | |
| [illegible]ING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |

## COMPLETION WORK

| | | | |
|---|---|---|---|
| A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

## TIME SUMMARY (OFFICE USE ONLY)

| | |
|---|---|
| DAY WORK | |
| HRS. W/DP | |
| HRS. WO/DP | |
| HRS. STANDBY | |
| TOTAL DAY WORK | |

## WIRE LINE RECORD

REEL NO.
NO. OF LINES — SIZE
FEET SLIPPED
FEET CUT OFF
PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.

## MORNING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 40 | STANDS D.P. | 3776 FT. |
| 2 | SINGLES D.P. | 62.94 FT. |
| 21 | D.C. 2¾ I.D. 6¾ O.D. | 618.28 FT. |
| | D.C. I.D. O.D. | FT. |
| 1 | STB. BODY O.D. | 8.18 FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | RMR. STB BODY O.D. | 8.30 FT. |
| 1 | SUBS O.D. | 3.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | SHOCK SUB | 8.46 FT. |
| | KELLY DOWN | 28.84 FT. |
| | TOTAL | 4513 FT. |
| WT. OF STRING | 110 | LBS. |

### BIT RECORD

| | |
|---|---|
| BIT NO. | 14 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | M44L |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 911215 |
| DEPTH OUT | |
| DEPTH IN | 4442 |
| TOTAL FTG. | 71 |
| TOTAL HR. RUN | 15½ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 2:00 | 4:30 | 7:00 |
| WEIGHT | 10.7 | 10.7 | 10.6 |
| VISC.-SEC | 75 | 74 | 65 |
| W.L.-C.C. | | | 9.6 |
| FLTR. CK. | | | 2/32 |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Gel | 10 sks | Soda Ash | 1 sk. |
| Benex | 2 sks | | |

DRILLER: R Brundige

## DAY TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 41 | STANDS D.P. | 3892.71 FT. |
| | SINGLES D.P. | FT. |
| 21 | D.C. 2⅞ I.D. 6¾ O.D. | 618.28 FT. |
| | D.C. I.D. O.D. | FT. |
| 1 | STB. BODY O.D. | 8.18 FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | RMR. STB BODY O.D. | 8.30 FT. |
| 1 | SUBS O.D. | 3.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | SHOCK SUB | 8.46 FT. |
| | KELLY DOWN | 11.00 FT. |
| | TOTAL | 4529.00 FT. |
| WT. OF STRING | 110M | LBS. |

### BIT RECORD

| | | |
|---|---|---|
| BIT NO. | 14 | 15 |
| SIZE | 8½ | 8½ |
| MFG. | SEC | SEC |
| TYPE | M44L | M44L |
| NOZZLE NO. | 3 | 3 |
| NOZZLE SIZE | 16 | 16 |
| SER. NO. | 911815 | 91360 |
| DEPTH OUT | 4529 | |
| DEPTH IN | 4442 | 4529 |
| TOTAL FTG. | 87 | |
| TOTAL HR. RUN | 19¾ | |
| COND. OF BIT | 5-4 | |
| REAMER NO. | | |
| REAMER TYPE | | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 8:30 | 12:00 | |
| WEIGHT | 10.5 | 10.5+ | |
| VISC.-SEC | 66 | 70 | |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | 9.5 | 9.5 | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER: C. Hopkins

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 41 | STANDS D.P. | 3892.71 FT. |
| | SINGLES D.P. | FT. |
| 21 | D.C. 2⅞ I.D. 6¾ O.D. | 618.28 FT. |
| | D.C. I.D. O.D. | FT. |
| 1 | STB. BODY O.D. | 8.18 FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | RMR. BODY O.D. | 8.30 FT. |
| 1 | SUBS O.D. | 3.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | SHOCK SUB | 8.46 FT. |
| | KELLY DOWN | [illegible] FT. |
| | TOTAL | 4529.00 FT. |
| WT. OF STRING | 110 | LBS. |

### BIT RECORD

| | |
|---|---|
| BIT NO. | 15 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | M44L |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 91360 |
| DEPTH OUT | |
| DEPTH IN | 4529 |
| TOTAL FTG. | 21 |
| TOTAL HR. RUN | 5-3/4 |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 7:30 | 8:30 | 11:30 |
| WEIGHT | 10.6 | 10.6 | 10.6 |
| VISC.-SEC | 63 | 61 | 60 |
| W.L.-C.C. | | | |
| FLTR. CK | | | |
| PH | 9.0+ | 9.5 | 9.0 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER:

## FOOTAGE / FORMATION / DEVIATION / TIME LOG

| 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'EL-P COMP-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4479 | 4513 | D | | | 60 | 20 | 1700 | 5½ | 70 | 5½ | | S |

DEVIATION RECORD: DEPTH 4485 — DEV. 3° — DIRECTION

| TIME LOG FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 | 3 | 3½ | DRLG 8½ HOLE |
| 3 | 3 | ¼ | SURVEY |
| 3 | 4 | ¼ | RIG SERV & T.O.P. |
| 4 | 8 | 4 | DRLG 8½ HOLE. |

| 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'EL-P COMP-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4513 | 4529 | D | | | 60 | 20 | 1300 | 5½ | 70 | 5½ | | S |

DEVIATION RECORD: DEPTH 4517 — DEV. 3¼° — DIRECTION — DEPTH 4529 — DEV. 3¼° — DIRECTION

| TIME LOG FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8:00 | 11:30 | 3½ | DRLG 8½" HOLE |
| 11:30 | 11:45 | ¼ | SURVEY |
| 11:45 | 12:00 | ¼ | RIG SERV & U 4" RAMS |
| 12:00 | 12:45 | ¾ | DRLG |
| 12:45 | 1:00 | ¼ | DROP SURVEY |
| 1:00 | 3:15 | 2¼ | HOIST & [illegible] |
| 3:15 | 3:30 | ¼ | CHANGE BAILS & RECOVER SURVEY & U BLIND RAMS |
| 3:30 | 4:00 | ½ | RUN IN TO C/O |

| 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'EL-P COMP-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4529 | 4550 | D | | | 50 | 15 | 700 | 5½ | 70 | 5½ | | S |
| | | | | | 60 | 20 | | | | | | |

DEVIATION RECORD: DEPTH — DEV. — DIRECTION — DEPTH — DEV. — DIRECTION — DEPTH — DEV. — DIRECTION

| TIME LOG FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4:00 | 4:30 | ½ | SER 93' CUT DRLG LINE |
| 4:30 | 4:45 | ¼ | BIG SEAL |
| 4:45 | 6:00 | 1¼ | RUN IN D.P. |
| 6:00 | 6:15 | ¼ | BREAK CIRC ECLRAD 5' TO BTM |
| 6:15 | 12:00 | 5¾ | DRLG 8½" HOLE |

## DRILLING CREW PAYROLL DATA

DATE: May 3/73
WELL NAME & NO.: Union Hkhavik F-38
COMPANY: Union Oil Co Ltd
TOOL PUSHER: Barry Armstrong — RIG NO. 1E

MORNING TOUR — P.M. — A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | A. Brundige | 12 |
| DRKMAN | | E. Symbleaky | 12 |
| MTRMAN | | B. Larsen | 12 |
| FIREMAN | | | |
| FLRMAN | | E. Edgehill | 12 |
| FLRMAN | | B. Taylor | 12 |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST-TIME ACCIDENT

DAY TOUR — A.M. — P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. Hopkins | 12 |
| DRKMAN | | H. Kleen | 12 |
| MTRMAN | | T. Langlois | 12 |
| FIREMAN | | | |
| FLRMAN | | G. Robertson | 12 |
| FLRMAN | | B. Marsh | 12 |
| FLRMAN | | J. Greenland | 12 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR — P.M. — P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 46 DATE MAY 2/73

OPERATOR: Union Oil Co LTD.
LEASE: Union AKLAVIK
WELL NO. F38 FIELD OR DIST. AKLAVIK COUNTY N.W.T. STATE CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. RIG NO. 1E

DRILL PIPE STRING NO. 3 SIZE 4 TOOL JOINT O.D. 5 TYPE THD 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: W.K. Mc Robb
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry L. Armstrong

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NAT | K380 | 14 |
| 2. | NAT | K380 | 14 |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | Mann | 40 #K55 | 67 | 2716.28 | | 2760 | CEM W/ 1300 SKS |
| | | | | | | | 216 WELL CEM. |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 7½ | 3 | 7½ |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | 5¾ | |
| LUBRICATE RIG | ¼ | ¾ | ¼ |
| DEVIATION SURVEY | ¼ | ¼ | ¼ |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| [illegible]ING | | | |
| TIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK: A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

## TIME SUMMARY (OFFICE USE ONLY)

DAY WORK
HRS. W/DP
HRS. WO/DP
HRS. STANDBY
TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.
NO. OF LINES SIZE
FEET SLIPPED
FEET CUT OFF
PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.

## MORNING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | | |
|---|---|---|---|
| 40 | STANDS D.P. | 3775.93 | FT. |
| | SINGLES D.P. | | FT. |
| 21 | D.C. I.D. 2¼ O.D. 6¼ | 618.28 | FT. |
| | D.C. I.D. O.D. | | FT. |
| 1 | STB. BODY O.D. | 8.18 | FT. |
| 1 | STB. BODY O.D. | 8.14 | FT. |
| 1 | RMR. STB. BODY O.D. | 8.30 | FT. |
| 1 | SUBS O.D. | 3.46 | FT. |
| | BIT OR C.B. | | FT. |
| 1 | Shock Sub | 8.46 | FT. |
| | KELLY DOWN | 14 | FT. |
| | TOTAL | 4434 | FT. |

WT. OF STRING 110 LBS.

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 13 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | M44N |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 413611 |
| DEPTH OUT | |
| DEPTH IN | 4327 |
| TOTAL FTG. | 107 |
| TOTAL HR. RUN | 23¼ |
| COND. OF BIT | DRLG. |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 100 | 300 | 700 |
| WEIGHT | 10.7 | 10.7 | 10.7 |
| VISC.-SEC | 75 | 70 | 67 |
| W.L.-C.C. | | | |
| FL.TR. CK. | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER: R Brundige

**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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4407 | 4436 | D | | | 65 | 22 | 1300 | 5½ | 71 | 5½ | | S |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 4423 | 3° | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 | 12¼ | ¼ | [redacted] Rig Serv & V BOP |
| 12¼ | 6¼ | 6 | Drlg. |
| 6¼ | 7 | ¼ | Survey. |
| 7 | 8 | 1 | Drlg. |

Held Blow Out Drill & Safety Meeting.

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | | |
|---|---|---|---|
| 40 | STANDS D.P. | 3765.93 | FT. |
| 1 | SINGLES D.P. | 31.81 | FT. |
| 21 | D.C. I.D. 2¼ O.D. 6¼ | 618.28 | FT. |
| | D.C. I.D. O.D. | | FT. |
| 1 | STB. BODY O.D. | 8.18 | FT. |
| 1 | STB. BODY O.D. | 8.14 | FT. |
| 1 | RMR. STB. BODY O.D. | 8.30 | FT. |
| 1 | SUBS O.D. | 3.46 | FT. |
| | BIT OR C.B. | | FT. |
| 1 | Shock Sub | 8.46 | FT. |
| | KELLY DOWN | 21.14 | FT. |
| | TOTAL | 4444.00 | FT. |

WT. OF STRING 110 LBS.

**BIT RECORD**

| | | |
|---|---|---|
| BIT NO. | 13 | 14 |
| SIZE | 8½ | 8½ |
| MFG. | SEC | SEC |
| TYPE | M44N | M44NS |
| NOZZLE NO. | 3 | 3 |
| NOZZLE SIZE | 16 | 16 |
| SER. NO. | 413611 | 911515 |
| DEPTH OUT | 4442 | |
| DEPTH IN | 4327 | 4442 |
| TOTAL FTG. | 115 | 2 |
| TOTAL HR. RUN | 26¼ | 1 |
| COND. OF BIT | 4-2-I | Drlg. |
| REAMER NO. | | |
| REAMER TYPE | | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 8:30 | | |
| WEIGHT | 10.7 | | |
| VISC.-SEC | 68 | | |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | 9.5 | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER: C Hopkins

**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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4436 | 4444 | D | | | 65 | 22 | 1300 | 5½ | 71 | 5½ | | S |
| | | | | | 45 | 15 | 1300 | 5½ | 71 | | | |
| | | | | | | 20 | | | | | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 4442 | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8⁰⁰ | 10⁰⁰ | 2 | Drlg 8½" Hole |
| 10⁰⁰ | 10¹⁵ | ¼ | Drop Survey |
| 10¹⁵ | 12¹⁵ | 2 | Hoist w/ Bit #13 |
| 12¹⁵ | 3⁰⁰ | 2¾ | Run in w/ Bit #14 - Clear Tight Hole on Even Std. of D.C.s |
| 3⁰⁰ | 4⁰⁰ | 1 | Drlg. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 14 |
| SIZE | 8½ |
| MFG. | SEC. |
| TYPE | M44NS |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 911515 |
| DEPTH OUT | |
| DEPTH IN | 4442 |
| TOTAL FTG. | 57 |
| TOTAL HR. RUN | 8½ |
| COND. OF BIT | DRLG. |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 4:00 | 6:30 | 8:30 |
| WEIGHT | 10.8 | 10.7 | 10.7 |
| VISC.-SEC | 67 | 60 | 60 |
| W.L.-C.C. | | | |
| FLTR. CK | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4444 | 4479 | D | | | 50 | 20 | 1300 | 5½ | 71 | 5½ | | S |
| | | | | | 60 | | | | | | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 4465 | 3° | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4⁰⁰ | 8⁴⁵ | 4¾ | Drlg 8½" Hole |
| 8⁴⁵ | 9⁰⁰ | ¼ | Survey. |
| 9⁰⁰ | 9¹¹ | ¼ | R&G Serv. |
| 9¹¹ | 12⁰⁰ | 2¾ | Drlg ½ Hole |

## DRILLING CREW PAYROLL DATA

DATE MAY 2/73
WELL NAME & NO. UNION AKLAVIK F38
COMPANY UNION OIL CO LTD.
TOOL PUSHER Barry L. Armstrong RIG NO. 1E

MORNING TOUR 12 P.M. 8 A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R BRUNDIGE | 12 |
| DRKMAN | | E SYMENKY | 12 |
| MTRMAN | | B LARSEN | 12 |
| FIREMAN | | | |
| FLRMAN | | E EDGHILL | 12 |
| FLRMAN | | B TAYLOR | 12 |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST-TIME ACCIDENT

DAY TOUR ____ A.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | O. HOPKINS | 12 |
| DRKMAN | | H. KLEEN | 12 |
| MTRMAN | | J. LOVELOTS | 12 |
| FIREMAN | | | |
| FLRMAN | | C. ALBERTSON | 12 |
| FLRMAN | | B. MARSH | 12 |
| FLRMAN | 66[illegible] | J. GREENLAND | 12 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR ____ P.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 45 — DATE May 1/73

OPERATOR: UNION OIL CO LTD
LEASE: UNION AKLAVIK
WELL NO. F38 — FIELD OR DIST. AKLAVIK — COUNTY N.W.T. — STATE CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. — RIG NO. 1E

DRILL PIPE STRING: NO. 2 — SIZE 4 — TOOL JOINT 5" O.D. — TYPE THD 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: W.R. McDIARMID
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry D. Armstrong

## PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NAT | K380 | 14 |
| 2. | NAT | K380 | 14 |
| 3. | | | |

## LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | NATIONAL | 40# K55 | 67 | 2766' | | 2760 | CEM W/1300 SAKS |
| | | | | | | | ALL WILL CIRC. |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 1½ | 7½ | 7½ |
| REAMING | 1 | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | ½ | | |
| LUBRICATE RIG | | ¼ | |
| DEVIATION SURVEY | | ¼ | ¼ |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | ½ | | |
| REPAIR RIG | | | |
| [illegible]ING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK: A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | |

## TIME SUMMARY (OFFICE USE ONLY)

DAY WORK
HRS. W/DP
HRS. WO/DP
HRS. STANDBY
TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.
NO. OF LINES — SIZE
FEET SLIPPED 23 feet.
FEET CUT OFF
PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.

## MORNING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 87 | STANDS D.P. | 5574.00 FT. |
| 2 | SINGLES D.P. | 65.13 FT. |
| 21 | D.C. 2⅞ & 6¾ I.D. O.D. | 618.25 FT. |
| | D.C. I.D. O.D. | FT. |
| 1 | STB. BODY O.D. | 8.18 FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | RMR. BODY O.D. | 8.30 FT. |
| 1 | SUBS O.D. | 3.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | SHOCK SUB | 8.46 FT. |
| | KELLY DOWN | 29 FT. |
| | TOTAL | 4330 FT. |
| WT. OF STRING | | 110 LBS. |

### BIT RECORD

| | |
|---|---|
| BIT NO. | 13 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | M44N |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 913611 |
| DEPTH OUT | |
| DEPTH IN | 4327 |
| TOTAL FTG. | 3 |
| TOTAL HR. RUN | ½ |
| COND. OF BIT | |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | | | |
| WEIGHT | T | | |
| VISC.-SEC | | R | |
| W.L.-C.C. | | | |
| FL.TR. CK. | | I | |
| PH | | | |
| SD. CONT. % | | P | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Baritc | 60sk | | |
| Benex | 2sks | | |

DRILLER: R Brundige

### 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.EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4327 | 4330 | D | | | 65 | 20 | 1300 | 5½ | 70 | 5½ | | S |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 4327 | 3° | | | | | | | |

### TIME LOG — DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

| FROM | TO | ELAPSED TIME | DETAILS |
|---|---|---|---|
| 12 | 2 30 | 2½ | DROPPED SURVEY & HOIST BIT #12. |
| 2 30 | 4 00 | 1½ | RUN in D.C. & LAY 20 DC DOWN & PICK UP 2 DC. |
| 4 00 | 4 30 | ½ | SLIPPED 23 feet LINE |
| 4 30 | 1 30 | 2 | RUN IN W/ BIT #13 |
| 1 30 | 7 30 | 1 | CLEAN OUT 15' FILL |
| 7 30 | 8 00 | ½ | DRLG. |

## DAY TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 39 | STANDS D.P. | 3671.94 FT. |
| 1 | SINGLES D.P. | 31.70 FT. |
| 21 | D.C. 2⅞ & 6¾ I.D. O.D. | 618.24 FT. |
| | D.C. I.D. O.D. | FT. |
| 1 | STB. BODY O.D. | 8.18 FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | RMR. BODY O.D. | 8.30 FT. |
| 1 | SUBS O.D. | 3.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | SHOCK SUB. | 8.46 FT. |
| | KELLY DOWN | 11.56 FT. |
| | TOTAL | 4373.00 FT. |
| WT. OF STRING | | 110 M LBS. |

### BIT RECORD

| | |
|---|---|
| BIT NO. | 13 |
| SIZE | 8½ |
| MFG. | SEC. |
| TYPE | M44N |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 913611 |
| DEPTH OUT | |
| DEPTH IN | 4327 |
| TOTAL FTG. | 46 |
| TOTAL HR. RUN | 8 |
| COND. OF BIT | RNG. |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 8 30 | 10 00 | 3 00 |
| WEIGHT | 10.7 | 10.7+ | 10.7+ |
| VISC.-SEC | 53 | 60 | 63 |
| W.L.-C.C. | | | |
| FL.TR. CK. | | | |
| PH | 9.5 | 9.5+ | 9.5+ |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | 15sk | | |
| Benex | 3 sk | | |
| Soda Ash | 2sk | | |

DRILLER: C. Hopkins

### 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.EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4330 | 4373 | D | | SHALE Top SCREEN IN Barite SHAKER | 65 | 20 | 1300 | 5½ | 71 | 5½ | 72 | S |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 4360 | 3° | | | | | | | |

### TIME LOG — DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

| FROM | TO | ELAPSED TIME | DETAILS |
|---|---|---|---|
| 8 00 | 9 15 | 1¼ | DRLG. 8½" HOLE |
| 9 15 | 9 30 | ¼ | REC SERV. & 4" P. RAMS |
| 9 30 | 3 15 | 5¾ | DRILL |
| 3 15 | 3 30 | ¼ | SURVEY |
| 3 30 | 4 00 | ½ | DRILL |

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 39 | STANDS D.P. | 3674.28 FT. |
| 2 | SINGLES D.P. | 61.70 FT. |
| 21 | D.C. 2⅞ & 6¾ I.D. O.D. | 618.28 FT. |
| | D.C. I.D. O.D. | FT. |
| 1 | STB. BODY O.D. | 8.18 FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | RMR. BODY O.D. | 8.30 FT. |
| 1 | SUBS O.D. | 3.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | SHOCK SUB | 8.46 FT. |
| | KELLY DOWN | 13.44 FT. |
| | TOTAL | 4407 FT. |
| WT. OF STRING | | 110 m. LBS. |

### BIT RECORD

| | |
|---|---|
| BIT NO. | 13 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | M44N |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 913611 |
| DEPTH OUT | |
| DEPTH IN | 4327 |
| TOTAL FTG. | 81 |
| TOTAL HR. RUN | 15¾ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 5 00 | 9 00 | 11 00 |
| WEIGHT | 10.7 | 10.7 | 10.7 |
| VISC.-SEC | 65 | 90 | 88 |
| W.L.-C.C. | | | |
| FL.TR. CK | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PAR.EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4373 | 4407 | D | | | 65 | 20 | 1300 | 5½ | 71 | 5½ | | S |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 4393 | 3° | | | | | | | |

### TIME LOG — DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

| FROM | TO | ELAPSED TIME | DETAILS |
|---|---|---|---|
| 4 00 | 10 15 | 6¼ | DRLG 8½" HOLE |
| 10 15 | 10 30 | ¼ | SURVEY |
| 10 30 | 12 00 | 1½ | DRLG. |

## DRILLING CREW PAYROLL DATA

DATE May
WELL NAME & NO. UNION AKLAVIK F38
COMPANY UNION OIL CO LTD.
TOOL PUSHER Barry D Armstrong — RIG NO. 1E

MORNING TOUR 12 P.M. 8 A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R BRUNDIGE | 12 |
| DRKMAN | | E SZYWENKY | 12 |
| MTRMAN | | D LARSEN | 12 |
| FIREMAN | | | |
| FLRMAN | | E EDGHILL | 12 |
| FLRMAN | | B TAYLOR | 12 |
| FLRMAN | | | |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

DAY TOUR _____ A.M. _____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. HOPKINS | 12 |
| DRKMAN | | H. KLEEN | 12 |
| MTRMAN | | S. LANGLOIS | 12 |
| FIREMAN | | | |
| FLRMAN | | A. ALBERTSON | 12 |
| FLRMAN | | B. MARSH | 12 |
| FLRMAN | | J. [illegible] | 4 |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR _____ P.M. _____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 44 — DATE APRIL 30/73

OPERATOR: UNION OIL CO. LTD. — LEASE: UNION AKLAVIK — WELL NO. F38 — FIELD OR DIST.: AKLAVIK — COUNTY: N.W.T. — STATE: CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. — RIG NO. 1E — DRILL PIPE STRING NO. 3 SIZE 4 — TOOL JOINT O.D. 5 — TYPE THD. 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: W.K. McIntosh — SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry D Stanbury

## PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | OAT | K380 | 14 |
| 2. | OAT | K380 | 14 |
| 3. | | | |

## LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | NATIONAL | 40 K55 | 47 | 2768 | | 2760 | CEM W/1300 SAK |
| | | | | | | | ALL WELL CEM |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | 7½ | 7½ | 7½ |
| DRILLING ACTUAL | | | |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | | |
| LUBRICATE RIG | ¼ | ¼ | ¼ |
| DEVIATION SURVEY | | ¼ | ¼ |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| [illegible] | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

## TIME SUMMARY (OFFICE USE ONLY)

DAY WORK
HRS. W/DP
HRS. WO/DP
HRS. STANDBY
TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.
NO. OF LINES — SIZE
FEET SLIPPED
FEET CUT OFF
PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.

## MORNING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 88 | STANDS D.P. | 3572.36 | FT. |
| | SINGLES D.P. | | FT. |
| 21 | D.C. 2⅞ I.D. 4¾ O.D. | 618.28 | FT. |
| | D.C. I.D. O.D. | | FT. |
| 1 | STB. BODY O.D. | 8.18 | FT. |
| 1 | STB. BODY O.D. | 8.14 | FT. |
| 1 | STB. BODY O.D. | 8.50 | FT. |
| 1 | SUBS O.D. | 3.46 | FT. |
| | BIT OR C.B. | | FT. |
| | | | FT. |
| | KELLY DOWN | 37 | FT. |
| | TOTAL | 4273 | FT. |
| WT. OF STRING | 108 | | LBS. |

### BIT RECORD

| | |
|---|---|
| BIT NO. | 12 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | DSJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 14 |
| SER. NO. | 413572 |
| DEPTH OUT | |
| DEPTH IN | 4253 |
| TOTAL FTG. | 42 |
| TOTAL HR. RUN | 10½ |
| COND. OF BIT | ORLg |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 1³⁰ | 5⁰⁰ | |
| WEIGHT | 10.7 | 10.7 | 10.6 |
| VISC.-SEC | 60 | 55 | 52 |
| W.L.-C.C. | | | |
| FL.TR. CK. | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Barite | 110 SKS. | | |
| Benex | 3 SKS. | | |

DRILLER: B Baundrage

### 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.EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4244 | 4273 | D | | | 30 | 30 35 | 1300 | 5½ | 70 | 6½ | | S |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 | 1 15 | 1¼ | DRLg. |
| 1 15 | 1 30 | ¼ | Rig Serv & w BOP. |
| 1 30 | 7 00 | 5½ | DRLg. |

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 38 | STANDS D.P. | 3579.00 | FT. |
| 1 | SINGLES D.P. | 31.55 | FT. |
| 21 | D.C. 2⅞ x 6¼ I.D. O.D. | 618.28 | FT. |
| | D.C. I.D. O.D. | | FT. |
| 1 | STB. BODY O.D. | 8.18 | FT. |
| 1 | STB. BODY O.D. | 8.14 | FT. |
| 1 | STB. BODY O.D. | 8.30 | FT. |
| 1 | SUBS O.D. | 3.45 | FT. |
| | BIT OR C.B. | | FT. |
| 1 | Shock Sub | 8.46 | FT. |
| | KELLY DOWN | 29.64 | FT. |
| | TOTAL | 4309.00 | FT. |
| WT. OF STRING | 178m | | LBS. |

### BIT RECORD

| | |
|---|---|
| BIT NO. | 12 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | DSJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 413572 |
| DEPTH OUT | |
| DEPTH IN | 4233 |
| TOTAL FTG. | 67 |
| TOTAL HR. RUN | 18 |
| COND. OF BIT | RW6 |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 8:30 | 11:00 | 3:30 |
| WEIGHT | 10.6 | | 10.6 |
| VISC.-SEC | 47 | | 7 |
| W.L.-C.C. | | | |
| FL.TR. CK. | | | |
| PH | 9.0 | | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Gel | 10 SK | Desco | 2 DSK |
| Soda Ash | 2 SK | | |
| Benex | 2 SK | | |

DRILLER: C Hopkins

### 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.EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4275 | 4300 | D | | | 30 | 35 | 1300 | 5½ | 71 | 6½ | | S |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 4264 | 3° | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 800 | 915 | 1¼ | DRLg. 8½" Hole |
| 915 | 930 | ¼ | Survey |
| 930 | 940 | ¼ | Rig Serv |
| [illegible] | | | |
| 945 | 400 | 6¼ | DRLg |

Hold Blow-Out Drill

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 37 | STANDS D.P. | 3517.00 | FT. |
| 2 | SINGLES D.P. | 63.13 | FT. |
| 21 | D.C. 2⅞ I.D. 4¾ O.D. | 618.28 | FT. |
| | D.C. I.D. O.D. | | FT. |
| 1 | STB. BODY O.D. | 8.18 | FT. |
| 1 | STB. BODY O.D. | 8.14 | FT. |
| 1 | STB. BODY O.D. | 8.50 | FT. |
| 1 | SUBS O.D. | 3.45 | FT. |
| | BIT OR C.B. | | FT. |
| 1 | Shock Sub | 8.46 | FT. |
| | KELLY DOWN | 24 | FT. |
| | TOTAL | 4327 | FT. |
| WT. OF STRING | 105m | | LBS. |

### BIT RECORD

| | |
|---|---|
| BIT NO. | 12 |
| SIZE | 8½ |
| MFG. | SEC. |
| TYPE | DSJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 413572 |
| DEPTH OUT | 4327 |
| DEPTH IN | 4233 |
| TOTAL FTG. | 94 |
| TOTAL HR. RUN | 25½ |
| COND. OF BIT | |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 5:30 | 9:30 | 10:30 |
| WEIGHT | 10.7 | 10.5 | 10.6 |
| VISC.-SEC | 53 | 56 | 55 |
| W.L.-C.C. | | | |
| FL.TR. CK | | | |
| PH | 9.4 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PAR.EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4300 | 4327 | D | | | 30 | 35 | 1300 | 5½" | 71 | 6½ | | S |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 4301 | 3 1/8 | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 400 | 645 | 9 3/4 | DRLG 8½" Hole |
| 645 | 700 | ¼ | Rig Serv. - 4½" Rams |
| 700 | 715 | ¼ | Survey |
| 715 | 12 | 4 3/4 | DRLG |

## DRILLING CREW PAYROLL DATA

DATE APRIL 30/73
WELL NAME & NO. UNION AKLAVIK F38
COMPANY UNION OIL CO. LTD.
TOOL PUSHER Barry D Stanbury — RIG NO. 1E

MORNING TOUR 12 P.M. 8 A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | K BAUNDRAGE | 12 |
| DRKMAN | | E SWEREKY | 12 |
| MTRMAN | | B LARSEN | 12 |
| FIREMAN | | | |
| FLRMAN | | E FENG HILL | 12 |
| FLRMAN | | B TAYLOR | 12 |
| FLRMAN | | | |

NO. OF DAYS _____ SINCE LAST LOST-TIME ACCIDENT

DAY TOUR _____ A.M. _____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. HOPKINS | 12 |
| DRKMAN | | H. KLEVEN | 12 |
| MTRMAN | | T. LANGLOIS | 12 |
| FIREMAN | | | |
| FLRMAN | | G. ALBERTSON | 12 |
| FLRMAN | | R MARSH | 12 |
| FLRMAN | | | |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR _____ P.M. _____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 43 — DATE APRIL 29/73

OPERATOR: Union Oil Co Ltd.

LEASE: Union AKLAVIK — WELL NO. F-38 — FIELD OR DIST. AKLAVIK — COUNTY N.W.T. — STATE CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. — RIG NO. 1E

DRILL PIPE STRING: NO. 2 — SIZE 4½ — TOOL JOINT O.D. 5 — TYPE THD 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: W.K. McIntosh

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry D Armstrong

## PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NAT | 4380 | 14 |
| 2. | NAT | K 380 | 14 |
| 3. | | | |

## LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9 5/8 | m4on | 40# K55 | 67 | 2765ft | | 2760 | Shamrock |
| | | | | | | | 200 sx w/ 1300 SAK |
| | | | | | | | Oil w/ Fill c.c.m. |

## TIME DISTRIBUTION–HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 7¾ | 9¼ | 2¾ |
| CLEAN OUT REAMING FILL | | | 1 |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | | 4 |
| LUBRICATE RIG | ¼ | ¼ | |
| DEVIATION SURVEY | | ¼ | ¼ |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| [illegible]ING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |

COMPLETION WORK: A. PERFORATING; B. TUBING TRIPS; C. SWABBING; D. TESTING; E. ADDITIONAL

TOTALS: 8 8 8

## TIME SUMMARY (OFFICE USE ONLY)

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.

NO. OF LINES — SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT STRENGTH

TON MI. DR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OR DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 37 | STANDS D.P. | 3499.98 FT. | |
| 1 | SINGLES D.P. | 30.78 FT. | |
| 21 | D.C. 2 7/8 x 6 3/4 I.D. | O.D. C.D. | 618.28 FT. |
| | D.C. I.D. | O.D. | FT. |
| 1 | STB. BODY | O.D. | 8.18 FT. |
| 1 | STB. BODY | O.D. | 8.14 FT. |
| 1 | RMR. BODY | O.D. | 8.30 FT. |
| 1 | SUBS | O.D. | 3.45 FT. |
| | BIT OR C.B. | | FT. |
| 1 | Shrock Sub | | 8.46 FT. |
| | KELLY DOWN | | 40 FT. |
| | TOTAL | | 4215 FT. |
| WT. OF STRING | | 108 M. | LBS. |

### BIT RECORD

| | |
|---|---|
| BIT NO. | 11 |
| SIZE | 8½ |
| MFG. | Sec |
| TYPE | DMT |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 14 |
| SER. NO. | 332947 |
| DEPTH OUT | |
| DEPTH IN | 4178 |
| TOTAL FTG. | 37 |
| TOTAL HR. RUN | 13¼ |
| COND. OF BIT | |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 200 | 400 | 700 |
| WEIGHT | 10.6+ | 10.6 | 10.5+ |
| VISC.–SEC | 60 | 58 | 55 |
| W.L.–C.C. | | | |
| FLTR. CK. | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Gel | 10 sks. | Soda Ash | 1 sk |
| Benex | 4 sks. | | |
| Barite | 40 sks | | |

DRILLER: R Brundige

### 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'EL–P COM'D–C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4194 | 4215 | D | | | 35 | 35 | 1300 | 5½ | 70 | 5½ | | S |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 00 | 3 00 | 3 | ORLg. |
| 3 00 | 3 15 | ¼ | Rig SERV. & V BOP. |
| 3 15 | 8 00 | 4¾ | ORLg. |

## DAY TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 37 | STANDS D.P. | 3485.98 FT. | |
| 2 | SINGLES D.P. | 61.87 FT. | |
| 21 | D.C. 2 7/8 x 6 3/4 I.D. | O.D. | 618.28 FT. |
| | D.C. I.D. | O.D. | FT. |
| 1 | STB. BODY | O.D. | 8.18 FT. |
| 1 | STB. BODY | O.D. | 8.14 FT. |
| 1 | ~~RMR.~~ STB. BODY | O.D. | 8.30 FT. |
| 1 | SUBS | O.D. | 3.45 FT. |
| | BIT OR C.B. | | FT. |
| 1 | Shrock Sub | | 8.46 FT. |
| | KELLY DOWN | | 24.50 FT. |
| | TOTAL | | 4232.00 FT. |
| WT. OF STRING | | 108 M. | LBS. |

### BIT RECORD

| | |
|---|---|
| BIT NO. | 11 |
| SIZE | 8½ |
| MFG. | Sec. |
| TYPE | DMT |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 332947 |
| DEPTH OUT | |
| DEPTH IN | 4178 |
| TOTAL FTG. | 54 |
| TOTAL HR. RUN | 20¾ |
| COND. OF BIT | Rno. |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 930 | 1200 | 200 |
| WEIGHT | 10.5 | 10.5 | 10.6 |
| VISC.–SEC | 50 | 49 | 66 |
| W.L.–C.C. | | | |
| FLTR. CK. | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

Dumped & Cleaned #1 Skit

MUD & CHEMICALS ADDED 2 ring Centr.

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Gel | 10 SAK | Bentex | 25 SAK |
| Dewred | 4 SAK | | |
| Celex | 1 SAK | | |

DRILLER: C. Hopkins

### FOOTAGE 17

| 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'EL–P COM'D–C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4215 | 4232 | D | | | 35 | 35 | 1300 | 5½ | 71 | 5½ | | S |
| | | | | | | 40 | | | | | | |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 4206 | 3° | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 800 | 830 | ½ | DRLG 8½" Hole |
| 830 | 845 | ¼ | Rig Serv. & 4" Rams |
| 845 | 900 | ¼ | Survey |
| 900 | 400 | 7 | DRLL |

Used 13 Rolls Polyethelene & 15 - 2" Bull Plugs For Fuel Storage

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 37 | STANDS D.P. | 3485.98 FT. | |
| 2 | SINGLES D.P. | 61.87 FT. | |
| 21 | D.C. 2 7/8 x 6 3/4 I.D. | O.D. | 618.28 FT. |
| | D.C. I.D. | O.D. | FT. |
| 1 | STB. BODY | O.D. | 8.18 FT. |
| 1 | STB. BODY | O.D. | 8.14 FT. |
| 1 | RMR. BODY | O.D. | 8.30 FT. |
| 1 | SUBS | O.D. | 3.45 FT. |
| | BIT OR C.B. | | FT. |
| 1 | Shrock Sub | | 8.46 FT. |
| | KELLY DOWN | | 37.50 FT. |
| | TOTAL | | 4244. FT. |
| WT. OF STRING | | 108 m. | LBS. |

### BIT RECORD

| | | |
|---|---|---|
| BIT NO. | 11 | 12 |
| SIZE | 8½ | 8½ |
| MFG. | Sec. | Sec |
| TYPE | DMT | DST |
| NOZZLE NO. | 3 | 3 |
| NOZZLE SIZE | 16 | 16 |
| SER. NO. | 332947 | 413872 |
| DEPTH OUT | 4233 | |
| DEPTH IN | 4178 | 4233 |
| TOTAL FTG. | 55 | 12 |
| TOTAL HR. RUN | 21 | 2½ |
| COND. OF BIT | | |
| REAMER NO. | | |
| REAMER TYPE | | |

### MUD RECORD

| | | |
|---|---|---|
| TIME | 400 | 1100 |
| WEIGHT | 10.6 | 10.3 |
| VISC.–SEC | 60 | 63 |
| W.L.–C.C. | | |
| FLTR. CK | | |
| PH | 9.5 | |
| SD. CONT. % | | |
| PRESSURE GRADIENT | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL–S PAR'EL–P COM'D–C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4232 | 4244 | D | | | 35 | 40 | 1300 | 5½ | 71 | 5½ | | S |
| | | | | | | | | X | | | | |
| | | | | | | | | 19" | | | | |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 4233 | 3° | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 400 | 415 | ¼ | ORLg 8½" Hole |
| 415 | 430 | ¼ | TRIP Survey |
| 430 | 630 | 2 | Hoist w/ Bit #11 Cleaned Box Thread on D.P. Sub Double |
| 630 | 8 30 | 2 | Change Bits & Run in Hole, Change Stab. Rubber |
| 8 30 | 9 00 | 1 | Clean out 15" Hole & Break Circ |
| 9 30 | 12 00 | 2½ | DRLG |

## DRILLING CREW PAYROLL DATA

DATE APRIL 29/73.

WELL NAME & NO. Union AKLAVIK F-38

COMPANY Union Oil Co Ltd.

TOOL PUSHER Barry D Armstrong — RIG NO. 1E

MORNING TOUR 12 P.M. 8 A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R BRUNDIGE | 12 |
| DRKMAN | | E SZWIENKOP | 12 |
| MTRMAN | | B LARSEN | 12 |
| FIREMAN | | | |
| FLRMAN | | E KOGHILL | 12 |
| FLRMAN | | B TAYLOR | 12 |
| FLRMAN | | | |

NO. OF DAYS _____ SINCE LAST LOST-TIME ACCIDENT

DAY TOUR _____ A.M. _____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | Q. HOPKINS | 12 |
| DRKMAN | | H. KLEEN | 12 |
| MTRMAN | | J. LANGLOIS | 12 |
| FIREMAN | | | |
| FLRMAN | | G. ALBERTSON | 12 |
| FLRMAN | | B. MARSH | 12 |
| FLRMAN | | | |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR _____ P.M. _____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | / | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 42 DATE APRIL 28/73

OPERATOR: Union Oil Co LTD.

LEASE: Union AKLAVIK

WELL NO. F38 FIELD OR DIST. AKLAVIK COUNTY N.W.T. STATE CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. RIG NO. 1E

DRILL PIPE STRING NO. 293 SIZE 4" TOOL JOINT O.D. 5" TYPE THD 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: K. McGillivray

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry D Armstrong

## PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NAT | K380 | 14 |
| 2. | NAT | K380 | 14 |
| 3. | | | |

## LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | m400 | 40 K55 | 67 | 2765' | | 2760 | CAM W/1300 SAK OIL WELL CEM. |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 6¾ | 4¼ | 5¾ |
| REAMING | | | 1½ |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | 3¼ | ¼ |
| LUBRICATE RIG | ¼ | | ¼ |
| DEVIATION SURVEY | ¼ | ¼ | |
| TEST B.O.P. | | | |
| SLIP DRILLING LINE | | | ¼ |
| REPAIR RIG | | | |
| [illegible] | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | ¾ | | |
| FISHING | | | |

COMPLETION WORK: A. PERFORATING; B. TUBING TRIPS; C. SWABBING; D. TESTING; E. ADDITIONAL

TOTALS: 8 8 8

## TIME SUMMARY (OFFICE USE ONLY)

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.

NO. OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS IN FROM MUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 37 | STANDS D.P. | 3499.18 | FT. |
| | SINGLES D.P. | | FT. |
| 21 | D.C. 2⅞ I.D. 6¼ O.D. | 618.28 | FT. |
| | D.C. I.D. O.D. | | FT. |
| 1 | STB. BODY O.D. | 8.18 | FT. |
| 1 | STB. BODY O.D. | 8.14 | FT. |
| 1 | RMR. STB. BODY O.D. | 8.30 | FT. |
| 1 | SUBS O.D. | 3.45 | FT. |
| | BIT OR C.B. | | FT. |
| 1 | SHOCKSUB | 8.46 | FT. |
| | KELLY DOWN | 25.65 | FT. |
| | TOTAL | 4170 | FT. |

WT. OF STRING 107 M. LBS.

### BIT RECORD

| | |
|---|---|
| BIT NO. | 10 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | DMT |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 14 |
| SER. NO. | 351865 |
| DEPTH OUT | |
| DEPTH IN | 4085 |
| TOTAL FTG. | 85 |
| TOTAL HR. RUN | 22 |
| COND. OF BIT | ORlg |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 100 | 300 | 700 |
| WEIGHT | 10.7 | 10.7 | 10.6 |
| VISC.-SEC | 60 | 60 | 53 |
| W.L.-C.C. | | | |
| FL.TR. CK. | | | |
| PH | | | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Soda Fish | 1 sac. | | |
| Benex | 1 sac. | | |

DRILLER B Brundige

### 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.EL.-P COM'D.-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4148 | 4170 | D | | | 35 | 40 | 1300 | 5½ | 72 | 5½ | | S |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 4145 | 3° | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 | 2 | 2 | ORlg. |
| 2 | 2 | ¼ | SLIP DRLG LINE. |
| 2 | 3 | ¼ | RIG SERV. V B.O.P. |
| 3 | 3 | ¼ | WORK ON SAND LINE. |
| 3 | 8 | 5 | ORlg. |

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 37 | STANDS D.P. | 3499.18 | FT. |
| 1 | SINGLES D.P. | 30.18 | FT. |
| 21 | D.C. 2⅞ I.D. 6¼ O.D. | 618.28 | FT. |
| | D.C. I.D. O.D. | | FT. |
| 1 | STB. BODY O.D. | 8.18 | FT. |
| 1 | STB. BODY O.D. | 8.14 | FT. |
| 1 | RMR. STB. BODY O.D. | 8.30 | FT. |
| 1 | SUBS O.D. | 3.45 | FT. |
| | BIT OR C.B. | | FT. |
| 1 | SHOCKSUB | 8.46 | FT. |
| | KELLY DOWN | 19.87 | FT. |
| | TOTAL | 4194. | FT. |

WT. OF STRING 108 LBS.

### BIT RECORD

| | | |
|---|---|---|
| BIT NO. | 10 | 11 |
| SIZE | 8½ | |
| MFG. | SEC | |
| TYPE | DMT | |
| NOZZLE NO. | 3 | |
| NOZZLE SIZE | 16 | |
| SER. NO. | 351865 | |
| DEPTH OUT | 4178 | |
| DEPTH IN | 4085 | |
| TOTAL FTG. | 93 | |
| TOTAL HR. RUN | 26¼ | |
| COND. OF BIT | 1-3-2 | |
| REAMER NO. | | |
| REAMER TYPE | | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 830 | 1130 | |
| WEIGHT | 10.6 | 10.5+ | |
| VISC.-SEC | 53 | 52 | |
| W.L.-C.C. | | | |
| FL.TR. CK. | | | |
| PH | 9.5 | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER C. Hopkins

### 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.EL.-P COM'D.-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4170 | 4178 | D | | | 35 | 40 | 1200 | 5½ | 72 | 5½ | | S |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 4178 | 3½° | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 800 | 1215 | 4¼ | DRLG 8½" HOLE |
| 1215 | 1230 | ¼ | DROP SURVEY @ 4178 |
| 1230 | 330 | 3 | HOIST W/BIT #10, BREAK BIT & RECOVER SURVEY |
| 330 | 400 | ½ | MAKE UP BIT & RUN IN DP |

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 37 | STANDS D.P. | 3499.18 | FT. |
| 1 | SINGLES D.P. | 30.18 | FT. |
| 21 | D.C. 2⅞ I.D. 6¼ O.D. | 618.25 | FT. |
| | D.C. I.D. O.D. | | FT. |
| 1 | STB. BODY O.D. | 8.18 | FT. |
| 1 | STB. BODY O.D. | 8.14 | FT. |
| 1 | RMR. STB. BODY O.D. | 8.30 | FT. |
| 1 | SUBS O.D. | 3.45 | FT. |
| | BIT OR C.B. | | FT. |
| 1 | SHOCKSUB | 8.46 | FT. |
| | KELLY DOWN | 19.87 | FT. |
| | TOTAL | 4194. | FT. |

WT. OF STRING 108 LBS.

### BIT RECORD

| | |
|---|---|
| BIT NO. | 11 |
| SIZE | 8½ |
| MFG. | SEC. |
| TYPE | DMT |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 339947 |
| DEPTH OUT | |
| DEPTH IN | 4178 |
| TOTAL FTG. | 16 |
| TOTAL HR. RUN | 5½ |
| COND. OF BIT | |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 700 | 800 | 1130 |
| WEIGHT | 10.5+ | 10.5 | 10.6+ |
| VISC.-SEC | 47 | 47. | 70. |
| W.L.-C.C. | | | |
| FL.TR. CK | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PAR EL.-P COM'D.-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4178 | 4194 | D | | | 35 | 10 | 1300 | 5½ | 72 | 5½ | | S |
| | | | | | | 30 | | | | | | |
| | | | | | | 35 | | | | | | |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 400 | 430 | ½ | RUN IN DP, CLEAN & THREADS |
| 430 | 445 | ¼ | SLIP 23' DRLG LINE |
| 445 | 500 | ¼ | RIG SERV. |
| 500 | 600 | 1 | RUN IN DP |
| 600 | 630 | ½ | BREAK CIRC & REAM 5' |
| 630 | 1200 | 5½ | DRLG 8½" HOLE |

## DRILLING CREW PAYROLL DATA

DATE APRIL 28/73

WELL NAME & NO. Union AKLAVIK F-38

COMPANY Union OIL CO LTD.

TOOL PUSHER Barry D Armstrong RIG NO. 1E

### MORNING TOUR 8 P.M. 8 A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R BRUNDIGE | 12 |
| DRKMAN | | E SYWENKY | 12 |
| MTRMAN | | B LARSEN | 12 |
| FIREMAN | | | |
| FLRMAN | | 1E EDGHILL | 12 |
| FLRMAN | | B TAYLOR | 12 |
| FLRMAN | | | |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

### DAY TOUR _____ A.M. _____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. HOPKINS | 12 |
| DRKMAN | | H KLEEN | 12 |
| MTRMAN | | T LAWLOTS | 12 |
| FIREMAN | | | |
| FLRMAN | | G ALBERTSON | 12 |
| FLRMAN | | B. MARSH | 12 |
| FLRMAN | | | |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

### EVENING TOUR _____ P.M. _____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 40 — DATE APRIL 27/73

OPERATOR: Union Oil Co LTD — LEASE: Union AKLAVIK — WELL NO. F-38 — FIELD OR DIST.: AKLAVIK — COUNTY: N.W.T. — STATE: CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD — RIG NO. 1E — DRILL PIPE STRING NO. 293, SIZE 4" — TOOL JOINT 5 1/2" O.D. TYPE THD. 3 1/2 IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: W.T. McSmith — SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry D Armstrong

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NAT | K380 | 14 |
| 2. | NAT | K380 | 14 |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9 5/8 | MANN | 40# K55 | 67 | 2765' | | 2760 | CSM w/1300 SAK OIL WELL CEM. |
| | | | | | | | |
| | | | | | | | |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 2 | 7 1/2 | 7 1/4 |
| REAMING | | 1/4 | |
| CONDITIONING MUD & CIRCULATING | 1/2 | | |
| TRIPS | 1/2 | | |
| LUBRICATE RIG | | 1/4 | |
| DEVIATION SURVEY | | | 1/4 |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| [illegible]ING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

## TIME SUMMARY (OFFICE USE ONLY)

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.

NO. OF LINES — SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

| NO. | DRILLING ASSEMBLY AT END OF TOUR | | BIT RECORD | | MUD RECORD | | 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'EL—P COM'D—C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 36 | STANDS D.P. | 3405.26 FT. | BIT NO. | 9 / 10 | TIME | 2[00] | 4076 | 4085 | | | | 35 | 35 | 1300 | 5 1/2 | | 5 1/2 | 72 | S |
| | SINGLES D.P. | FT. | SIZE | 8 1/2 / 8 1/2 | WEIGHT | 10.7. | | | | | | | | | | | | | |
| 21 | D.C. 2 7/8" I.D. 6 3/4" O.D. | 618.28 FT. | MFG. | SEC / SEC | VISC.-SEC | 58' | | | | | | | | | | | | | |
| | D.C. I.D. O.D. | FT. | TYPE | DMJ / DMJ | W.L.-C.C. | | | | | | | | | | | | | | |
| | | | NOZZLE NO. | 3 / 3 | FL.TR. CK. | | | | | | | | | | | | | | |
| 1 | STB. BODY O.D. | 8.18 FT. | NOZZLE SIZE | 16 / 16 | PH | | | | | | | | | | | | | | |
| 1 | STB. BODY O.D. | 8.14 FT. | SER. NO. | 35186 / 35186 | SD. CONT. % | | | | | | | | | | | | | | |
| 1 | RMR. STB BODY O.D. | 8.30 FT. | DEPTH OUT | 4085 | PRESSURE GRADIENT | | | | | | | | | | | | | | |
| 1 | SUBS O.D. | 3.45' FT. | DEPTH IN | 3954 / 4085 | | | | | | | | | | | | | | | |
| | BIT OR C.B. | FT. | TOTAL FTG. | 131 | MUD & CHEMICALS ADDED | | | | | | | | | | | | | | |
| 1 | SHOCK SUB | 4.46 FT. | TOTAL HR. RUN | 3 3/4 | TYPE | AMT. | TYPE | AMT. | | | | | | | | | | | |
| | KELLY DOWN | 35.00 FT. | COND. OF BIT | 8 4 1 | Barite | 250 sks. | | | | | | | | | | | | | |
| | TOTAL | 4085' FT. | REAMER NO. | | Benex | 8 sks | | | | | | | | | | | | | |
| WT. OF STRING | 106m LBS. | | REAMER TYPE | | DRILLER | B Brundige | | | | | | | | | | | | | |

| DEVIATION RECORD | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|---|
| | 4085 | 2 3/4 | | | | | | | |

| TIME LOG FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12[00] | 2[00] | 2 | DRLg. |
| 2[00] | 2:30 | 1/2 | CIRC. SAMPLE. 4085' |
| 2[30] | 5[00] | 2 1/2 | DROPPED SURVEY. HOIST BIT #9 |
| 5[00] | 6[00] | 1 | CHAIN STB RUBBERS |
| 6[00] | 8[00] | 2 | RUN IN w/ BIT #10 |

## EVENING TOUR

| NO. | DRILLING ASSEMBLY AT END OF TOUR | | BIT RECORD | | MUD RECORD | | | 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'EL—P COM'D—C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 36 | STANDS D.P. | 3393.94 FT. | BIT NO. | 10 | TIME | 930 | 12[00] 300 | 4085 | 4122 | D | | | 35 | 15 / 35 | 1300 | 5 1/2 | | 5 1/2 | 71 | S |
| 1 | SINGLES D.P. | 31.70 FT. | SIZE | 8 1/2 | WEIGHT | 10.8 | 10.8 10.8 | | | | | | | | | X | | X | | |
| 21 | D.C. 2 7/8" x 6 3/4" I.D. O.D. | 618.28 FT. | MFG. | SEC | VISC.-SEC | 80 | 72 65 | | | | | | | | | 14 | | 14 | | |
| | D.C. I.D. O.D. | FT. | TYPE | DMJ | W.L.-C.C. | | | | | | | | | | | | | | | |
| | | | NOZZLE NO. | 3 | FL.TR. CK. | | | | | | | | | | | | | | | |
| 1 | STB. BODY O.D. | 8.18 FT. | NOZZLE SIZE | 16 | PH | 9.0 | 9.0 | | | | | | | | | | | | | |
| 1 | STB. BODY O.D. | 8.14 FT. | SER. NO. | 351865 | SD. CONT. % | | | | | | | | | | | | | | | |
| 1 | RMR. STB BODY O.D. | 8.30 FT. | DEPTH OUT | | PRESSURE GRADIENT | | | | | | | | | | | | | | | |
| 1 | SUBS O.D. | 3.45 FT. | DEPTH IN | 4085' | | | | | | | | | | | | | | | | |
| | BIT OR C.B. | FT. | TOTAL FTG. | 37 | MUD & CHEMICALS ADDED | | | | | | | | | | | | | | | |
| 1 | SHOCK SUB | 8.46 FT. | TOTAL HR. RUN | 7 1/2 | TYPE | AMT. | TYPE | AMT. | | | | | | | | | | | | |
| | KELLY DOWN | 40.00 FT. | COND. OF BIT | RNG | | | | | | | | | | | | | | | | |
| | TOTAL | 4129.00 FT. | REAMER NO. | | | | | | | | | | | | | | | | | |
| WT. OF STRING | 107 M LBS. | | REAMER TYPE | | DRILLER | C. Hopkins | | | | | | | | | | | | | | |

| DEVIATION RECORD | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

| TIME LOG FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8[00] | 8[15] | 1/4 | CLEAN 10' TO BTM. |
| 8[15] | 9[45] | 1 1/2 | DRLG. 8 1/2" HOLE |
| 9[45] | 10[00] | 1/4 | RIG SERV. & U.B.O.P.'S |
| 10[00] | 4[00] | 18 | DRLG |

| NO. | DRILLING ASSEMBLY AT END OF TOUR | | BIT RECORD | | MUD RECORD | | | 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'EL—P COM'D—C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 36 | STANDS D.P. | 3462.26 FT. | BIT NO. | 10 | TIME | 530 | 8[00] | 4122 | 4148 | D | | DUMP & CLEAN SUCTION TANK | 35 | 35 | 1300 | 5 1/2 | 72 | 5 1/2 | | S |
| 2 | SINGLES D.P. | 63.35 FT. | SIZE | 8 1/2 | WEIGHT | 10.7+ | 10.7. | | | | | | | | | X | | X | | |
| 21 | D.C. 2 7/8" x 6 3/4" I.D. O.D. | 618.28 FT. | MFG. | SEC | VISC.-SEC | 68 | 61 | | | | | | | | | 14 | | 14 | | |
| | D.C. I.D. O.D. | FT. | TYPE | DMJ | W.L.-C.C. | | | | | | | | | | | | | | | |
| | | | NOZZLE NO. | 3 | FL.TR. CK | | | | | | | | | | | | | | | |
| 1 | STB. BODY O.D. | 8.18 FT. | NOZZLE SIZE | 16 | PH | 9 | | | | | | | | | | | | | | |
| 1 | STB. BODY O.D. | 8.14 FT. | SER. NO. | 351865 | SD. CONT. % | | | | | | | | | | | | | | | |
| 1 | RMR. STB BODY O.D. | 8.30 FT. | DEPTH OUT | | PRESSURE GRADIENT | | | | | | | | | | | | | | | |
| 1 | SUBS O.D. | 3.45 FT. | DEPTH IN | 4085' | | | | | | | | | | | | | | | | |
| | BIT OR C.B. | FT. | TOTAL FTG. | 64 | MUD & CHEMICALS ADDED | | | | | | | | | | | | | | | |
| 1 | SHOCK SUB | 8.46 FT. | TOTAL HR. RUN | 15 3/4 | TYPE | AMT. | TYPE | AMT. | | | | | | | | | | | | |
| | KELLY DOWN | 35.05 FT. | COND. OF BIT | ORLg. | | | | | | | | | | | | | | | | |
| | TOTAL | 4148 FT. | REAMER NO. | | | | | | | | | | | | | | | | | |
| WT. OF STRING | 107 m LBS. | | REAMER TYPE | | DRILLER | | | | | | | | | | | | | | | |

| DEVIATION RECORD | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|---|
| | 4133 | 30 | | | | | | | |

| TIME LOG FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4[00] | 4[15] | 1/4 | DRLG 8 1/2" HOLE |
| 4[15] | 4[30] | 1/4 | SURVEY & RTG SERV |
| 4[30] | 12[00] | 7 1/2 | DRLG |

## DRILLING CREW PAYROLL DATA

DATE APRIL 27/73

WELL NAME & NO. Union AKLAVIK F-38

COMPANY Union Oil Co LTD

TOOL PUSHER Barry D Armstrong — RIG NO. 1E

MORNING TOUR 12[00] P.M. 8[00] A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | B BRUNDIGE | 12 |
| DRKMAN | | F. SYWYK Jnr. | 12 |
| MTRMAN | | B LARSEN | 12 |
| FIREMAN | | | |
| FLRMAN | | E. E. DOGHILL | 12 |
| FLRMAN | | B TAYLOR | 12 |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST-TIME ACCIDENT

DAY TOUR ____ A.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. HOPKINS | 12 |
| DRKMAN | | H. KLEEN | 12 |
| MTRMAN | | T. LANGLOIS | 12 |
| FIREMAN | | | |
| FLRMAN | | C. ROBERTSON | 12 |
| FLRMAN | | B. MARSH | 12 |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR ____ P.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 40 DATE APRIL 27/73

OPERATOR: Union Oil Co LTD
LEASE: Union AKLAVIK
WELL NO. F-38
FIELD OR DIST.: AKLAVIK
COUNTY: N.W.T.
STATE: CANADA.

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD
RIG NO.: 1E
DRILL PIPE STRING NO. 243 SIZE 4½"
TOOL JOINT O.D. 5"
TYPE THD. 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: W.K. McSmith
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry D Armstrong

PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NAT | K380 | 14 |
| 2. | NAT | K380 | 14 |
| 3. | | | |

LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9 5/8 | MAYO | 40# K55 | 67 | 2765' | | 2760 | CSM W/1300 SAK OIL W/ 3% CC. |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 2 | 7½ | 7¾ |
| REAMING | | ¼ | |
| CONDITIONING MUD & CIRCULATING | 1/4 | | |
| TRIPS | ¾ | | |
| LUBRICATE RIG | | ¼ | |
| DEVIATION SURVEY | | | 1/4 |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| [illegible]ING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK
HRS. W/DP
HRS. WO/DP
HRS. STANDBY
TOTAL DAY WORK

WIRE LINE RECORD

REEL NO.
NO. OF LINES SIZE
FEET SLIPPED
FEET CUT OFF
PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.

## MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 36 | STANDS D.P. | 3405.26 FT. |
| | SINGLES D.P. | FT. |
| 21 | D.C. 2¾ I.D. 6¼ O.D. | 618.28 FT. |
| | D.C. I.D. O.D. | FT. |
| 1 | STB. BODY O.D. | 8.18 FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | RMR. STB BODY O.D. | 8.30 FT. |
| 1 | SUBS O.D. | 3.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | SHOCK SUB | 4.46 FT. |
| | KELLY DOWN | 35.00 FT. |
| | TOTAL | 4085' FT. |
| WT. OF STRING | 166m | LBS. |

BIT RECORD

| | | |
|---|---|---|
| BIT NO. | 9 | 10 |
| SIZE | 8½ | 8½ |
| MFG. | SEC | SEC |
| TYPE | DMJ | DMJ |
| NOZZLE NO. | 3 | 3 |
| NOZZLE SIZE | 14 | 14 |
| SER. NO. | 351861 | 351865 |
| DEPTH OUT | 4085 | |
| DEPTH IN | 3954 | 4085 |
| TOTAL FTG. | 131 | |
| TOTAL HR. RUN | 38¾ | |
| COND. OF BIT | 8 4 1 | |
| REAMER NO. | | |
| REAMER TYPE | | |

MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 9:00 | | |
| WEIGHT | 10.7 | | |
| VISC.-SEC | 58 | | |
| W.L.-C.C. | | | |
| FL TR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Barite | 250 sks. | | |
| Benex | 8 sks. | | |

DRILLER: R Brundige

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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4076 | 4085 | | | | 35 | 35 | 1300 | 5½ | | 5½ | 72 | S |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 4085 | 2 7/4 | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 00 | 2 00 | 2 | DRLG. |
| 2 00 | 2:30 | ½ | CIRC. SAMPLE. 4085' |
| 2 30 | 5 00 | 2½ | DROPPED SURVEY HOIST BIT #9 |
| 5 00 | 6 00 | 1 | CHAIN STB BUMPERS |
| 6 00 | 8 00 | 2 | RUN IN W/ BIT #10 |

## EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 36 | STANDS D.P. | 3393.94 FT. |
| 1 | SINGLES D.P. | 31.70 FT. |
| 21 | D.C. 2 7/8 I.D. 6¾ O.D. | 613.28 FT. |
| | D.C. I.D. O.D. | FT. |
| 1 | STB. BODY O.D. | 8.18 FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | RMR. STB BODY O.D. | 8.30 FT. |
| 1 | SUBS O.D. | 3.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | SHOCK SUB | 3.46 FT. |
| | KELLY DOWN | 40.00 FT. |
| | TOTAL | 4122.00 FT. |
| WT. OF STRING | 107 M | LBS. |

BIT RECORD

| | | |
|---|---|---|
| BIT NO. | 10 | |
| SIZE | 8½ | |
| MFG. | SEC | |
| TYPE | DMJ | |
| NOZZLE NO. | 3 | |
| NOZZLE SIZE | 16 | |
| SER. NO. | 351865 | |
| DEPTH OUT | | |
| DEPTH IN | 4085' | |
| TOTAL FTG. | 37 | |
| TOTAL HR. RUN | 7½ | |
| COND. OF BIT | RNG | |
| REAMER NO. | | |
| REAMER TYPE | | |

MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 9 30 | 12 00 | 3 00 |
| WEIGHT | 10.8 | 10.8 | 10.8 |
| VISC.-SEC | 80 | 72 | 65 |
| W.L.-C.C. | | | |
| FL TR. CK. | | | |
| PH | 9.0 | 9.0 | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER: C. Hopkins

FOOTAGE 37

| 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4085 | 4122 | D | | | 35 | 15 | 1300 | 5½ | | 5½ | 71 | S |
| | | | | | | 35 | | X | | X | | |
| | | | | | | | | 14 | | 14 | | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8 00 | 8 15 | 1/4 | CLEAN 10' TO BTM. |
| 8 15 | 9 45 | 1 1/2 | DRLG. 8½" HOLE |
| 9 45 | 10 00 | 1/4 | RIG SERV. & U.B.O.P.'S |
| 10 00 | 4 00 | | DRLG |

## EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 36 | STANDS D.P. | 3404.26 FT. |
| 2 | SINGLES D.P. | 63.35 FT. |
| 21 | D.C. 2 7/8 I.D. 6¾ O.D. | 618.98 FT. |
| | D.C. I.D. O.D. | FT. |
| 1 | STB. BODY O.D. | 8.18 FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | RMR. STB BODY O.D. | 8.30 FT. |
| 1 | SUBS O.D. | 3.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | SHOCK SUB | 8.46 FT. |
| | KELLY DOWN | 35.06 FT. |
| | TOTAL | 4148 FT. |
| WT. OF STRING | 107 m | LBS. |

BIT RECORD

| | | |
|---|---|---|
| BIT NO. | 10 | |
| SIZE | 8½ | |
| MFG. | SEC | |
| TYPE | DMJ | |
| NOZZLE NO. | 3 | |
| NOZZLE SIZE | 16 | |
| SER. NO. | 351865 | |
| DEPTH OUT | | |
| DEPTH IN | 4085' | |
| TOTAL FTG. | 64 | |
| TOTAL HR. RUN | 15 1/2 | |
| COND. OF BIT | ORLy. | |
| REAMER NO. | | |
| REAMER TYPE | | |

MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 5 30 | 8 00 | |
| WEIGHT | 10.7+ | 10.7 | |
| VISC.-SEC | 68 | 61 | |
| W.L.-C.C. | | | |
| FL TR. CK | | | |
| PH | 9 | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4122 | 4148 | D | | DUMP & CLEAN SUCTION TANK | 35 | 35 | 1300 | 5½ | 72 | 5½ | | S |
| | | | | | | | | X | | X | | |
| | | | | | | | | 14 | | 14 | | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 4123 | 30 | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4 00 | 4 15 | 1/4 | DRLG 8½" HOLE |
| 4 15 | 4 30 | 1/4 | SURVEY & RIG SERV |
| 4 30 | 12 00 | 7½ | DRLG |

DRILLING CREW PAYROLL DATA

DATE APRIL 27/73
WELL NAME & NO. Union AKLAVIK F-38
COMPANY Union Oil Co LTD.
TOOL PUSHER Barry D Armstrong RIG NO. 1E

MORNING TOUR 12 P.M. 8 A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R BRUNDIGE | 12 |
| DRKMAN | | F. SYVERTSEN | 12 |
| MTRMAN | | B LARSEN | 12 |
| FIREMAN | | | |
| FLRMAN | | E. ENGHILL | 12 |
| FLRMAN | | B TAYLOR | 12 |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

DAY TOUR ____ A.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. HOPKINS | 12 |
| DRKMAN | | H. KLEEN | 12 |
| MTRMAN | | J. LANGLOIS | 12 |
| FIREMAN | | | |
| FLRMAN | | C. ROBERTSON | 12 |
| FLRMAN | | B. MORGAN | 12 |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR ____ P.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

FOR COPY

# DAILY DRILLING REPORT

REPORT NO. 40 DATE April 26/73

OPERATOR: Union Oil Co. LTD.
LEASE: Union Aklavik
WELL NO. F38 FIELD OR DIST. Aklavik COUNTY N.W.T. STATE Canada
CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. RIG NO. 1E
DRILL PIPE STRING NO. 223 SIZE 4" TOOL JOINT TYPE THD. 3½ IF O.D. 5"
SIGNATURE OF OPERATOR'S REPRESENTATIVE: W.K. McIntosh
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry J. Armstrong

## PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NAT | K 350 | 14" |
| 2. | NAT | K 380 | 14" |
| 3. | | | |

## LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | Mann | 40# K55 | 67 | 2765.07 | | 2760 | Cem. w/1300 SKS |
| | | | | | | | Oil Well Cem. |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 7¾ | 7¾ | 5¾ |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING SAMPLE | | | 1¼ |
| TRIPS | | | |
| LUBRICATE RIG | ¼ | ¼ | ¼ |
| DEVIATION SURVEY | ¼ | | |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| [illegible]ING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER W.O.O. | | | 3¼ |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | |

## TIME SUMMARY (OFFICE USE ONLY)

| | | | |
|---|---|---|---|
| DAY WORK | | | |
| HRS. W/DP | | | |
| HRS. WO/DP | | | |
| HRS. STANDBY | | | |
| TOTAL DAY WORK | | | |

## WIRE LINE RECORD

REEL NO.
NO. OF LINES SIZE
FEET SLIPPED
FEET CUT OFF
PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.

## DAY TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 35 | STANDS D.P. | 3310.67 FT. |
| 2 | SINGLES D.P. | 61.91 FT. |
| | D.C. I.D. O.D. | FT. |
| 21 | D.C. 2⅞ x 6¾ I.D. O.D. | 618.26 FT. |
| 1 | STB. BODY O.D. | 8.19 FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | RMR. STB. BODY O.D. | 8.30 FT. |
| 1 | SUBS O.D. | 3.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock sub | 9.46 FT. |
| | KELLY DOWN | 11.97 FT. |
| | TOTAL | 4031 FT. |

WT. OF STRING 106 M. LBS.

### BIT RECORD

| | |
|---|---|
| BIT NO. | 9 |
| SIZE | 8½ |
| MFG. | Sec |
| TYPE | DMT |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 351861 |
| DEPTH OUT | |
| DEPTH IN | 3954 |
| TOTAL FTG. | |
| TOTAL HR. RUN | 23¼ |
| COND. OF BIT | Drlg |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 2⁰⁰ | 4⁰⁰ | 7⁰⁰ |
| WEIGHT | 10.2 | 10.2 | 10.2 |
| VISC.-SEC | 57 | 55 | 52 |
| W.L.-C.C. | | | 8.0 |
| FL TR. CK. | | | 2/32 |
| PH | | | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|

DRILLER R. Hanley

### FOOTAGE

| FROM | TO | DR.-D RM.-R CORE.-C | CORE NO. |
|---|---|---|---|
| 4008 | 4031 | D | |

### FORMATION (SHOW CORE RECOVERY)

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 4020 | 2½ | | | | | | | |

| 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|
| 35 | 35 | 1300 | 5½ | 72 | 5½ | | S |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12⁰⁰ | 6.45 | 6¾ | Drlg. |
| 6.45 | 7⁰⁰ | ¼ | Survey |
| 7⁰⁰ | 8.00 | 1 | Drlg. |

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 35 | STANDS D.P. | 3310.67 FT. |
| 2 | SINGLES D.P. | 61.91 FT. |
| | D.C. I.D. O.D. | FT. |
| 21 | D.C. 2⅞ x 6¾ I.D. O.D. | 618.28 FT. |
| 1 | STB. BODY O.D. | 8.19 FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | RMR. STB. BODY O.D. | 8.30 FT. |
| 1 | SUBS O.D. | 3.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock sub | 9.46 FT. |
| | KELLY DOWN | 36. FT. |
| | TOTAL | 4055 FT. |

WT. OF STRING 106 M. LBS.

### BIT RECORD

| | |
|---|---|
| BIT NO. | 9 |
| SIZE | 8½ |
| MFG. | Sec |
| TYPE | DMT |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 351861 |
| DEPTH OUT | |
| DEPTH IN | 3954 |
| TOTAL FTG. | 101 |
| TOTAL HR. RUN | 31 |
| COND. OF BIT | Drlg |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 8⁰⁰ | 11⁰⁰ | 3⁰⁰ |
| WEIGHT | 10.2 | 10.2 | 10.2 |
| VISC.-SEC | 51 | 50 | 65 |
| W.L.-C.C. | 8.0 | 8.0 | |
| FLTR. CK. | 2/32 | 2/32 | |
| PH | 9.5 | 9.5 | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Gel | 10 sks | | |
| Benex | 2 sks | | |
| Barite | 10 sks | | |

DRILLER R. Brundige

### FOOTAGE

| FROM | TO | DR.-D RM.-R CORE.-C | CORE NO. |
|---|---|---|---|
| 4031 | 4055 | D | |

### FORMATION (SHOW CORE RECOVERY)

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

| 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|
| 35 | 35 | 1300 | 5½ | 72 | 5½ | 72 | S |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8 | 8.45 | ¾ | DRLg. |
| 8.45 | 9.00 | ¼ | Rig SERV. & V B.O.P. |
| 9.00 | 4.00 | 7 | DRLg. |

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 36 | STANDS D.P. | 3409.60 FT. |
| | SINGLES D.P. | FT. |
| | D.C. I.D. O.D. | FT. |
| 21 | D.C. 9⅜ x 6⅞ I.D. O.D. | 618.28 FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | STB. BODY O.D. | 8.19 FT. |
| 1 | RMR. STB. BODY O.D. | 8.30 FT. |
| 1 | SUBS O.D. | 3.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | SHOCK | 9.46 FT. |
| | KELLY DOWN | 36.24 FT. |
| | TOTAL | 4076.00 FT. |

WT. OF STRING 107 M. LBS.

### BIT RECORD

| | |
|---|---|
| BIT NO. | 9 |
| SIZE | 8½ |
| MFG. | SEC. |
| TYPE | DMT |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 351861 |
| DEPTH OUT | |
| DEPTH IN | 3954 |
| TOTAL FTG. | 122 |
| TOTAL HR. RUN | 36¾ |
| COND. OF BIT | RNG |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 4⁰⁰ | 7³⁰ | 11³⁰ |
| WEIGHT | 10.0 | 10.2 | 10.3+ |
| VISC.-SEC | 75 | 63 | 61 |
| W.L.-C.C. | | | |
| FLTR. CK | | | |
| PH | | 9.0 | 9.0 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| BARITE | 65 SAXS | | |

DRILLER C. Hopkins

### FOOTAGE 21

| FROM | TO | DR.-D RM.-R CORE.-C | CORE NO. |
|---|---|---|---|
| 4055 | 4076 | D | |

### FORMATION (SHOW CORE RECOVERY)

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

| 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|
| 35 | 35 | 1300 | 5½ | | 5½ | 72 | S |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4⁰⁰ | 5.45 | 1¾ | DRLg. 8½" Hole |
| 5.45 | 6.15 | ½ | Circ. Sample @ 4060 |
| 6.15 | 6.30 | ¼ | Rig SERV. & V 4" Rams |
| 6.30 | 9.15 | 2¾ | DRLg. |
| 9.15 | 10⁰⁰ | ¾ | Circ. Sample @ 4070 |
| 10⁰⁰ | 10.45 | ¾ | W.O.D. & Mix Barite |
| 10.45 | 12⁰⁰ | 1¼ | DRLg. |

## DRILLING CREW PAYROLL DATA

DATE April 26/73
WELL NAME & NO. Union Aklavik F38
COMPANY Union Oil Co. LTD.
TOOL PUSHER Barry J. Armstrong RIG NO. 1E

MORNING TOUR ____ P.M. ____ A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. | |
|---|---|---|---|---|
| DRILLER | | R. Henley | 8 | T |
| DRKMAN | | C. Campbell | 8 | T |
| MTRMAN | | D. McLaughlin | 8 | T |
| FIREMAN | | | | |
| FLRMAN | | Stan Shumacher | 8 | T |
| FLRMAN | | DeTasman | 8 | T |
| FLRMAN | | | | |

NO. OF DAYS ____ SINCE LAST LOST-TIME ACCIDENT

DAY TOUR ____ A.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. | |
|---|---|---|---|---|
| DRILLER | | R. Brundige | 8 | |
| DRKMAN | | E. Symonenkyo | 8 | |
| MTRMAN | | A. Larsen | 8 | |
| FIREMAN | | | | |
| FLRMAN | | E. Englehill | 8 | |
| FLRMAN | | B. Taylor | 8 | |
| FLRMAN | | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR 4⁰⁰ P.M. 12⁰⁰ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. | |
|---|---|---|---|---|
| DRILLER | | C. Hopkins | 8 | T |
| DRKMAN | | H. Kleen | 8 | T |
| MTRMAN | | J. Langlois | 8 | T |
| FIREMAN | | | | |
| FLRMAN | | C. Albertson | 8 | T |
| FLRMAN | | B. Marsh | 8 | T |
| FLRMAN | | | | |
| | | A. Webber | | T |
| | | B. Armstrong | | T |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 34 — DATE April 25/73

OPERATOR: Union Oil Co. LTD.
LEASE: Union AKlavik
WELL NO. F-34 — FIELD OR DIST. Aklavik — COUNTY NWT — STATE
CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. — RIG NO. 1E
DRILL PIPE STRING NO. 223 SIZE 4½ — TOOL JOINT 5" O.D. TYPE THD. 3½ IF
SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: D. G. Webber

PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NaT | K 350 | 14" |
| 2. | NaT | K 350 | 14" |
| 3. | | | |

LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT |
|---|---|---|---|---|---|---|
| 9 5/8 | Mann | 40# K55 | 67 | 2765' | | 2764 |

REMARKS: Cemented w/1300 SAX — Or Oil well Cem.

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 1 | 7¾ | |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | 3½ | | |
| LUBRICATE RIG | | ¼ | |
| DEVIATION SURVEY | | | |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | ½ | | |
| REPAIR RIG | 3 | | |
| CASING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | |

## TIME SUMMARY (OFFICE USE ONLY)

DAY WORK
HRS. W/DP
HRS. WO/DP
HRS. STANDBY
TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.
NO. OF LINES — SIZE
FEET SLIPPED
FEET CUT OFF
PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.

## MORNING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 34 | STANDS D.P. | | 3216.71 FT. |
| 2 | SINGLES D.P. | | 62.79 FT. |
| 21 | D.C. I.D. | O.D. | 618.28 FT. |
| | D.C. I.D. | O.D. | FT. |
| 1 | STB. BODY | O.D. | 8.19 FT. |
| 1 | STB. BODY | O.D. | 8.14 FT. |
| 1 | RMR. STB BODY | O.D. | 8.30 FT. |
| 1 | SUBS | O.D. | 3.43 FT. |
| | BIT OR C.B. | | FT. |
| 1 | Shock Sub | | 9.46 FT. |
| | KELLY DOWN | | 30.57 FT. |
| | TOTAL | | 3954 FT. |

WT. OF STRING 106M LBS.

### BIT RECORD

| | |
|---|---|
| BIT NO. | 9 |
| SIZE | 8½ |
| MFG. | Sec |
| TYPE | DMS |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 351461 |
| DEPTH OUT | |
| DEPTH IN | 3454 |
| TOTAL FTG. | 2 |
| TOTAL HR. RUN | 1 |
| COND. OF BIT | Drlg. |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| TIME | |
|---|---|
| WEIGHT | |
| VISC.-SEC | |
| W.L.-C.C. | |
| FLTR. CK. | |
| PH | |
| SD. CONT. % | |
| PRESSURE GRADIENT | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R Dorey

### FOOTAGE

| FROM | TO | DR.-D RM.-R CORE.-C | CORE NO. |
|---|---|---|---|
| 3454 | 3456 | D | |

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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|
| 35 | 16 | 1300 | 5½ | | 5½ | | S |

DEVIATION RECORD: DEPTH 3454 — DEV. 2¼ — DIRECTION

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 1200 | 300 | 3 | Work on Panel. |
| 300 | 445 | 1 3/4 | Trapped Survey Hoist For Bit Strap Pipe |
| 445 | 530 | 3/4 | Change Stab + Run in w/ DC. |
| 530 | 600 | ½ | Cut + Slip Line |
| 600 | 700 | 1 | Run in w/ Bit #9 |
| 700 | 800 | 1 | Drlg. |

STRAP out 3946.11
TALLY 3946.95

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 33 | STANDS D.P. | | 3310.67 FT. |
| | SINGLES D.P. | | FT. |
| 21 | D.C. I.D. | O.D. | 618.28 FT. |
| | D.C. I.D. | O.D. | FT. |
| 1 | STB. BODY | O.D. | 8.19 FT. |
| 1 | STB. BODY | O.D. | 8.14 FT. |
| 1 | RMR. STB BODY | O.D. | 8.30 FT. |
| 1 | SUBS | O.D. | 3.43 FT. |
| | BIT OR C.B. | | FT. |
| 1 | Shock Sub | | 9.46 FT. |
| | KELLY DOWN | | 27.12 FT. |
| | TOTAL | | 3985 FT. |

WT. OF STRING 106M LBS.

### BIT RECORD

| | |
|---|---|
| BIT NO. | 9 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | DMT |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 351461 |
| DEPTH OUT | |
| DEPTH IN | 3954 |
| TOTAL FTG. | 33 |
| TOTAL HR. RUN | 8 3/4 |
| COND. OF BIT | DRlg. |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| TIME | 800 | 1030 | 230 |
|---|---|---|---|
| WEIGHT | 10.3 | 10.3 | 10.3 |
| VISC.-SEC | 52 | 51 | 65 |
| W.L.-C.C. | 8.0 | 8.0 | |
| FLTR. CK. | 2/32 | 2/32 | |
| PH | 9.5 | 9.5 | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Gel | 10sks | | |
| Benex | 2sks | | |

DRILLER R Brundrige

### FOOTAGE

| FROM | TO | DR.-D RM.-R CORE.-C | CORE NO. |
|---|---|---|---|
| 3954 | 3985 | D | |

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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|
| 35 | 35 | 1300 | 5½ | 72 | 5½ | | S |

DEVIATION RECORD: DEPTH — DEV. — DIRECTION

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 800 | 1015 | 2¼ | DRlg |
| 1015 | 1020 | ¼ | Rig Ser. Rig. |
| 1030 | 400 | 5½ | DRlg. |

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 35 | STANDS D.P. | | 3310.67 FT. |
| 7 | SINGLES D.P. | | 71.59 FT. |
| 21 | D.C. I.D. | O.D. | 618.28 FT. |
| | D.C. I.D. | O.D. | FT. |
| 1 | STB. BODY | O.D. | 8.19 FT. |
| 1 | STB. BODY | O.D. | 8.14 FT. |
| 1 | RMR. STB BODY | O.D. | 8.30 FT. |
| 1 | SUBS | O.D. | 3.43 FT. |
| | BIT OR C.B. | | FT. |
| 1 | Shock Sub | | 9.46 FT. |
| X | KELLY DOWN | | 14.29 FT. |
| | TOTAL | | 4008 FT. |

WT. OF STRING 106M LBS.

### BIT RECORD

| | |
|---|---|
| BIT NO. | 9 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | DMT |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 351461 |
| DEPTH OUT | |
| DEPTH IN | 3954 |
| TOTAL FTG. | 54 |
| TOTAL HR. RUN | 16½ |
| COND. OF BIT | Drlg. |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| TIME | 700 | 900 | 1100 |
|---|---|---|---|
| WEIGHT | 10.3 | 10.3 | 10.2 |
| VISC.-SEC | 63 | 62 | 60 |
| W.L.-C.C. | | | 8.0 |
| FLTR. CK | | | 2/32 |
| PH | | | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER

### FOOTAGE

| FROM | TO | DR.-D RM.-R CORE.-C | CORE NO. |
|---|---|---|---|
| 3985 | 4004 | | |

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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|
| 35 | 35 | 1300 | 5½ | 72 | 5½ | | S |

DEVIATION RECORD: DEPTH 3990 — DEV. 2¼ — DIRECTION

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 400 | 430 | 4½ | DRlg. |
| 830 | 845 | ¼ | Survey |
| 845 | 1200 | 3¼ | Drlg |

## DRILLING CREW PAYROLL DATA

DATE April 25/73
WELL NAME & NO. Union AKlavik F-34
COMPANY Union Oil Co. LTD.
TOOL PUSHER D. G. Webber — RIG NO. 1-E

### MORNING TOUR ____ P.M. ____ A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | 12 |
| DRKMAN | | R. Henley | 12 |
| MTRMAN | | C Campbell | 12 |
| FIREMAN | | D. McLaughlin. | 12 |
| FLRMAN | | | |
| FLRMAN | | Stan Shumacher | 12 |
| FLRMAN | | D. Jasman. | 12 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

### DAY TOUR 8 A.M. 4 P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | R Brundrige | 12 |
| MTRMAN | | ½ Sgt Bink | 12 |
| FIREMAN | | B LARSEN | 12 |
| FLRMAN | | | |
| FLRMAN | | F Doyle | 12 |
| FLRMAN | | B Finlay | |
| | | B Taylor | 12 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

### EVENING TOUR ____ P.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 38 — DATE April 24/73

OPERATOR: Union Oil Co. LTD.

LEASE: Union AKlavik

WELL NO. # 38 — FIELD OR DIST. AKlavik — COUNTY N.W.T. — STATE Canada

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. — RIG NO. 1E

DRILL PIPE STRING: NO. 223 — SIZE 4" — TOOL JOINT 5½" O.D. — TYPE THD. 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: D.A. Webber

## PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | Nat | K 36 | 14" |
| 2. | Nat | K 380 | 14" |
| 3. | | | |

## LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | Mann | 40# K55 | 67 | 2765 | | 2760 | Cem. w/1300 SAX |
| | | | | | | | Oil Well Cem. |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEARDOWN | | | |
| DRILLING ACTUAL | | | |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | | |
| LUBRICATE RIG | | | |
| DEVIATION SURVEY | | | |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | 8 | 8 | 9 |
| FISHING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK: A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

## TIME SUMMARY (OFFICE USE ONLY)

| | |
|---|---|
| DAY WORK | |
| HRS. W/DP | |
| HRS. WO/DP | |
| HRS. STANDBY | |
| TOTAL DAY WORK | |

## WIRE LINE RECORD

| | |
|---|---|
| REEL NO. | |
| NO. OF LINES | SIZE |
| FEET SLIPPED | |
| FEET CUT OFF | |
| PRESENT LENGTH | |
| TON MI. OR TRIPS SINCE LAST CUT | |
| CUMULATIVE TON MI. OR TRIPS | |
| NO. OF DAYS FROM SPUD | |
| CUMULATIVE ROTATING HRS. | |

## DAY TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 34 | STANDS D.P. | 3216.71 | FT. |
| 2 | SINGLES D.P. | 62.77 | FT. |
| 21 | D.C. I.D. O.D. | 618.24 | FT. |
| | D.C. I.D. O.D. | | FT. |
| 1 | STB. BODY O.D. | 8.19 | FT. |
| 1 | STB. BODY O.D. | 8.14 | FT. |
| 1 | RMR. 519 BODY O.D. | 8.30 | FT. |
| 1 | SUBS O.D. | 3.45 | FT. |
| | BIT OR C.B. | | FT. |
| 1 | Shock | 9.46 | FT. |
| | KELLY DOWN | 28.57 | FT. |
| | TOTAL | 3954 | FT. |

WT. OF STRING 106M LBS.

### BIT RECORD

| | |
|---|---|
| BIT NO. | 8 |
| SIZE | 8½ |
| MFG. | Sec |
| TYPE | DSJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 7/16 |
| SER. NO. | 374062 |
| DEPTH OUT | |
| DEPTH IN | 3892 |
| TOTAL FTG. | 62 |
| TOTAL HR. RUN | 05¾ |
| COND. OF BIT | |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 1⁰⁰ | 3⁰⁰ | 6⁰⁰ |
| WEIGHT | 10.3 | 10.3 | 10.3 |
| VISC.-SEC | 57 | 57 | 57 |
| W.L.-C.C. | 8.4 | | |
| FL TR. CK. | 2/32 | | |
| PH | 9.5 | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER [signature]

### 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3454 | | | | | | | | | | | | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12⁰⁰ | 8⁰⁰ | 8 | W O Parts for Panel |

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 34 | STANDS D.P. | 3216.71 | FT. |
| 2 | SINGLES D.P. | 62.77 | FT. |
| 21 | D.C. I.D. O.D. | 618.24 | FT. |
| | D.C. I.D. O.D. | | FT. |
| 1 | STB. BODY O.D. | 8.19 | FT. |
| 1 | STB. BODY O.D. | 8.14 | FT. |
| 1 | RMR. 519 BODY O.D. | 8.30 | FT. |
| 1 | SUBS O.D. | 3.45 | FT. |
| | BIT OR C.B. | | FT. |
| 1 | Shock Sub | 9.46 | FT. |
| | KELLY DOWN | 28.57 | FT. |
| | TOTAL | 3954 | FT. |

WT. OF STRING 106M. LBS.

### BIT RECORD

| | |
|---|---|
| BIT NO. | 8 |
| SIZE | 8½ |
| MFG. | Sec |
| TYPE | DST |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 14 |
| SER. NO. | 374062 |
| DEPTH OUT | |
| DEPTH IN | 3892 |
| TOTAL FTG. | 62 |
| TOTAL HR. RUN | 15¾ |
| COND. OF BIT | |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 8⁰⁰ | 10³⁰ | 3⁰⁰ |
| WEIGHT | 10.3 | 10.3 | 10.3 |
| VISC.-SEC | 63 | 63 | 55 |
| W.L.-C.C. | 8.4 | | |
| FL TR. CK. | 1/32 | | |
| PH | 9.5 | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER B Brundige

### 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3954 | | | | | | | | | | | | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8⁰⁰ | 4⁰⁰ | 8 | W. O. PARTS FOR PANEL. |

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 34 | STANDS D.P. | 3216.71 | FT. |
| 2 | SINGLES D.P. | 62.77 | FT. |
| 21 | D.C. I.D. O.D. | 618.24 | FT. |
| | D.C. I.D. O.D. | | FT. |
| 1 | STB. BODY O.D. | 8.19 | FT. |
| 1 | STB. BODY O.D. | 8.14 | FT. |
| 1 | RMR. 519 BODY O.D. | 8.30 | FT. |
| 1 | SUBS O.D. | 3.45 | FT. |
| | BIT OR C.B. | | FT. |
| 1 | Shock Sub | 9.46 | FT. |
| | KELLY DOWN | 28.57 | FT. |
| | TOTAL | 3954 | FT. |

WT. OF STRING 106M LBS.

### BIT RECORD

| | |
|---|---|
| BIT NO. | 8 |
| SIZE | 8½ |
| MFG. | Sec |
| TYPE | DST |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 14 |
| SER. NO. | 374062 |
| DEPTH OUT | |
| DEPTH IN | 3892 |
| TOTAL FTG. | 62 |
| TOTAL HR. RUN | 15¾ |
| COND. OF BIT | 8-4-I |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 6⁰⁰ | 9⁰⁰ | 12⁰⁰ |
| WEIGHT | 10.3 | 10.3 | 10.3 |
| VISC.-SEC | 56 | 55 | 55 |
| W.L.-C.C. | | | |
| FL TR. CK | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3454 | | | | | | | | | | | | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4⁰⁰ | 12⁰⁰ | 8 | W O PARTS FOR PANEL. |
| | | | E Work on Panel & Cords. |

## DRILLING CREW PAYROLL DATA

DATE April 24/73

WELL NAME & NO. Union AKlavik

COMPANY Union Oil Co. LTD

TOOL PUSHER D.A. Webber — RIG NO. 1-E

MORNING TOUR ____ P.M. ____ A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R. Henley | 12 |
| DRKMAN | | C Campbell | 12 |
| MTRMAN | | D. McLaughlin | 12 |
| FIREMAN | | | |
| FLRMAN | | STan Shumacher | 12 |
| FLRMAN | | D Jesman | 12 |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

DAY TOUR 1 A.M. 4 P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R BRUNDIGE | 12 |
| DRKMAN | | E SYNCHYSHYN | 12 |
| MTRMAN | | B LARSEN | 12 |
| FIREMAN | | | |
| FLRMAN | | E [illegible]HILL | 12 |
| FLRMAN | | B TAYLOR | 12 |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR ____ P.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 37 DATE April 23/73

OPERATOR: Union Oil Co. L.T.D.

LEASE: Union AKlavik

WELL NO. F38 FIELD OR DIST. AKlavik COUNTY IVWT STATE Canada

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. RIG NO. 1E

DRILL PIPE STRING NO. 283 SIZE 4" TOOL JOINT 5" O.D. TYPE THD. 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER D. A. Wibber

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | IVaT | K 380 | 14" |
| 2. | IVaT | K 380 | 14" |
| 3. | | | |

LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | Mann | 40# K55 | 67 | 2765.07 | | 2760 | Cem w/800 sax |
| | | | | | | | Oil well Cem. |

**TIME DISTRIBUTION–HOURS**

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 7½ | 7 | 1½ |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | ½ | ½ | |
| TRIPS | | | |
| LUBRICATE RIG | | ¼ | |
| DEVIATION SURVEY | | ¼ | |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | 6¾ |
| [illegible]ING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

**TIME SUMMARY (OFFICE USE ONLY)**

| | |
|---|---|
| DAY WORK | |
| HRS. W/DP | |
| HRS. WO/DP | |
| HRS. STANDBY | |
| TOTAL DAY WORK | |

**WIRE LINE RECORD**

| | |
|---|---|
| REEL NO. | |
| NO. OF LINES | SIZE |
| FEET SLIPPED | |
| FEET CUT OFF | |
| PRESENT LENGTH | |
| TON MI. OR TRIPS SINCE LAST CUT | |
| CUMULATIVE TON MI. OR TRIPS | |
| NO. OF DAYS FROM SPUD | |
| CUMULATIVE ROTATING HRS. | |

## MORNING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 34 | STANDS D.P. | 3216.71 FT. |
| 1 | SINGLES D.P. | 31.18 FT. |
| 21 | D.C. 2 7/8 x 6 3/4 I.D. O.D. | 618.28 FT. |
| | D.C. I.D. O.D. | FT. |
| 1 | STB. BODY O.D. | 8.19 FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | RMR. STB BODY O.D. | 8.30 FT. |
| 1 | SUBS O.D. | 3.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | | 9.46 FT. |
| | KELLY DOWN | 30.66 FT. |
| | TOTAL | 3925.65 FT. |

WT. OF STRING 105m. LBS.

**BIT RECORD**

| | | |
|---|---|---|
| BIT NO. | | 4 |
| SIZE | | 8½ |
| MFG. | | SEC |
| TYPE | | DSJ |
| NOZZLE | NO. | 3 |
| | SIZE | 16 |
| SER. NO. | | 374062 |
| DEPTH OUT | | |
| DEPTH IN | | 3892 |
| TOTAL FTG. | | 33 |
| TOTAL HR. RUN | | 7½ |
| COND. OF BIT | | Drlg |
| REAMER NO. | | |
| REAMER TYPE | | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 2⁰⁰ | 11⁰⁰ | 16⁰⁰ |
| WEIGHT | 10.3 | 10.3 | 10.3 |
| VISC.–SEC | 61 | 59 | 57 |
| W.L.–C.C. | | | 8.4 |
| FL.TR. CK. | | | 3/32 |
| PH | | | 9.0 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R. Hanley

**FOOTAGE**

| FROM | TO | DR–D RM–R CORE–C | CORE NO. |
|---|---|---|---|
| 3892 | 3925 | D | |

**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'EL–P COM'D–C |
|---|---|---|---|---|---|---|---|
| 35 | 30 | 1300 | 5½ | 73 | 5½ | | S |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12⁰⁰ | 4.45 | 4¾ | Drlg. |
| 4.45 | 5.15 | ½ | Cir Sample |
| 5.15 | 8⁰⁰ | 2¾ | Drlg. |

## DAY TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 34 | STANDS D.P. | 3216.71 FT. |
| 2 | SINGLES D.P. | 62.77 FT. |
| 21 | D.C. 2 7/8 x 6 3/4 I.D. O.D. | 618.28 FT. |
| | D.C. I.D. O.D. | FT. |
| 1 | STB. BODY O.D. | 8.19 FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | RMR. STB BODY O.D. | 8.30 FT. |
| 1 | SUBS O.D. | 3.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shockson | 9.46 FT. |
| | KELLY DOWN | 27.94 FT. |
| | TOTAL | 3951 FT. |

WT. OF STRING 106m. LBS.

**BIT RECORD**

| | | |
|---|---|---|
| BIT NO. | | 7 |
| SIZE | | 8½ |
| MFG. | | SEC |
| TYPE | | OSJ |
| NOZZLE | NO. | 3 |
| | SIZE | 16 |
| SER. NO. | | 374062 |
| DEPTH OUT | | |
| DEPTH IN | | 3892 |
| TOTAL FTG. | | 60 |
| TOTAL HR. RUN | | 11½ |
| COND. OF BIT | | |
| REAMER NO. | | |
| REAMER TYPE | | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 8⁰⁰ | 11³⁰ | 3⁰⁰ |
| WEIGHT | 10.3 | 10.3 | 10.3 |
| VISC.–SEC | 57 | 55 | 70 |
| W.L.–C.C. | 8.4 | 8.4 | |
| FL.TR. CK. | 3/32 | 3/32 | |
| PH | 9.0 | 9.0 | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Del Sulb | | Soda Ash | 1 sk |
| Benex | 2 sks | | |

DRILLER B. Brundige

**FOOTAGE**

| FROM | TO | DR–D RM–R CORE–C | CORE NO. |
|---|---|---|---|
| 3925 | 3952 | D | |

**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'EL–P COM'D–C |
|---|---|---|---|---|---|---|---|
| 73 | 40 | 1500 | 5½ | 73 | 5½ | | S |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 3925 | 3¾ | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8⁰⁰ | 8.30 | ½ | CIR Sample |
| 8.30 | 10.15 | 1¾ | ORLg. |
| 10.15 | 10.30 | ¼ | SURVEY |
| 10.30 | 10.45 | ¼ | Rig SERV & BOP |
| 10.45 | 4⁰⁰ | 5¼ | ORLg. |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 34 | STANDS D.P. | 3216.71 FT. |
| 2 | SINGLES D.P. | 62.77 FT. |
| 21 | D.C. 2 7/8 x 6 3/4 I.D. O.D. | 618.28 FT. |
| | D.C. I.D. O.D. | FT. |
| 1 | STB. BODY O.D. | 8.19 FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | RMR. STB BODY O.D. | 8.30 FT. |
| 1 | SUBS O.D. | 3.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shockson | 9.46 FT. |
| | KELLY DOWN | 28.57 FT. |
| | TOTAL | 3954 FT. |

WT. OF STRING 106m. LBS.

**BIT RECORD**

| | | |
|---|---|---|
| BIT NO. | | 8 |
| SIZE | | 8½ |
| MFG. | | SEC |
| TYPE | | DSJ |
| NOZZLE | NO. | 3 |
| | SIZE | 16 |
| SER. NO. | | 374062 |
| DEPTH OUT | | |
| DEPTH IN | | 3892 |
| TOTAL FTG. | | 62 |
| TOTAL HR. RUN | | 15¾ |
| COND. OF BIT | | |
| REAMER NO. | | |
| REAMER TYPE | | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | | | |
| WEIGHT | | | |
| VISC.–SEC | | | |
| W.L.–C.C. | | | |
| FL.TR. CK | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER

**FOOTAGE**

| FROM | TO | DR–D RM–R CORE–C | CORE NO. |
|---|---|---|---|
| 3952 | 3954 | | |

**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'EL–P COM'D–C |
|---|---|---|---|---|---|---|---|
| | | | | | | | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4⁰⁰ | 5.15 | 1¼ | DRLg |
| 5.15 | 12⁰⁰ | 6¾ | Work on Electric Panel Wire Repairs |

## DRILLING CREW PAYROLL DATA

DATE April 23/73

WELL NAME & NO. Union AKlavik F38

COMPANY Union Oil Co L.T.D.

TOOL PUSHER D. A. Wibber RIG NO. 1E

**MORNING TOUR** P.M. A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R. Henley | 12 |
| DRKMAN | | C Campbell | 12 |
| MTRMAN | | D. McLaughlin | 12 |
| FIREMAN | | | 12 |
| FLRMAN | | STan Shumacher | 12 |
| FLRMAN | | D. Jasman | 12 |
| FLRMAN | | | 12 |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

**DAY TOUR** 8⁰⁰ A.M. 4⁰⁰ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | A Brundige | 12 |
| DRKMAN | | E Szywlenkay | 12 |
| MTRMAN | | B Larsen | 12 |
| FIREMAN | | | 12 |
| FLRMAN | | E Enghill | 12 |
| FLRMAN | | D Risk | 12 |
| FLRMAN | | B Taylor | 12 |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

**EVENING TOUR** P.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 36 — DATE April 22/73

OPERATOR: Union Oil Co. LTD.

LEASE: Union Aklavik

WELL NO. F38 — FIELD OR DIST. Aklavik — COUNTY N.W.T. — STATE Canada

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. — RIG NO. 1E

DRILL PIPE STRING: NO. 223 — SIZE 4" — TOOL JOINT TYPE THD. 3½ IF — O.D. 5"

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: D. A. Wilbber

## PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NaT | K 380 | 14" |
| 2. | NaT | K 380 | 14" |
| 3. | | | |

## LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | Mann | 40# K55 | 67 | 2765.07 | | 2760 | Cem. w/1300 SAX Oil well Cem |

## DRILLING CREW PAYROLL DATA

DATE April 22/73

WELL NAME & NO. Union Aklavik F38

COMPANY Union Oil Co. LTD

TOOL PUSHER D. A. Wilbber — RIG NO. 1E

MORNING TOUR ____ P.M. ____ A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R. Henley | 12 |
| DRKMAN | | C. Campbell | 12 |
| MTRMAN | | D McLaughlin | 12 |
| FIREMAN | | | |
| FLRMAN | | STan Shumacher | 12 |
| FLRMAN | | D. Jasman | 12 |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

DAY TOUR ____ A.M. 4 P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R BRANDIGE | 12 |
| DRKMAN | | E Squirenky | 12 |
| MTRMAN | | B LARSEN | 12 |
| FIREMAN | | | |
| FLRMAN | | E ENGHILL | 12 |
| FLRMAN | | D IRISH | 12 |
| FLRMAN | | B TAYLOR | 12 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR ____ P.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 7½ | 7½ | 4 |
| REAMING | | | ½ |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | | 3½ |
| LUBRICATE RIG | | ¼ | |
| DEVIATION SURVEY | ¼ | ¼ | |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| [illegible]ING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK: A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.

NO. OF LINES — SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 33 | STANDS D.P. | 3122.47 FT. |
| ½ | SINGLES D.P. | 62.64 FT. |
| 21 | D.C. 2¾ x 6¾ I.D. O.D. | 618.28 FT. |
| | D.C. I.D. O.D. | FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | RMR. STB BODY O.D. | 8.30 FT. |
| 1 | SUBS O.D. | 3.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | ShockSub | 9.46 FT. |
| | KELLY DOWN | 15.42 FT. |
| | TOTAL | 3847. FT. |

WT. OF STRING 104 m. LBS.

### BIT RECORD

| | |
|---|---|
| BIT NO. | 7 |
| SIZE | 8½ |
| MFG. | Sec |
| TYPE | DSJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 369926 |
| DEPTH OUT | |
| DEPTH IN | 3690 |
| TOTAL FTG. | 157 |
| TOTAL HR. RUN | 36½ |
| COND. OF BIT | Drlg |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 2⁰⁰ | 4⁰⁰ | 6⁰⁰ |
| WEIGHT | 10.3+ | 10.3+ | 10.3+ |
| VISC.-SEC | 60 | 58 | 55 |
| W.L.-C.C. | | | 7.8 |
| FL.TR. CK. | | | |
| PH | | | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER B Henley

### 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3811 | 3847 | D | | | 35 | 35 | 1300 | 5½ | | 5½ | 77 | |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 3835 | 2¼ | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12.00 | 6.00 | 6 | Drlg. |
| 6.00 | 6.15 | ¼ | Survey |
| 6.15 | 8.00 | 1¾ | Drlg. |

## DAY TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 34 | STANDS D.P. | 3216.71 FT. |
| | SINGLES D.P. | FT. |
| 21 | D.C. 2¾ x 6¾ I.D. O.D. | 618.28 FT. |
| | D.C. I.D. O.D. | FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | RMR. STB BODY O.D. | 8.30 FT. |
| 1 | SUBS O.D. | 3.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock Sub | 9.46 FT. |
| | KELLY DOWN | 15 FT. |
| | TOTAL | 3878 FT. |

WT. OF STRING 104 m. LBS.

### BIT RECORD

| | |
|---|---|
| BIT NO. | 7 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | DST |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 369926 |
| DEPTH OUT | |
| DEPTH IN | 3690 |
| TOTAL FTG. | 188 |
| TOTAL HR. RUN | 44 |
| COND. OF BIT | DRLg |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 9⁰⁰ | 11³⁰ | 3⁰⁰ |
| WEIGHT | 10.3 | 10.3 | 10.3 |
| VISC.-SEC | 54 | 51 | 49 |
| W.L.-C.C. | 7.8 | 7.8 | 7.8 |
| FL.TR. CK. | 3/32 | 3/32 | 2/32 |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Gel | 10 sks | | |
| Benex | 2 sks | | |

DRILLER B Brandigge

### 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3847 | 3878 | D | | | 35 | 35 | 1300 | 5½ | 73 | 5½ | | S |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 3860 | 2⅛ | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8.00 | 1.45 | 5¾ | DRLg. |
| 1.45 | 2.00 | ¼ | SURVEY. |
| 2.00 | 2.15 | ¼ | Rig SERV. |
| 2.15 | 4.00 | 1¾ | DRLg. |

Held Safety meeting & checked Kelly Cock

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 34 | STANDS D.P. | 3216.71 FT. |
| | SINGLES D.P. | FT. |
| 21 | D.C. 2¾ x 6¾ I.D. O.D. | 614.28 FT. |
| | D.C. I.D. O.D. | FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | RMR. STB BODY O.D. | 8.30 FT. |
| 1 | SUBS O.D. | 3.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | | 9.46 FT. |
| | KELLY DOWN | 34.64 FT. |
| | TOTAL | 3892 FT. |

WT. OF STRING 104 m. LBS.

### BIT RECORD

| | |
|---|---|
| BIT NO. | 7 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | DST |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 14 |
| SER. NO. | 369926 |
| DEPTH OUT | 3892 |
| DEPTH IN | 3690 |
| TOTAL FTG. | 202 |
| TOTAL HR. RUN | 46 |
| COND. OF BIT | 7-7-1 |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | |
|---|---|
| TIME | 6³⁰ |
| WEIGHT | 10.3 |
| VISC.-SEC | 63 |
| W.L.-C.C. | |
| FL.TR. CK | |
| PH | |
| SD. CONT. % | |
| PRESSURE GRADIENT | |

TRIP

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3878 | 3892 | D | | | 35 | 35 | 1300 | 5½ | 73 | 5½ | | S |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 3890 | 2⅛ | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4.00 | 8.00 | 4 | DRLg. |
| 8.00 | 10.00 | 2 | Dropped Survey Hoist For Bit |
| 10.00 | 11.30 | 1½ | Run in w/ Bit # 8 |
| 11.30 | 12.00 | ½ | Reamed Bridges to Bot. (15") |

# DAILY DRILLING REPORT

OPERATOR: Union Oil Co. L.T.D.
REPORT NO.: 35
DATE: April 21/73
LEASE: Union Aklavik
WELL NO.: F38
FIELD OR DIST.: Aklavik
COUNTY: N.W.T.
STATE: Canada
CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD.
RIG NO.: 1E
DRILL PIPE STRING: NO. 223, SIZE 4"
TOOL JOINT: 5' O.D., TYPE THD. 3 1/2 IF
SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: D. A. Webber

PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NOT | K340 | 14" |
| 2. | NOT | K340 | 14" |
| 3. | | | |

LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9 5/8 | Mann | 40# K55 | 67 | 2765.01 | | 2750 | Cem w/1300 SAX |
| | | | | | | | Oil well Cem. |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 7 3/4 | 7 3/4 | 7 1/2 |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | | |
| LUBRICATE RIG | 1/4 | 1/4 | 1/4 |
| DEVIATION SURVEY | | 1/2 | 1/4 |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| CASING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

## TIME SUMMARY (OFFICE USE ONLY)

DAY WORK
HRS. W/DP
HRS. WO/DP
HRS. STANDBY
TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.
NO. OF LINES — SIZE
FEET SLIPPED
FEET CUT OFF
PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.

## MORNING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 22 | STANDS D.P. | 3024.12 FT. |
| 1 | SINGLES D.P. | 31.71 FT. |
| 21 | D.C. 2 7/8 x 6 3/4 I.D. O.D. | 614.24 FT. |
| | D.C. I.D. O.D. | FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | RMR. STB BODY O.D. | 8.30 FT. |
| 1 | SUBS O.D. | 3.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shocksub | 9.46 FT. |
| | KELLY DOWN | 40.92 FT. |
| | TOTAL | 3147. FT. |

WT. OF STRING 102 M LBS.

### BIT RECORD

| | |
|---|---|
| BIT NO. | 7 |
| SIZE | 8 1/2 |
| MFG. | SEC |
| TYPE | DSJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 3/16 |
| SER. NO. | 369926 |
| DEPTH OUT | |
| DEPTH IN | 3690 |
| TOTAL FTG. | 57 |
| TOTAL HR. RUN | 14 |
| COND. OF BIT | Drlg |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 1:00 | 11:00 | 7:00 |
| WEIGHT | 10.3+ | 10.3+ | 10.3+ |
| VISC.-SEC | 51 | 49 | 57 |
| W.L.-C.C. | | | 8.0 |
| FLTR. CK. | | | 2/32 |
| PH | 9.5 | | 9.0 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Bet | 55KG | | |
| BENEX | 25KG | | |

DRILLER: R Henley

### 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3715 | 3747 | D | | | 35 | 30 | 1200 | 5 1/2 | 73 | 5 1/2 | | S |
| | | | | | | 35 | | | | | | |

DEVIATION RECORD: DEPTH — DEV. — DIRECTION — DEPTH — DEV. — DIRECTION — DEPTH — DEV. — DIRECTION

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12:00 | 12:15 | 1/4 | Rig Serv. & BOPs |
| 12:15 | 8:00 | 7 3/4 | Drlg. |

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 32 | STANDS D.P. | 3027.97 FT. |
| 2 | SINGLES D.P. | 63.93 FT. |
| 21 | D.C. I.D. O.D. | 618.28 FT. |
| | D.C. I.D. O.D. | FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | RMR. STB BODY O.D. | 8.30 FT. |
| 1 | SUBS O.D. | 3.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shocksub | 9.46 FT. |
| | KELLY DOWN | 41. FT. |
| | TOTAL | 3778 FT. |

WT. OF STRING 102 M LBS.

### BIT RECORD

| | |
|---|---|
| BIT NO. | 7 |
| SIZE | 8 1/2 |
| MFG. | SEC |
| TYPE | DST |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 14 |
| SER. NO. | 369926 |
| DEPTH OUT | |
| DEPTH IN | 3690 |
| TOTAL FTG. | 80 |
| TOTAL HR. RUN | 21 1/4 |
| COND. OF BIT | DRLG. |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 8:30 | 11:00 | 3:00 |
| WEIGHT | 10.4 | 10.3 | 10.3 |
| VISC.-SEC | 60 | 56 | 51 |
| W.L.-C.C. | 8.0 | 8.0 | 8.0 |
| FLTR. CK. | 2/32 | 2/32 | 2/32 |
| PH | 9.0 | 9.0 | 9.0 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Barite | 30sks | Soda Ash | 1sk |
| Bel | 10sks. | | |
| Benex | 3sks | | |

DRILLER: R Brundige

### 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3741 | 3778 | D | | | 35 | 35 | 1300 | 5 1/2 | 4 | 5 1/2 | 75 | 5 |

DEVIATION RECORD: DEPTH 3740 — DEV. 2 1/8 — DIRECTION — DEPTH 3770 — DEV. 2 1/8 — DIRECTION — DEPTH — DEV. — DIRECTION

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8:00 | 8:15 | 1/4 | SURVEY. |
| 8:15 | 8:30 | 1/4 | RIG SERV & ~~BOP~~. |
| ~~8:30~~ | ~~9:30~~ | | ~~Drlg.~~ |
| 8:30 | 3:30 | 7 | DRLG |
| 3:30 | 3:45 | 1/4 | SURVEY |
| 3:45 | 4:00 | 1/4 | DRLG |

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 33 | STANDS D.P. | 3122.47 FT. |
| 1 | SINGLES D.P. | 31.25 FT. |
| 21 | D.C. 2 7/8 x 6 3/4 I.D. O.D. | 618.28 FT. |
| | D.C. I.D. O.D. | FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | RMR. STB BODY O.D. | 8.30 FT. |
| 1 | SUBS O.D. | 3.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shocksub | 9.46 FT. |
| | KELLY DOWN | 70.73 FT. |
| | TOTAL | 3811. FT. |

WT. OF STRING 102 M LBS.

### BIT RECORD

| | |
|---|---|
| BIT NO. | 7 |
| SIZE | 8 1/2 |
| MFG. | SEC |
| TYPE | DST |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 14 |
| SER. NO. | 369926 |
| DEPTH OUT | |
| DEPTH IN | 3690 |
| TOTAL FTG. | 121 |
| TOTAL HR. RUN | 28 3/4 |
| COND. OF BIT | Drlg. |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 7:00 | 9:00 | 12:00 |
| WEIGHT | 10.3+ | 10.3+ | 10.3+ |
| VISC.-SEC | 75 | 73 | 68 |
| W.L.-C.C. | 8.0 | | |
| FLTR. CK | 2/32 | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3778 | 3811 | D | | | 35 | 35 | 1300 | 5 1/2 | | 5 1/2 | 73 | 5 |

DEVIATION RECORD: DEPTH 3800 — DEV. 2 1/4 — DIRECTION — DEPTH — DEV. — DIRECTION — DEPTH — DEV. — DIRECTION

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4:00 | 11:15 | 7 1/4 | DRLG. |
| 11:15 | 11:30 | 1/4 | Survey |
| 11:30 | 11:45 | 1/4 | Rig Serv & BOPs |
| 11:45 | 12:00 | 1/4 | Drlg. |

## DRILLING CREW PAYROLL DATA

DATE: April 21/73
WELL NAME & NO.: Union Aklavik F38
COMPANY: Union Oil Co. L.T.D.
TOOL PUSHER: D. A. Webber — RIG NO.: 1E

### MORNING TOUR ____ P.M. ____ A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R. Henley | 12 |
| DRKMAN | | C Campbell | 12 |
| MTRMAN | | D. McLaughlin | 12 |
| FIREMAN | | | |
| FLRMAN | | Stan Shumacher | 12 |
| FLRMAN | | D. Tasman. | 12 |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST-TIME ACCIDENT

### DAY TOUR 8 A.M. 4 P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R BRundige | 12 |
| DRKMAN | | E SURVIENKA | 12 |
| MTRMAN | | B LARSEN. | 12 |
| FIREMAN | | | |
| FLRMAN | | E EDGHILL | 12 |
| FLRMAN | | D IRISH | 12 |
| FLRMAN | | B TAYLOR. | 12 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

### EVENING TOUR ____ P.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 34 — DATE April 20/73

OPERATOR: Union Oil Co. L.T.D.

LEASE: Union Aklavik

WELL NO. F38 — FIELD OR DIST. Aklavik — COUNTY N.W.T. — STATE Canada

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. — RIG NO. 1E

DRILL PIPE STRING NO. 2 SIZE 3½" — TOOL JOINT O.D. 5" — TYPE THD. 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: John L. Pettit

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: D. A. Wilbur

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | Nat | K 380 | 14" |
| 2. | Nat | K 380 | 14" |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9 5/8 | Mann | 40# K55 | 67 | 2766.07 | | 2760 | Cem w/1300 SAX Oil well Cem. |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 5½ | 6½ | |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | 2¾ | | 1 |
| LUBRICATE RIG | ¼ | | |
| DEVIATION SURVEY | ¼ | ¼ | |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER Clean & Bail | ¾ | ½ | |
| FISHING | | | |

COMPLETION WORK: A. PERFORATING; B. TUBING TRIPS; C. SWABBING; D. TESTING; E. ADDITIONAL

TOTALS: 8 4

### TIME SUMMARY (OFFICE USE ONLY)

DAY WORK; HRS. W/DP; HRS. WO/DP; HRS. STANDBY; TOTAL DAY WORK

### WIRE LINE RECORD

REEL NO.; NO. OF LINES — SIZE; FEET SLIPPED; FEET CUT OFF; PRESENT LENGTH; TON MI. OR TRIPS SINCE LAST CUT; CUMULATIVE TON MI. OR TRIPS; NO. OF DAYS FROM SPUD; CUMULATIVE ROTATING HRS.

## MORNING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 31 | STANDS D.P. | 2934.25 FT. |
| 2 | SINGLES D.P. | 62.44 FT. |
| 21 | D.C. 2¾ x 6¾ I.D. O.D. | 618.25 FT. |
| | D.C. I.D. O.D. | FT. |
| 1 | STB. BODY O.D. | 8.19 FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | SHR. STB BODY O.D. | 8.30 FT. |
| 1 | SUBS O.D. | 3.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock sub | 9.46 FT. |
| | KELLY DOWN | 32.83 FT. |
| | TOTAL | 3676. FT. |

WT. OF STRING 100 m. LBS.

### BIT RECORD

| | |
|---|---|
| BIT NO. | 6 |
| SIZE | 8½ |
| MFG. | ~~DMT~~ Sec |
| TYPE | ~~DMT~~ DMT |
| NOZZLE NO. | ~~3~~ 16 |
| NOZZLE SIZE | |
| SER. NO. | 351838 |
| DEPTH OUT | |
| DEPTH IN | 3543 |
| TOTAL FTG. | 133 |
| TOTAL HR. RUN | 38 |
| COND. OF BIT | Drly. |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 20" | 40" | 60" |
| WEIGHT | 10.3 | 10.3 | 10.3 |
| VISC.-SEC | 52 | 50 | 48 |
| W.L.-C.C. | | 3.4 | 3.4 |
| FLTR. CK. | | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Gel | 5 sks | | |
| Benex | 1 sk. | | |

DRILLER R. Henley

### 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'EL-P COMP.-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3652 | 3676 | D | | | 35 | 40 | 1700 | 5½ | 73 | 5½ | | S |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 3645 | 2¼° | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12:00 | 12:15 | ¼ | Rig Serv v BOP's. |
| 12:15 | 12:30 | ¼ | Survey |
| 12:30 | 8:00 | 7½ | Drlg. |

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 32 | STANDS D.P. | 3022.12 FT. |
| | SINGLES D.P. | FT. |
| 21 | D.C. 2¾ x 6¾ I.D. O.D. | 614.25 FT. |
| | D.C. I.D. O.D. | FT. |
| 1 | STB. BODY O.D. | 8.19 FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | ~~SHR. STB~~ BODY O.D. | 8.30 FT. |
| 1 | SUBS O.D. | 7.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock sub | 9.46 FT. |
| | KELLY DOWN | 41.00 FT. |
| | TOTAL | 3745.51 FT. |

WT. OF STRING 100 LBS.

### BIT RECORD

| | | |
|---|---|---|
| BIT NO. | 6 | 7 |
| SIZE | 8½ | 8½ |
| MFG. | SEC | SEC |
| TYPE | DMT | OSJ |
| NOZZLE NO. | 3 | 3 |
| NOZZLE SIZE | 16 | 16 |
| SER. NO. | 351838 | 349926 |
| DEPTH OUT | 3690 | |
| DEPTH IN | 3543 | 3690 |
| TOTAL FTG. | 147 | |
| TOTAL HR. RUN | 4½ | |
| COND. OF BIT | 1-1 | |
| REAMER NO. | | |
| REAMER TYPE | | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 9:00 | 11:00 | |
| WEIGHT | 10.3 | 10.3 | T |
| VISC.-SEC | 58 | 54 | R. |
| W.L.-C.C. | 8.4 | 8.4 | I |
| FLTR. CK. | 1/32 | 1/32 | P |
| PH | 9.5 | 9.5 | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R Brundige

### 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'EL-P COMP.-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3676 | 3690 | D | | | 35 | 40 | 1500 | 5½ | 73 | 5½ | | S |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 3674 | 2¼° | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8:00 | 10:15 | 2¼ | ORLg. |
| 10:15 | 10:30 | ¼ | SURVEY. |
| 10:30 | 10:45 | ¼ | Rig SERV. v Brake |
| 10:45 | 1:00 | 2¼ | DRLg. |
| 1:00 | 2:45 | 1¾ | HOIST BIT #6 |
| 2:45 | 3:00 | ¼ | V BLIND RAMS & MOTOR SHUT OFF & START. |
| 3:00 | 4:00 | 1 | Run in DC. |
| | | | Check Escape Buggy Held Blow Out Drill. |

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 32 | STANDS D.P. | 3024.12 FT. |
| | SINGLES D.P. | FT. |
| 21 | D.C. 2¾ x 6¾ I.D. O.D. | 614.25 FT. |
| | D.C. I.D. O.D. | FT. |
| 1 | STB. BODY O.D. | 8.19 FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | ~~SHR. STB~~ BODY O.D. | 8.30 FT. |
| 1 | SUBS O.D. | 7.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock sub | 9.46 FT. |
| | KELLY DOWN | 41.00 FT. |
| | TOTAL | 3745.51 FT. |

WT. OF STRING 100 LBS.

### BIT RECORD

| | |
|---|---|
| BIT NO. | 7 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | OSJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 349926 |
| DEPTH OUT | |
| DEPTH IN | 3690 |
| TOTAL FTG. | 25 |
| TOTAL HR. RUN | 6¼ |
| COND. OF BIT | Drlg |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 7:00 | 9:00 | 11:00 |
| WEIGHT | 10.3+ | 10.3+ | 10.3 |
| VISC.-SEC | 53. | 52. | 52 |
| W.L.-C.C. | 8.4 | | |
| FLTR. CK. | 2/32 | | |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PAR'EL-P COMP.-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3690 | 3715 | D | | | 30 | 35 | 1300 | 5½ | 73 | 5½ | | S |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 3705 | 2¼° | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4:00 | 5:00 | 1 | Run in Hole with Bit #7 |
| 5:00 | 5:30 | ½ | Clean out 14' Fill |
| 5:30 | 11:45 | 6¼ | DRLg. |
| 11:45 | 12:00 | ¼ | Survey |

## DRILLING CREW PAYROLL DATA

DATE April 20/73

WELL NAME & NO. Union Aklavik F 34

COMPANY Union Oil Co. L.T.D.

TOOL PUSHER D. A. Wilbur — RIG NO. 1E

MORNING TOUR ____ P.M. ____ A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R. Henley | 12 |
| DRKMAN | | C. Campbell | 12 |
| MTRMAN | | D. McLaughlin | 12 |
| FIREMAN | | | |
| FLRMAN | | Stan Shumocher | 12 |
| FLRMAN | | D. Jasman. | 12 |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST-TIME ACCIDENT

DAY TOUR ____ A.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R BRUNDIGE | 12 |
| DRKMAN | | I. SWIDZINSKY | 12 |
| MTRMAN | | BLARSEN. | 12 |
| FIREMAN | | | |
| FLRMAN | | E ENGHILL | 12 |
| FLRMAN | | DIRISH | 12 |
| FLRMAN | | B TAYLOR. | 12 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR ____ P.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 33 — DATE April 14/73

OPERATOR: Union Oil Co. Ltd.

LEASE: Union Aklavik — WELL NO. F38 — FIELD OR DIST. Aklavik — COUNTY N.W.T. — STATE Canada

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. — RIG NO. 1E

DRILL PIPE STRING: NO. 2 — SIZE 3½" — TOOL JOINT SIZE 5" O.D. — TYPE THD. 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: D. A. Webber

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NaT | K 380 | |
| 2. | NaT | K 380 | |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9 5/8 | Mann | 40# K5 | 67 | 2765' | | 2760 | |
| | | | | | | | |
| | | | | | | | |

## TIME DISTRIBUTION–HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 7¾ | 7½ | 7½ |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | | |
| LUBRICATE RIG | | ¼ | |
| DEVIATION SURVEY | ¼ | ¼ | |
| TEST B.O.P. | | | ¼ |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | ¼ |
| RING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

## TIME SUMMARY (OFFICE USE ONLY)

| | |
|---|---|
| DAY WORK | |
| HRS. W/DP | |
| HRS. WO/DP | |
| HRS. STANDBY | |
| TOTAL DAY WORK | |

## WIRE LINE RECORD

| | |
|---|---|
| REEL NO. | |
| NO. OF LINES | SIZE |
| FEET SLIPPED | |
| FEET CUT OFF | |
| PRESENT LENGTH | |
| TON MI. OR TRIPS SINCE LAST CUT | |
| CUMULATIVE TON MI. OR TRIPS | |
| NO. OF DAYS FROM SPUD | |
| CUMULATIVE ROTATING HRS. | |

## MORNING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 21 | STANDS D.P. | 2934.28 FT. |
| | SINGLES D.P. | FT. |
| 21 | D.C. 2 7/8 x 6 3/4 I.D. O.D. | 618.28 FT. |
| | D.C. I.D. O.D. | FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | SMR. STB BODY O.D. | 8.30 FT. |
| 1 | SUBS O.D. | 3.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shocksub | 9.46 FT. |
| | KELLY DOWN | 16.27 FT. |
| | TOTAL | 3597 FT. |

WT. OF STRING 100M LBS.

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 6 |
| SIZE | 8½ |
| MFG. | Sec |
| TYPE | DMJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 14 |
| SER. NO. | 351838 |
| DEPTH OUT | |
| DEPTH IN | 3548 |
| TOTAL FTG. | 54 |
| TOTAL HR. RUN | 15½ |
| COND. OF BIT | Drlg |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| TIME | 10:00 | 2:00 | 7:00 |
|---|---|---|---|
| WEIGHT | 10.3 | 10.3 | 10.3 |
| VISC.-SEC | 56 | 56 | 53 |
| W.L.-C.C. | | | 4.0 |
| FLTR. CK. | | | |
| PH | 9.5 | | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER K. Henley

**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'EL-P COMP'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3568 | 3597 | D | | | 30 | 30 | 1300 | 5½ | | 5½ | 74 | |
| | | | | | 35 | 35 | | | | | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 3580 | 2 3/8 | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12:00 | 5:45 | 5¾ | Drlg. |
| 5:45 | 6:00 | ¼ | Survey |
| 6:00 | 8:00 | 2 | Drlg. |

## DAY TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 31 | STANDS D.P. | 2934.28 FT. |
| 1 | SINGLES D.P. | 31.18 FT. |
| 21 | D.C. 2 7/8 x 6 3/4 I.D. O.D. | 618.28 FT. |
| | D.C. I.D. O.D. | FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | SMR. STB BODY O.D. | 8.30 FT. |
| 1 | SUBS O.D. | 3.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shocksub | 9.46 FT. |
| | KELLY DOWN | 16.27 FT. |
| | TOTAL | 3597 FT. |

WT. OF STRING 100M LBS.

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 6 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | DMJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 14 |
| SER. NO. | 351838 |
| DEPTH OUT | |
| DEPTH IN | 3543 |
| TOTAL FTG. | 84 |
| TOTAL HR. RUN | 23 |
| COND. OF BIT | DRlg |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| TIME | 8:00 | 10:00 | 3:30 |
|---|---|---|---|
| WEIGHT | 10.3 | 10.3 | 10.3 |
| VISC.-SEC | 53 | 65 | 60 |
| W.L.-C.C. | 8.0 | 8.0 | 8.0 |
| FLTR. CK. | 2/32 | 2/32 | 2/32 |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Gel | 5 sks | | |
| Benex | 1 sk | | |
| Soda Ash | 1 sk | | |

DRILLER A Brundige

**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'EL-P COMP'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3547 | 3627 | D | | | 35 | 35 | 1800 | 5½ | 73 | 5½ | | 5 |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 3610 | 2° | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8:00 | 1:30 | 5½ | DRLg. |
| 1:30 | 1:45 | ¼ | SURVEY. |
| 1:45 | 2:00 | ¼ | Rig SERV. & B.O.P. |
| 2:00 | 4:00 | 2 | DRLg. |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 31 | STANDS D.P. | 2934.28 FT. |
| 1 | SINGLES D.P. | 31.18 FT. |
| 21 | D.C. I.D. O.D. | 618.28 FT. |
| | D.C. I.D. O.D. | FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | SMR. STB BODY O.D. | 8.30 FT. |
| 1 | SUBS O.D. | 3.45 FT. |
| | BIT OR C.B. | 9.46 FT. |
| 1 | Shocksub | FT. |
| | KELLY DOWN | 40.04 FT. |
| | TOTAL | 3652.00 FT. |

WT. OF STRING 100M LBS.

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 6 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | DMJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 14 |
| SER. NO. | 351838 |
| DEPTH OUT | |
| DEPTH IN | 3543 |
| TOTAL FTG. | 109 |
| TOTAL HR. RUN | 30½ |
| COND. OF BIT | DRlg |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| TIME | 7:00 | 9:00 | 11:00 |
|---|---|---|---|
| WEIGHT | 10.3 | 10.3 | 10.3 |
| VISC.-SEC | 55 | 57 | 56 |
| W.L.-C.C. | 8.0 | | |
| FLTR. CK | 2/32 | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PAR'EL-P COMP'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3627 | 3652 | | | | 35 | 35 | 1300 | 5½ | 73 | 5½ | | 5 |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4:00 | 5:30 | 1½ | DRLg. |
| 5:30 | 5:45 | ¼ | Check up Conservation Board. |
| 5:45 | 9:00 | 3¼ | Drlg. |
| 9:00 | 9:15 | ¼ | ~~Drlg.~~ Work on Flow Line |
| 9:15 | 12:00 | 2¾ | Drlg. |

## DRILLING CREW PAYROLL DATA

DATE April 14/73

WELL NAME & NO. Union Aklavik F38

COMPANY Union Oil Co. LTD.

TOOL PUSHER D. A. Webber — RIG NO. 1E

**MORNING TOUR** — P.M. — A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R. Henley | 12 |
| DRKMAN | | C. Campbell | 12 |
| MTRMAN | | D. McLaughlin | 12 |
| FIREMAN | | | |
| FLRMAN | | Stan Shumacher | 12 |
| FLRMAN | | D. Jaeman | 12 |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

**DAY TOUR** — A.M. 12 — P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | A Brundige | 12 |
| DRKMAN | | E Swyrenkay | 12 |
| MTRMAN | | A Larsen | 12 |
| FIREMAN | | | |
| FLRMAN | | K Endicott | 12 |
| FLRMAN | | D Irish | 12 |
| FLRMAN | | B Taylor | 12 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

**EVENING TOUR** — P.M. — P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 33 DATE April 19/73

OPERATOR: Union Oil Co. LTD.

LEASE: Union A Klavik

WELL NO. F38 FIELD OR DIST. A Klavik COUNTY M.W.T. STATE Canada

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. RIG NO. 1E

DRILL PIPE STRING NO. 2 SIZE 4" TOOL JOINT 5" O.D. TYPE THD. 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: D. A. Webber

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NOT | K 380 | |
| 2. | NOT | K 380 | |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9 5/8 | Mann | 40# K55 | 67 | 2765.01 | | 2760 | |

**TIME DISTRIBUTION—HOURS**

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 7¾ | 7¾ | 7½ |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | | |
| LUBRICATE RIG | | ¼ | |
| DEVIATION SURVEY | ¼ | ¼ | |
| TEST B.O.P. | | | ¼ |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | ¼ |
| [illegible]RING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK: A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

**TIME SUMMARY (OFFICE USE ONLY)**

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

**WIRE LINE RECORD**

REEL NO.

NO. OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | FT. |
|---|---|---|
| 21 | STANDS D.P. | 2934.28 |
| | SINGLES D.P. | |
| 21 | D.C. 2⅞ x 6¾ I.D. O.D. | 618.28 |
| | D.C. I.D. O.D. | |
| 1 | STB. BODY O.D. | 8.14 |
| 1 | STB. BODY O.D. | 8.14 |
| 1 | ~~SUB~~ STB BODY O.D. | 8.30 |
| 1 | SUBS O.D. | 3.45 |
| | BIT OR C.B. | |
| 1 | Shock sub | 9.46 |
| | KELLY DOWN | 16.27 |
| | TOTAL | 3597 |

WT. OF STRING 100m LBS.

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 6 |
| SIZE | 8½ |
| MFG. | Sec |
| TYPE | DMJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 14 |
| SER. NO. | 351838 |
| DEPTH OUT | |
| DEPTH IN | ~~3548~~ |
| TOTAL FTG. | 54 |
| TOTAL HR. RUN | 15½ |
| COND. OF BIT | Drlg * |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 10⁰⁰ | 2⁰⁰ | 7⁰⁰ |
| WEIGHT | 10.3 | 10.3 | 10.3 |
| VISC.-SEC | 56 | 56 | 53 |
| W.L.-C.C. | | | 8.0 |
| FL.TR. CK. | | | |
| PH | 9.5 | | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER K Hunt

**FOOTAGE**

| FROM | TO | DR.-D RM.-R CORE.-C | CORE NO. |
|---|---|---|---|
| 3568 | 3597 | D | |

**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 |
|---|---|---|---|---|---|---|---|
| ~~30~~ 35 | 30 35 | 1300 | 5½ | | 5½ | 74 | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 3580 | 2½ | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12⁰⁰ | 5⁴⁵ | 5¾ | Drlg. |
| 5⁴⁵ | 6⁰⁰ | ¼ | Survey |
| 6⁰⁰ | 8⁰⁰ | 2 | Drlg. |

## DAY TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | FT. |
|---|---|---|
| 31 | STANDS D.P. | 2934.28 |
| 1 | SINGLES D.P. | 31.18 |
| 21 | D.C. 2⅞ 6¾ I.D. O.D. | 618.28 |
| | D.C. I.D. O.D. | |
| 1 | STB. BODY O.D. | 8.14 |
| 1 | STB. BODY O.D. | 8.14 |
| 1 | ~~SUB~~ STB BODY O.D. | 8.30 |
| 1 | SUBS O.D. | 3.45 |
| | BIT OR C.B. | |
| 1 | Shock sub | 9.46 |
| | KELLY DOWN | 16.21 |
| | TOTAL | 3627 |

WT. OF STRING 100 m. LBS.

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 6 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | DMJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 14 |
| SER. NO. | 351838 |
| DEPTH OUT | |
| DEPTH IN | 3543 |
| TOTAL FTG. | 84 |
| TOTAL HR. RUN | 7.3 |
| COND. OF BIT | DRlg |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 8⁰⁰ | 1⁰⁰ | 3³⁰ |
| WEIGHT | 10.3 | 10.3 | 10.3 |
| VISC.-SEC | 53 | 65 | 60 |
| W.L.-C.C. | 8.0 | 8.0 | 9.0 |
| FL.TR. CK. | 2/32 | 2/32 | 2/32 |
| PH | 9.5 | 9.5 | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Gel | 5 sks | | |
| Benex | 1 sk | | |
| Soda Ash | 1 sk | | |

DRILLER R Brundige

**FOOTAGE**

| FROM | TO | DR.-D RM.-R CORE.-C | CORE NO. |
|---|---|---|---|
| 3597 | 3627 | D | |

**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 |
|---|---|---|---|---|---|---|---|
| 35 | 35 | 1300 | 5½ | 73 | 5½ | | 5 |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 3610 | 2° | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8⁰⁰ | 1³⁰ | 5½ | DRLg |
| 1³⁰ | 1⁴⁵ | ¼ | SURVEY. |
| 1⁴⁵ | 2⁰⁰ | ¼ | Rig SERV. & B.O.P. |
| 2⁰⁰ | 4⁰⁰ | 2 | DRLg. |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | FT. |
|---|---|---|
| 31 | STANDS D.P. | 2934.28 |
| | SINGLES D.P. | 31.18 |
| 21 | D.C. I.D. O.D. | 618.28 |
| | D.C. I.D. O.D. | |
| 1 | STB. BODY O.D. | 8.14 |
| 1 | STB. BODY O.D. | 8.14 |
| 1 | ~~SUB~~ STB BODY O.D. | 8.30 |
| 1 | SUBS O.D. | 3.45 |
| | BIT OR C.B. | 9.46 |
| 1 | Shock sub | |
| | KELLY DOWN | 40.00 |
| | TOTAL | 3652.00 |

FT. OF STRING 105 m LBS.

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 6 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | DMJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 14 |
| SER. NO. | 351838 |
| DEPTH OUT | |
| DEPTH IN | 3543 |
| TOTAL FTG. | 109 |
| TOTAL HR. RUN | 20½ |
| COND. OF BIT | Drlg |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 7⁰⁰ | 9⁰⁰ | 11.0⁰⁰ |
| WEIGHT | 10.3 | 10.3 | 10.3 |
| VISC.-SEC | 55 | 57 | 56 |
| W.L.-C.C. | 8.0 | | |
| FL.TR. CK | 2/32 | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER

**FOOTAGE**

| FROM | TO | DR.-D RM.-R CORE.-C | CORE NO. |
|---|---|---|---|
| 3627 | 3652 | | |

**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 |
|---|---|---|---|---|---|---|---|
| 35 | 35 | 1300 | 5½ | 73 | 5½ | | S |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4⁰⁰ | 5³⁰ | 1½ | DRLg. |
| 5.30 | 5⁴⁵ | ¾ | Check up Conservation Board. |
| 5⁴⁵ | 9⁰⁰ | 3¼ | Drlg. |
| 9⁰⁰ | 9.15 | ¼ | ~~Drlg~~ Work on Flow Line |
| 9.15 | 12.00 | 2¾ | Drlg. |

## DRILLING CREW PAYROLL DATA

DATE April 19/73

WELL NAME & NO. Union A Klavik F38

COMPANY Union Oil Co. LTD

TOOL PUSHER D. A. Webber RIG NO. 1E

**MORNING TOUR** P.M. A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R. Henley | 12 |
| DRKMAN | | C. Campbell | 12 |
| MTRMAN | | D. McLoughlin | 12 |
| FIREMAN | | | |
| FLRMAN | | Stan Shumacher | 12 |
| FLRMAN | | D. Iseman. | 12 |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST-TIME ACCIDENT

**DAY TOUR** 1²⁰ A.M. 12²⁰ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R B Brundige | 12 |
| DRKMAN | | E Surgenay | 12 |
| MTRMAN | | B Larsen | 12 |
| FIREMAN | | | |
| FLRMAN | | E Engelish | 12 |
| FLRMAN | | D Irish | 12 |
| FLRMAN | | B Taylor | 12 |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

**EVENING TOUR** P.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

DAILY DRILLING REPORT — REPORT NO. 32 — DATE April 18/73

OPERATOR: Union Oil Co. LTD.

LEASE: Union Aklavik

WELL NO. F38 — FIELD OR DIST. Aklavik — COUNTY N.W.T. — STATE Canada

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. — RIG NO. 1E

DRILL PIPE STRING: NO. 3 x 3 — SIZE 4½" — TOOL JOINT TYPE THD. 3½ IF — 5" O.D.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry D. Armstrong

PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NAT | K 350 | 14" |
| 2. | NAT | K 350 | 14" |
| 3. | | | |

LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | Mann | 40# K55 | 67 | 2765.07 | | 2760 | |

TIME DISTRIBUTION–HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 7¼ | 9½ | 7¾ |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | 3¾ | |
| LUBRICATE RIG | ¼ | | ¼ |
| DEVIATION SURVEY | ¼ | | |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | ¾ | |
| REPAIR RIG | | | |
| [illegible]ING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK: A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 18 | 8 |

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK
HRS. W/DP
HRS. WO/DP
HRS. STANDBY
TOTAL DAY WORK

WIRE LINE RECORD

REEL NO.
NO. OF LINES — SIZE
FEET SLIPPED
FEET CUT OFF
PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.

## MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 30 | STANDS D.P. | 2831.51 FT. |
| 1 | SINGLES D.P. | 31.67 FT. |
| 21 | D.C. 2¾ I.D. 6¾ O.D. | 618.24 FT. |
| | D.C. I.D. O.D. | FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | RMR. STB BODY O.D. | 8.30 FT. |
| 1 | SUBS O.D. | 3.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shocksub | 4.46 FT. |
| | KELLY DOWN | 14.77 FT. |
| | TOTAL | 3537 FT. |

WT. OF STRING 100M LBS.

BIT RECORD

| | |
|---|---|
| BIT NO. | 5 |
| SIZE | 8½ |
| MFG. | Sec |
| TYPE | DSJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 197590 |
| DEPTH OUT | |
| DEPTH IN | 3448 |
| TOTAL FTG. | 89 |
| TOTAL HR. RUN | 27½ |
| COND. OF BIT | Drlg. |
| REAMER NO. | |
| REAMER TYPE | |

MUD RECORD

| TIME | 2:00 | N 0:00 | 6:00 |
|---|---|---|---|
| WEIGHT | 10.2 | 10.2 | 10.2 |
| VISC.–SEC | 58 | 57 | 57 |
| W.L.–C.C. | | | |
| FL.TR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|

DRILLER R. Henley

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'EL–P COM'D–C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3514 | 3537 | D | | | 35 | 30 | 1300 | 5½ | | 6½ | 73 | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 3520 | 1¾ | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12:00 | 3:30 | 3½ | Drlg |
| 3:30 | 3:45 | ¼ | Rig Serv. & BOPs |
| 3:45 | 4:00 | ¼ | Survey |
| 4:00 | 8:00 | 4 | Drlg |

## DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 30 | STANDS D.P. | 2851.51 FT. |
| 1 | SINGLES D.P. | 31.67 FT. |
| 21 | D.C. 2⅞ I.D. 6¾ O.D. | 618.24 FT. |
| | D.C. I.D. O.D. | FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | RMR. STB BODY O.D. | 8.30 FT. |
| 1 | SUBS O.D. | 3.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shocksub | 4.46 FT. |
| | KELLY DOWN | 26.77 FT. |
| | TOTAL | 3543 FT. |

WT. OF STRING 100 M LBS.

BIT RECORD

| | | |
|---|---|---|
| BIT NO. | 5 | 6 |
| SIZE | 8½ | 8½ |
| MFG. | SEC | SEC |
| TYPE | DSJ | OMJ |
| NOZZLE NO. | 3 | 3 |
| NOZZLE SIZE | 16 | 14 |
| SER. NO. | 197590 | 351788 |
| DEPTH OUT | 3543 | |
| DEPTH IN | 3448 | 3543 |
| TOTAL FTG. | 95 | |
| TOTAL HR. RUN | 31 | |
| COND. OF BIT | 7-4-1 | |
| REAMER NO. | | |
| REAMER TYPE | | |

MUD RECORD

| TIME | 9:00 | | |
|---|---|---|---|
| WEIGHT | 10.2 | | |
| VISC.–SEC | 57 | T | |
| W.L.–C.C. | | R | |
| FLTR. CK. | | I | |
| PH | | P. | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Gel | 5 SKS | Soda Ash | 1 SK |
| Benex | 3 SKS | | |
| Barite | 60 SKS | | |

DRILLER A. Brundidge

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'EL–P COM'D–C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3537 | 3543 | D | | | 35 | 30 | 1300 | 5½ | | 6½ | 73 | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 3543 | 1 7/8 | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8:00 | 11:30 | 3½ | DRLG |
| 11:30 | 1:30 | 2 | DROP SURVEY & HOIST BITS |
| 1:30 | 2:00 | ½ | RUN IN DC |
| 2:00 | 2:45 | ¾ | SLIPPED LINE |
| 2:45 | 4:00 | 1¼ | RUN IN 2nd BIT #6 |

## EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 30 | STANDS D.P. | 2821.51 FT. |
| 2 | SINGLES D.P. | 63.09 FT. |
| 21 | D.C. 2⅞ x 6¾ I.D. O.D. | 614.28 FT. |
| | D.C. I.D. O.D. | FT. |
| 1 | STB. BODY O.D. | 8.19 FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | RMR. STB BODY O.D. | 8.30 FT. |
| 1 | SUBS O.D. | 3.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock sub | 4.46 FT. |
| | KELLY DOWN | 14.69 FT. |
| | TOTAL | 3568.00 FT. |

WT. OF STRING 100 M LBS.

BIT RECORD

| | |
|---|---|
| BIT NO. | 6 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | OMJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 14 |
| SER. NO. | 351388 |
| DEPTH OUT | |
| DEPTH IN | 3543 |
| TOTAL FTG. | 25 |
| TOTAL HR. RUN | 7¾ |
| COND. OF BIT | Drlg |
| REAMER NO. | |
| REAMER TYPE | |

MUD RECORD

| TIME | 5:00 | 4:00 | 11:00 |
|---|---|---|---|
| WEIGHT | 10.2 | 10.2 | 10.3 |
| VISC.–SEC | 56 | 56 | 57 |
| W.L.–C.C. | 7.8 | | 7.4 |
| FLTR. CK | | | |
| PH | | | 9.5 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.–S PAR'EL–P COM'D–C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3543 | 3568 | D | | | 35 | 10 | 1500 | 5½ | | 6½ | 68 | |
| | | | | | | 20 | | | | | | |
| | | | | | | 30 | | | | | | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4:00 | 9:00 | 5 | DRLG |
| 9:00 | 9:14 | ¼ | Rig Serv. & BOPs |
| 9:15 | 12:00 | 2¾ | Drlg |

DRILLING CREW PAYROLL DATA

DATE April 18/73 —
WELL NAME & NO. Union Aklavik F38
COMPANY Union Oil Co. LTD.
TOOL PUSHER Barry D. Armstrong RIG NO. 1E

MORNING TOUR 12:00 P.M. 8:00 A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R. Henley | 12 |
| DRKMAN | | E. Comptebell | 12 |
| MTRMAN | | D. McLaughlin | 12 |
| FIREMAN | | | |
| FLRMAN | | Stan Shumacher | 12 |
| FLRMAN | | Dr. Jasmon | 12 |
| FLRMAN | | | |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

DAY TOUR 8:00 A.M. 4:00 P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | A. Brundidge | 12 |
| DRKMAN | | E. Swyripa | 12 |
| MTRMAN | | B. Larsen | 12 |
| FIREMAN | | | |
| FLRMAN | | E. Chill | 12 |
| FLRMAN | | D. Irish | 12 |
| FLRMAN | | B. Taylor | 15 |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR _____ P.M. _____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 31 — DATE April 17/73

OPERATOR: Union Oil Co. LTD.

LEASE: Union Aklavik

WELL NO. F38 — FIELD OR DIST. Union Aklavik — COUNTY N.W.T. — STATE Canada

CONTRACTOR: S&T DRILLING (WESTERN) CO. LTD. — RIG NO. 1E

DRILL PIPE STRING: NO. 213 — SIZE 4½" — TOOL JOINT TYPE THD. 3½ IF — O.D. 5"

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry D Armstrong

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NOT | K 380 | 14" |
| 2. | NOT | K 380 | 14" |
| 3. | | | |

LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | Mann | 40# K-S | 167 | 2765' | | 2760 | |

## TIME DISTRIBUTION — HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 4½ | 7¾ | 7¾ |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | 3½ | | |
| LUBRICATE RIG | | ¼ | |
| DEVIATION SURVEY | | | ¼ |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| [illegible]ING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER From T.D. to B.O.P. | ¼ | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | |

## TIME SUMMARY (OFFICE USE ONLY)

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.

NO. OF LINES — SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | | |
|---|---|---|---|
| 29 | STANDS D.P. | 2744.78 | FT. |
| 1 | SINGLES D.P. | 31.69 | FT. |
| 21 | D.C. 2⅞ I.D. 6¾ O.D. | 618.28 | FT. |
| | D.C. I.D. O.D. | [illegible] | FT. |
| 1 | STB. BODY O.D. | 8.14 | FT. |
| 1 | STB. BODY O.D. | 8.19 | FT. |
| 1 | RMR. STB BODY O.D. | 8.30 | FT. |
| 1 | SUBS O.D. | 3.45 | FT. |
| | BIT OR C.B. | | FT. |
| 1 | Shocksub | 9.46 | FT. |
| | KELLY DOWN | 39.05 | FT. |
| | TOTAL | 34.62 | FT. |

WT. OF STRING 100.M LBS.

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 5 |
| SIZE | 8½ |
| MFG. | Sec |
| TYPE | DS5 |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 147590 |
| DEPTH OUT | |
| DEPTH IN | 3448 |
| TOTAL FTG. | 14 |
| TOTAL HR. RUN | 4½ |
| COND. OF BIT | Drlg |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | | 5[illegible] | 7:00 |
| WEIGHT | | 10.2 | 10.2 |
| VISC.-SEC | | 58 | 58 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Barcoid | 10SK | | |

DRILLER R Henley

**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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3448 | 3462 | D | | | 35 | 10 | 1350 | 5½ | 74 | 5½ | | S |
| | | | | | | 20 | | | | | | |
| | | | | | | 30 | | | | | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 3448 | 1¾ | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12.00 | 1.00 | 1 | Hoist For Bit |
| 1.00 | 1.45 | ¾ | Make up Bit x Change Stab. Rubbers |
| 1.45 | 3.15 | 1½ | Run in w/ Bit #5 |
| 3.15 | 3.30 | ¼ | Clean 10' to Bottom. |
| 3.30 | 8.00 | 4½ | Drlg 8½" Hole |

✓ Escape Buggie — Held Blow out Drill.

## DAY TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | | |
|---|---|---|---|
| 29 | STANDS D.P. | 2744.78 | FT. |
| 2 | SINGLES D.P. | 63.22 | FT. |
| 21 | D.C. 2⅞ I.D. 6¾ O.D. | 618.28 | FT. |
| | D.C. I.D. O.D. | [illegible] | FT. |
| 1 | STB. BODY O.D. | 8.14 | FT. |
| 1 | STB. BODY O.D. | 8.19 | FT. |
| 1 | RMR. STB BODY O.D. | 8.30 | FT. |
| 1 | SUBS O.D. | 3.45 | FT. |
| | BIT OR C.B. | | FT. |
| 1 | Shocksub | 9.46 | FT. |
| | KELLY DOWN | 37. | FT. |
| | TOTAL | 34.97 | FT. |

WT. OF STRING 100.M. LBS.

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 5 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | DSJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 7/16 |
| SER. NO. | 147590 |
| DEPTH OUT | |
| DEPTH IN | 3448 |
| TOTAL FTG. | 43 |
| TOTAL HR. RUN | 12¼ |
| COND. OF BIT | DRlg |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 9:30 | 1:00 | 2:30 |
| WEIGHT | 10.3 | 10.2 | 10.2 |
| VISC.-SEC | 57. | 54. | 50 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Gel | 10 SKS. | | |
| Benex | 2 SKS | | |

DRILLER R Brundige

**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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3442 | 3491 | D | | [illegible] | 35 | 30 | 1550 | 5½ | | 5½ | 73 | S |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8 00 | 8 15 | ¼ | Rig Serv. ✓ BOP & MORTOR SHUT OFF |
| 8 15 | 4 00 | 7¾ | DRlg. |

✓ Fire Extinguisher Hold Blow out Drill

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | | |
|---|---|---|---|
| 30 | STANDS D.P. | 2839.51 | FT. |
| | SINGLES D.P. | | FT. |
| 21 | D.C. 2⅞ I.D. 6¾ O.D. | 618.28 | FT. |
| | D.C. I.D. O.D. | | FT. |
| 1 | STB. BODY O.D. | 8.14 | FT. |
| 1 | STB. BODY O.D. | 8.19 | FT. |
| 1 | RMR. STB BODY O.D. | 8.30 | FT. |
| 1 | SUBS O.D. | 3.45 | FT. |
| | BIT OR C.B. | | FT. |
| 1 | Shock sub | 9.46 | FT. |
| | KELLY DOWN | 28.04 | FT. |
| | TOTAL | 35.14 | FT. |

WT. OF STRING 100.M. LBS.

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 5 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | DST |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 14 |
| SER. NO. | 147590 |
| DEPTH OUT | |
| DEPTH IN | 3448 |
| TOTAL FTG. | 66 |
| TOTAL HR. RUN | 20 |
| COND. OF BIT | Drlg. |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 7[illegible] | 10.00 | 12.00 |
| WEIGHT | 10.2 | 10.2 | 10.2 |
| VISC.-SEC | 64 | 59 | 54. |
| W.L.-C.C. | | | |
| FLTR. CK | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3491 | 3514 | D | | | 35 | 30 | 1300 | 5½ | | 5½ | 73 | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 3486 | 1 ¾ | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4 00 | 5 15 | 1¼ | DRlg. |
| 5 15 | 5 30 | ¼ | SURVEY. |
| 5 30 | 12 00 | 6½ | DRlg. |

## DRILLING CREW PAYROLL DATA

DATE April 17/73

WELL NAME & NO. Union Aklavik F38

COMPANY Union Oil Co LTD

TOOL PUSHER Barry D Armstrong — RIG NO. 1E

MORNING TOUR ____ P.M. ____ A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R. Henley | 12 |
| DRKMAN | | C. Compbell | 12 |
| MTRMAN | | D. McLaughlin | 12 |
| FIREMAN | | | |
| FLRMAN | | Stan Shumacher | 12 |
| FLRMAN | | D. Jasman | 12 |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST-TIME ACCIDENT

DAY TOUR ____ A.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R Brundige | 12 |
| DRKMAN | | E. Sywenky | 12 |
| MTRMAN | | B Larsen | 12 |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | E Edehill | 12 |
| FLRMAN | | D Irish | 12 |
| FLRMAN | | B. Taylor | 12 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR ____ P.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 38 DATE April 16/73

OPERATOR: Union Oil Co. LTD

LEASE: Union Aklavik

WELL NO. F38 FIELD OR DIST. Aklavik COUNTY N.W.T STATE Canada

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. RIG NO. 1E

DRILL PIPE STRING NO. 223 SIZE 4½" TOOL JOINT O.D. 5" TYPE THD. 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry Armstrong

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | Nat | K 380 | 14" |
| 2. | Nat | K 350 | 14" |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | Mann | 40# KS | 67 | 2766 FT | | 2760 | |

**TIME DISTRIBUTION—HOURS**

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 7½ | 7¾ | 6¼ |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | | 1 |
| LUBRICATE RIG | ¼ | 1/4 | ¼ |
| DEVIATION SURVEY | ¼ | | |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| CASING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

**TIME SUMMARY (OFFICE USE ONLY)**

DAY WORK
HRS. W/DP
HRS. WO/DP
HRS. STANDBY
TOTAL DAY WORK

**WIRE LINE RECORD**

REEL NO.
NO. OF LINES SIZE
FEET SLIPPED
FEET CUT OFF
PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.

## MORNING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 29 | STANDS D.P. | 2744.78 FT. |
| | SINGLES D.P. | FT. |
| | D.C. I.D. O.D. | FT. |
| 21 | D.C. 2⅞ I.D. 6¾ O.D. | 618.24 FT. |
| 1 | STB. BODY O.D. | 8.19 FT. |
| 1 | STB. BODY O.D. | 8.19 FT. |
| 1 | RMR. STB BODY O.D. | 8.30 FT. |
| 1 | SUBS O.D. | 3.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock sub | 9.46 FT. |
| | KELLY DOWN | 18.77 FT. |
| | TOTAL | 3410 FT. |
| WT. OF STRING | 98M. | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 4 |
| SIZE | 8½ |
| MFG. | Sec |
| TYPE | DMJ |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 14 16 |
| SER. NO. | 338405 |
| DEPTH OUT | |
| DEPTH IN | 3366 |
| TOTAL FTG. | 44 |
| TOTAL HR. RUN | 13½ |
| COND. OF BIT | Drlg. |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 10:00 | 8:00 | |
| WEIGHT | 10.3 | 10.2 | |
| VISC.-SEC | 48 | 47 | |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | 90 SKS | | |
| BENEX | 2 SKS | | |

DRILLER R Henley

**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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3387 | 3410 | D | | | 35 | 25 | 1200 | 5½ | | 5½ | 73 | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 3340 | 1¾ | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12:00 | 4.00 | 4 | Drlg. |
| 4:00 | 4.15 | ¼ | Rig Serv. & BOPs. |
| 4.15 | 4.30 | ¼ | Dev. Survey |
| 4.30 | 8:00 | 3½ | Drlg |

## DAY TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 29 | STANDS D.P. | 2744.78 FT. |
| | SINGLES D.P. | 31.69 FT. |
| 21 | D.C. 2⅞ I.D. 6¾ O.D. | 618.24 FT. |
| | D.C. I.D. O.D. | FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | STB. BODY O.D. | 8.19 FT. |
| 1 | RMR. STB BODY O.D. | 8.30 FT. |
| 1 | SUBS O.D. | 3.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock sub | 9.46 FT. |
| | KELLY DOWN | 25.04 FT. |
| | TOTAL | 3448 FT. |
| WT. OF STRING | 98M. | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 4 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | DMJ |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 14 14 |
| SER. NO. | 338405 |
| DEPTH OUT | 3448 |
| DEPTH IN | 3366 |
| TOTAL FTG. | 112 |
| TOTAL HR. RUN | 28 |
| COND. OF BIT | 5-5-1 |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 8:00 | 11:00 | 1:00 |
| WEIGHT | 10.2 | 10.2 | 10.2 |
| VISC.-SEC | 50 | 50 | 49 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Gel | 10# | | |
| Benex | 2# | | |
| Soda Ash | 1# | | |

DRILLER R Brundrige

**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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3410 | 3432 | D | | | 35 | 30 | 1300 | 5½ | | 5½ | 73 | S |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8:00 | 12:30 | 4½ | Drlg. |
| 12:30 | 12:45 | ¼ | Rig Serv. & BOP. |
| 12:45 | 4:00 | 3¼ | Drlg. |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 29 | STANDS D.P. | 2744.78 FT. |
| 1 | SINGLES D.P. | 31.69 FT. |
| 21 | D.C. 2⅞ I.D. 6¾ O.D. | 618.24 FT. |
| | D.C. I.D. O.D. | FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | STB. BODY O.D. | 8.19 FT. |
| 1 | RMR. STB BODY O.D. | 8.30 FT. |
| 1 | SUBS O.D. | 3.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shock sub | 9.46 FT. |
| | KELLY DOWN | 25.04 FT. |
| | TOTAL | 3448 FT. |
| WT. OF STRING | 98M. | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 4 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | DMJ |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 14 14 |
| SER. NO. | 338405 |
| DEPTH OUT | 3448 |
| DEPTH IN | 3366 |
| TOTAL FTG. | 112 |
| TOTAL HR. RUN | 28 |
| COND. OF BIT | 5-5-1 |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 6:30 | | |
| WEIGHT | 10.2 | | |
| VISC.-SEC | 70 | | |
| W.L.-C.C. | | | |
| FLTR. CK | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER

**FOOTAGE**

| FROM | TO | DR.D RM.P 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3432 | 3448 | | | | 35 | 40 | 1350 | 5½ | | 5½ | 73 | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 3422 | 1½ | | 3448 | 1¾ | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4:00 | 4:15 | ¼ | Surv. Hy. |
| 4:15 | 11:00 | 6¾ | Drlg. |
| 11:00 | 12:00 | 1 | Trip survey Hoist For Bit |

**DRILLING CREW PAYROLL DATA**

DATE April 16/73
WELL NAME & NO. Union Aklavik F38
COMPANY Union Oil Co LTD
TOOL PUSHER Barry Armstrong RIG NO. 1E

MORNING TOUR ____ P.M. ____ A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R. Henley | 12 |
| DRKMAN | | C. Campbell | 12 |
| MTRMAN | | D. McLaughlin | 12 |
| FIREMAN | | | |
| FLRMAN | | STan Shumacher | 12 |
| FLRMAN | | D. Jasman | 12 |
| FLRMAN | | | |

NO. OF DAYS 8 SINCE LAST LOST-TIME ACCIDENT

DAY TOUR 8 A.M. 4:00 P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | A Brundrige | 12 |
| DRKMAN | | F Syvenky | 12 |
| MTRMAN | | B LAREN | 12 |
| FIREMAN | | | |
| FLRMAN | | F ERCHILL | 12 |
| FLRMAN | | | |
| FLRMAN | | B TAYLOR | 12 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR ____ P.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 29 — DATE April 15/73

OPERATOR: Union Oil Co LTD

LEASE: Union Aklavik

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. — RIG NO. 1E

DRILL PIPE STRING: NO. 233 — SIZE 4½" — TOOL JOINT O.D. 5" — TYPE THD. 3½IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry D Armstrong

WELL NO. — FIELD OR DIST. Aklavik — COUNTY ~~Canada~~ N.W.T. — STATE Canada

PUMPS F-38

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | Nat | K 380 | 14" |
| 2. | Nat | K 380 | 14" |
| 3. | | | |

LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | Maint | 40#KS | 67 | 2760 | | 2760 | |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 7½ | 4 | 6 |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | 3½ | 1½ |
| LUBRICATE RIG | ¼ | 1/4 | |
| DEVIATION SURVEY | ¼ | 1/4 | |
| TEST S.O.P. | | | |
| CUT OFF DRILLING LINE | | | ½ |
| REPAIR RIG | | | |
| RIG SERVICING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |

COMPLETION WORK: A. PERFORATING; B. TUBING TRIPS; C. SWABBING; D. TESTING; E. ADDITIONAL

TOTALS: 8 8 8

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.

NO. OF LINES 4 — SIZE 1¼

FEET SLIPPED 23'

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

| NO. | DRILLING ASSEMBLY AT END OF TOUR | | |
|---|---|---|---|
| 28 | STANDS D.P. | 2650.21 | FT. |
| | SINGLES D.P. | | FT. |
| 21 | D.C. 2¼ x 6¾ I.D. O.D. | 618.24 | FT. |
| | D.C. I.D. O.D. | | FT. |
| 1 | STB. BODY O.D. | 8.19 | FT. |
| 1 | STB. BODY O.D. | 8.14 | FT. |
| | RMR. BODY O.D. | | FT. |
| 1 | SUBS O.D. | 3.45 | FT. |
| | BIT OR C.B. | | FT. |
| 1 | Shock Sub | 9.46 | FT. |
| | KELLY DOWN | 34.14 | FT. |
| | TOTAL | 3354.00 | FT. |

WT. OF STRING 95 m. LBS.

BIT RECORD

| | |
|---|---|
| BIT NO. | 3 |
| SIZE | 8½ |
| MFG. | Sec |
| TYPE | M44N |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 14 |
| SER. NO. | 913610 |
| DEPTH OUT | |
| DEPTH IN | 3270 |
| TOTAL FTG. | 84 |
| TOTAL HR. RUN | 15½ |
| COND. OF BIT | Drlg |
| REAMER NO. | |
| REAMER TYPE | |

MUD RECORD

| TIME | 1:00 | 4:00 | 7:00 |
|---|---|---|---|
| WEIGHT | 10.2 | 10.2 | 10.2 |
| VISC.-SEC | 59 | 55 | 53 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | 10SKS | | |
| BARITE | 20SKS | | |
| BENEX | 2SKS | | |

DRILLER R. Henley

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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3325 | 3354 | D | | | 60 | 20 | 1400 | 5½ | | 5½ | 73 | |

DEVIATION RECORD: DEPTH 3320 — DEV. 1 3/4 — DIRECTION

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12:00 | 12:30 | ½ | Drlg. |
| 12:30 | 12:45 | ¼ | Rig Serv. ✓ BOPs. |
| 12:45 | 1:00 | ¼ | Survey |
| 1:00 | 8:00 | 7 | Drlg. |

## DAY TOUR

| NO. | DRILLING ASSEMBLY AT END OF TOUR | | |
|---|---|---|---|
| 28 | STANDS D.P. | 2650.21 | FT. |
| 2 | SINGLES D.P. | 63.31 | FT. |
| 21 | D.C. 2½ x 6¾ I.D. O.D. | 618.24 | FT. |
| | D.C. I.D. O.D. | | FT. |
| 1 | STB. BODY O.D. | 8.19 | FT. |
| 1 | STB. BODY O.D. | 8.14 | FT. |
| | RMR. BODY O.D. | | FT. |
| 1 | SUBS O.D. | 3.45 | FT. |
| | BIT OR C.B. | | FT. |
| | | | FT. |
| | KELLY DOWN | 15 | FT. |
| | TOTAL | 3566 | FT. |

WT. OF STRING 98 LBS.

BIT RECORD

| | | |
|---|---|---|
| BIT NO. | 3 | 4 |
| SIZE | 8½ | 8½ |
| MFG. | SEC | SEC |
| TYPE | M44N | OMT |
| NOZZLE NO. | 3 | 1 2 |
| NOZZLE SIZE | 14 | 14 14 |
| SER. NO. | 913610 | 839405 |
| DEPTH OUT | 3366 | |
| DEPTH IN | 3270 | 3366 |
| TOTAL FTG. | 96 | |
| TOTAL HR. RUN | 19½ | |
| COND. OF BIT | 6 2 1 | |
| REAMER NO. | | |
| REAMER TYPE | | |

MUD RECORD

| TIME | 8:30 | 10:30 | |
|---|---|---|---|
| WEIGHT | 10.3 | 10.3 | |
| VISC.-SEC | 53 | 52 | |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R Brundige

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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3324 | 3566 | D | | | 60 | 20 | 1450 | 5½ | 73 | 5½ | | 5 |

DEVIATION RECORD: DEPTH 3350 — DEV. 1½ — DIRECTION — DEPTH 3366 — DEV. 2° — DIRECTION

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8:00 | 9:45 | 1¾ | DRLg. |
| 9:45 | 10:00 | ¼ | SURVEY |
| 10:00 | 10:15 | ¼ | Rig SERV ✓ BOP. |
| 10:15 | 12:30 | 2¼ | DRLg |
| 12:30 | 3:00 | 2½ | DROPPED SURVEY & HOIST BIT #3. |
| 3 | 4:00 | 1 | Run D.C. & Pick up BODY STB |

## EVENING TOUR

| NO. | DRILLING ASSEMBLY AT END OF TOUR | | |
|---|---|---|---|
| 28 | STANDS D.P. | 2650.21 | FT. |
| 2 | SINGLES D.P. | 63.31 | FT. |
| 21 | D.C. 2½ x 6¾ I.D. O.D. | 618.24 | FT. |
| | D.C. I.D. O.D. | | FT. |
| 1 | STB. BODY O.D. | 8.19 | FT. |
| 1 | STB. BODY O.D. | 8.14 | FT. |
| 1 | RMR. STB. BODY O.D. | 8.30 | FT. |
| 1 | SUBS O.D. | 3.45 | FT. |
| | BIT OR C.B. | | FT. |
| | | | FT. |
| | KELLY DOWN | 27.18 | FT. |
| | TOTAL | 3387 | FT. |

WT. OF STRING 96 LBS.

BIT RECORD

| | |
|---|---|
| BIT NO. | 4 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | OMT |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 14 14 |
| SER. NO. | 351903 |
| DEPTH OUT | |
| DEPTH IN | 3366 |
| TOTAL FTG. | 21 |
| TOTAL HR. RUN | 6 |
| COND. OF BIT | Drlg |
| REAMER NO. | |
| REAMER TYPE | |

MUD RECORD

| TIME | 6:30 | 9:00 | 12:00 |
|---|---|---|---|
| WEIGHT | 10.3 | 10.3 | 10.3 |
| VISC.-SEC | 51 | 52 | 50 |
| W.L.-C.C. | | | |
| FLTR. CK | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ~~4~~ | ~~4~~ | | | | | | | | | | | |
| 3366 | 3387 | D | | | 35 | 25 | 1250 | 5½ | | 5½ | 73 | |

DEVIATION RECORD: DEPTH 3340 — DEV. 1½ — DIRECTION

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4:00 | 4:30 | ½ | SLIPPED LINE |
| 4:30 | 6:00 | 1½ | Rumhole & Brake Clrs. |
| 6:00 | 12:00 | 6 | DRLg. |

## DRILLING CREW PAYROLL DATA

DATE April 15/73

WELL NAME & NO. Union Aklavik E-38

COMPANY Union Oil Co LTD.

TOOL PUSHER Barry D Armstrong — RIG NO. 1E

MORNING TOUR — P.M. — A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R. Henley | 12 |
| DRKMAN | | C Campbell | 12 |
| MTRMAN | | D McLaughlin | 12 |
| FIREMAN | | | |
| FLRMAN | | Stan Shumacher | 12 |
| FLRMAN | | D. Jasman. | 12 |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST-TIME ACCIDENT

DAY TOUR 8:00 A.M. 4:00 P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R BRUNDIGE | 12 |
| DRKMAN | | E SYMENKY. | 12 |
| MTRMAN | | B LARSEN. | 12 |
| FIREMAN | | | |
| FLRMAN | | E EDGHILL | 12 |
| FLRMAN | | O IRISH | 12 |
| FLRMAN | | B TAYLOR | 12 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR ____ P.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 28 — DATE April 14/73

OPERATOR: Union Oil Co LTD

LEASE: Union AKlavik — WELL NO. ~~#7~~ — FIELD OR DIST.: AKlavik — COUNTY: NWT. — STATE: Canada

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. — RIG NO. 1E

DRILL PIPE STRING: NO. 253, SIZE 4" — TOOL JOINT O.D. 5" — TYPE THD. 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry Hunting

PUMPS F-38

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | Nat | K 350 | 14" |
| 2. | Nat | K 380 | 14" |
| 3. | | | |

LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | Mann | 40# KS | 67 | 2785.07 | | 2760 | |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 7¾ | 2 | 7½ |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | 5 | |
| LUBRICATE RIG | ¼ | ¼ | |
| DEVIATION SURVEY | | ¼ | ¼ |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | ¼ |
| CASING | | | |
| WIRELINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | ½ | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK
HRS. W/DP
HRS. WO/DP
HRS. STANDBY
TOTAL DAY WORK

WIRE LINE RECORD

REEL NO.
NO. OF LINES — SIZE
FEET SLIPPED
FEET CUT OFF
PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.

## MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 27 | STANDS D.P. | 2558.71 FT. |
| 1 | SINGLES D.P. | 31.28 FT. |
| | D.C. I.D. O.D. | FT. |
| 21 | D.C. 2¼ x 6¾ I.D. O.D. | 618.24 FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | STB. BODY O.D. | 8.17 FT. |
| | RMR. BODY O.D. | FT. |
| 1 | SUBS O.D. | 3.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shocksub | 9.46 FT. |
| | KELLY DOWN | 37.00 FT. |
| | TOTAL | 3262 FT. |

WT. OF STRING 96m - LBS.

BIT RECORD

| | |
|---|---|
| BIT NO. | 2 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | DSJ |
| NOZZLE NO. | 1 2 2 |
| NOZZLE SIZE | 14 16 |
| SER. NO. | 91228 |
| DEPTH OUT | |
| DEPTH IN | 3005 |
| TOTAL FTG. | 257 |
| TOTAL HR. RUN | 22 |
| COND. OF BIT | Drlg. |
| REAMER NO. | |
| REAMER TYPE | |

MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 2nd | 5th | 7.00 |
| WEIGHT | 10.5# | 10.2 | 10.2 |
| VISC.-SEC | 65 | 62 | 62 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | 10 SKS. | | |
| BENEX | 2 SKS | | |

DRILLER B Henley

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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3209 | 3262 | D | | | 40 | 35 | 1300 | 5½ | 62 | 5½ | | S |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12.00 | 3.30 | 3½ | Drlg. |
| 3.30 | 3.45 | ¼ | Rig Serv |
| 3.45 | 8.00 | 4¼ | Drlg. |

## DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 27 | STANDS D.P. | 2558.71 FT. |
| 2 | SINGLES D.P. | 62.68 FT. |
| 21 | D.C. 2¾ x 6¾ I.D. O.D. | 618.24 FT. |
| | D.C. I.D. O.D. | FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| | RMR. BODY O.D. | FT. |
| 1 | SUBS O.D. | 3.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shocksub | 9.46 FT. |
| | KELLY DOWN | 18.00 FT. |
| | TOTAL | 3279 FT. |

WT. OF STRING 96 m LBS.

BIT RECORD

| | 2 | 3 |
|---|---|---|
| BIT NO. | | |
| SIZE | 8½ | 8½ |
| MFG. | SEC | SEC |
| TYPE | DSJ | M44N |
| NOZZLE NO. | 1 2 2 | 3 |
| NOZZLE SIZE | 14 16 | 14 |
| SER. NO. | 91228 | 91340 |
| DEPTH OUT | 3270 | |
| DEPTH IN | 3005 | 3270 |
| TOTAL FTG. | 265 | 4 |
| TOTAL HR. RUN | 33½ | ½ |
| COND. OF BIT | 4 8 1 | ORlg |
| REAMER NO. | | |
| REAMER TYPE | | |

MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 3rd | | |
| WEIGHT | 10.3 | | |
| VISC.-SEC | 50 | | |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER B Baundrige

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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3242 | 3274 | D | | | 35 | 35 | 84 | 5½ | 63 | 5½ | | S |
| | | | | | 50 | 16 | 1450 | 5½ | | 5½ | 73 | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 3260 | 1½ | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8 am | 8.45 | ¾ | DRLg. (THRU D.P. DRILL + Safety meeting) |
| 8.45 | 9 00 | ¼ | SURVEY. |
| 9 00 | 9.15 | ¼ | Rig SERV + B.O.P. |
| 9.15 | 10 00 | ¾ | DRLg. |
| 10.00 | 12 30 | 2½ | HOIST BIT #2. |
| 12 30 | 3 00 | 2½ | RUN in w BIT #3 |
| 3 00 | 3 30 | ½ | CLEAN OUT 30 ft. FILL |
| 3 30 | 4 00 | ½ | DRLg. |

## EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 28 | STANDS D.P. | 2650.21 FT. |
| | SINGLES D.P. | FT. |
| 21 | D.C. 2¾ x 6¾ I.D. O.D. | 614.24 FT. |
| | D.C. I.D. O.D. | FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| | RMR. BODY O.D. | FT. |
| 1 | SUBS O.D. | 3.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shocksub | 9.46 FT. |
| | KELLY DOWN | 36.79 FT. |
| | TOTAL | 3325. FT. |

WT. OF STRING 96 m LBS.

BIT RECORD

| | 3 |
|---|---|
| BIT NO. | |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | M44N |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 14 |
| SER. NO. | 91340 |
| DEPTH OUT | |
| DEPTH IN | 3270 |
| TOTAL FTG. | 55 |
| TOTAL HR. RUN | 8 |
| COND. OF BIT | Run |
| REAMER NO. | |
| REAMER TYPE | |

MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 7.00 | 9.00 | 11.00 |
| WEIGHT | 10.2 | 10.2 | 10.1 |
| VISC.-SEC | 48 | 48 | 45 |
| W.L.-C.C. | | | |
| FLTR. CK | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3274 | 3325 | D | | | 60 | 20 | 1400 | 5½ | | 5½ | 73 | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4 00 | 7 30 | 3½ | DRLg. |
| 7 30 | 7 45 | ¼ | SURVEY |
| 7 45 | 9 15 | 1½ | DRLg. |
| 9 15 | 9 30 | ¼ | Work on Air Line. |
| 9.30 | 12 00 | 2½ | DRLg. |

## DRILLING CREW PAYROLL DATA

DATE April 14/73

WELL NAME & NO. Union AKlavik F#28

COMPANY Union Oil Co. LTD

TOOL PUSHER Barry Hunting — RIG NO. 1E

MORNING TOUR _____ P.M. _____ A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R. Henley | 12 |
| DRKMAN | | C Campbell | 12 |
| MTRMAN | | D. McLaughlin | 12 |
| FIREMAN | | | |
| FLRMAN | | STan Shumacher | 12 |
| FLRMAN | | D Tasman | 12 |
| FLRMAN | | | |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

DAY TOUR _____ A.M. _____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R BRundige | 12 |
| DRKMAN | | ES y KENky | 12 |
| MTRMAN | | BLARSEN | 12 |
| FIREMAN | | | |
| FLRMAN | | E EDCHILL | 12 |
| FLRMAN | | D IRISH | 12 |
| FLRMAN | | B TAYLOR | 12 |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR _____ P.M. _____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 27 — DATE April 13/73

OPERATOR: Union Oil Co. LTD.

LEASE: Union Aklavik C-38

WELL NO. ~~C38~~ — FIELD OR DIST. Aklavik — COUNTY NWT — STATE Canada

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. — RIG NO. 1E

DRILL PIPE STRING: NO. 233 SIZE 4½" — TOOL JOINT O.D. 5½" TYPE THD. 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry Armstrong

PUMPS: F-38

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | Wal | K380 | 14" |
| 2. | " | " | " |
| 3. | | | |

LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | KKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | Mann | 40# K-55 | 67 | 2786.07 | | 2760 | |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | | 7½ | 7½ |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | | |
| LUBRICATE RIG | | ¼ | |
| DEVIATION SURVEY | | ½ | ½ |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| RIGGING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | | 8 | 8 |

## TIME SUMMARY (OFFICE USE ONLY)

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.

NO. OF LINES — SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 25 | STANDS D.P. | 2365.90 FT. |
| 2 | SINGLES D.P. | 62.94 FT. |
| 21 | D.C. 2¾ x 6¾ I.D. O.D. | 618.24 FT. |
| | D.C. I.D. O.D. | FT. |
| | STB. BODY O.D. | 8.14 FT. |
| | STB. BODY O.D. | 8.17 FT. |
| | RMR. BODY O.D. | FT. |
| 1 | SUBS O.D. | 3.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | ShockSub | 9.46 FT. |
| | KELLY DOWN | 13.83 FT. |
| | TOTAL | 3080 FT. |

WT. OF STRING 96M LBS.

### BIT RECORD

| | |
|---|---|
| BIT NO. | 2 |
| SIZE | 8½ |
| MFG. | Sec |
| TYPE | DSJ |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 14/16 |
| SER. NO. | 91228 |
| DEPTH OUT | |
| DEPTH IN | ~~3005~~ 3005 |
| TOTAL FTG. | ~~75~~ 75 |
| TOTAL HR. RUN | 9¼ |
| COND. OF BIT | Run |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | |
|---|---|
| TIME | 700 |
| WEIGHT | 10.4 |
| VISC.-SEC | 62 |
| W.L.-C.C. | |
| FLTR. CK. | |
| PH | |
| SD. CONT. % | |
| PRESSURE GRADIENT | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER B. Henley

### FOOTAGE

| FROM | TO | DR. RM. CORE | 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3020 | 3080 | | | | 35 | 30 | 1250 | 5½ | 76 | 5½ | | 7 |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 3040 | 1½° | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| ~~12:00~~ | 12:15 | ¼ | Rig Serv. & BOPs. |
| 12:15 | 1:00 | ¾ | Displace Hole |
| 1:00 | 3:30 | 2½ | Drlg 8½ Hole |
| 3:30 | 3:45 | ¼ | Survey |
| 3:45 | 7:00 | 3¼ | Drlg |
| 7:00 | 7:15 | ¼ | Survey |
| 7:15 | 8:00 | ¾ | Drlg |

## DAY TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 26 | STANDS D.P. | 2455.94 FT. |
| 1 | SINGLES D.P. | 31.92 FT. |
| 21 | D.C. 2¾ x 6¾ I.D. O.D. | 618.24 FT. |
| | D.C. I.D. O.D. | FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | STB. BODY O.D. | 8.17 FT. |
| | RMR. BODY O.D. | FT. |
| 1 | SUBS O.D. | 3.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | Shocksub | 9.46 FT. |
| | KELLY DOWN | 13 FT. |
| | TOTAL | 3142 FT. |

WT. OF STRING 96M LBS.

### BIT RECORD

| | |
|---|---|
| BIT NO. | 2 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | DSJ |
| NOZZLE NO. | 1 3 |
| NOZZLE SIZE | 14/14 |
| SER. NO. | ~~91228~~ 91228 |
| DEPTH OUT | |
| DEPTH IN | 3005' |
| TOTAL FTG. | 137 |
| TOTAL HR. RUN | 14½ |
| COND. OF BIT | DRLg. |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | 8:30 | 12:00 | 2:00 |
|---|---|---|---|
| TIME | | | |
| WEIGHT | 10.3+ | 10.2 | 10.1 |
| VISC.-SEC | 53 | 70 | 57 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Gel | 15 sks | Q 13 roun | 2 sks. |
| Benex | 6 sks | cellex | 1 sk |
| Bentolite | 20 sks | Dextrid | 4 sks |

DRILLER A. Brundige

### FOOTAGE

| FROM | TO | DR. RM. CORE | 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3080 | 3142 | D | | | 35 | 35 | 15 | 5½ | 64 | 5½ | | 5 |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 3107 | 1° | | 3130 | 1° | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8:00 | 11:30 | 3½ | DRLg. |
| 11:30 | 11:45 | ¼ | SURVEY. |
| 11:45 | 3:00 | 3¼ | DRLg. |
| 3:15 | 3:30 | ¼ | SURVEY |
| 3:30 | 3:45 | ¼ | RIG SERV. & BOP. |
| 3:45 | 4:00 | ¼ | DRLg. |

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 27 | STANDS D.P. | 2558.72 FT. |
| | SINGLES D.P. | FT. |
| 21 | D.C. 2¾ x 6¾ I.D. O.D. | 618.24 FT. |
| | D.C. I.D. O.D. | FT. |
| 1 | STB. BODY O.D. | 8.14 FT. |
| 1 | STB. BODY O.D. | 8.17 FT. |
| | RMR. BODY O.D. | FT. |
| 1 | SUBS O.D. | 3.45 FT. |
| | BIT OR C.B. | FT. |
| 1 | SHOCKSUB | 9.46 FT. |
| | KELLY DOWN | 152.8 FT. |
| | TOTAL | 3209 FT. |

WT. OF STRING 96M LBS.

### BIT RECORD

| | |
|---|---|
| BIT NO. | 2 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | DSJ |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 14/14 |
| SER. NO. | 91228 |
| DEPTH OUT | |
| DEPTH IN | 3005' |
| TOTAL FTG. | 204 |
| TOTAL HR. RUN | 24½ |
| COND. OF BIT | Run |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | 6:30 | 9:00 | 12:00 |
|---|---|---|---|
| TIME | | | |
| WEIGHT | 10.3 | 10.3 | 10.2+ |
| VISC.-SEC | 49 | 56 | 50 |
| W.L.-C.C. | | | |
| FLTR. CK | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER

### FOOTAGE

| FROM | TO | DR. RM. CORE | 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3142 | 3209 | D | | | 40 | 35 | 1300 | 5½ | 64 | 5½ | | 9 |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 3195 | 1¼° | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4:00 | 11:00 | 7 | DRLg. |
| 11:00 | 11:15 | ¼ | WL Survey |
| 11:15 | ~~12:00~~ | ¾ | DRLg. |

## DRILLING CREW PAYROLL DATA

DATE April 13/73

WELL NAME & NO. Union Aklavik E-38

COMPANY Union Oil Co. LTD.

TOOL PUSHER Barry Armstrong — RIG NO. 1E

### MORNING TOUR ____ P.M. ____ A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | B. Henley | 12 |
| DRKMAN | | C. Campbell | 12 |
| MTRMAN | | D. McLaughlin | 12 |
| FIREMAN | | | |
| FLRMAN | | Stan Shumacher | 12 |
| FLRMAN | | D. Jasman | 12 |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST-TIME ACCIDENT

### DAY TOUR ____ A.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | A. Brundige | 12 |
| DRKMAN | | E. Symonenky | 12 |
| MTRMAN | | B. Larsen | 12 |
| FIREMAN | | | |
| FLRMAN | | L. F. Ogilvie | 12 |
| FLRMAN | | D. Irish | 12 |
| FLRMAN | | B. Taylor | 12 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

### EVENING TOUR ____ P.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 26 DATE APRIL 12/73

OPERATOR: UNION OIL CO LTD.

LEASE: UNION ARLANTX E-38

WELL NO. E-38 | FIELD OR DIST. ARLADIK | COUNTY N.W.T | STATE CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. | RIG NO. 1E

DRILL PIPE STRING: NO. 23 SIZE 4½" | TOOL JOINT 5" O.D. TYPE THD. 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry D Smathers

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NATIONAL | K-380 | 14" |
| 2. | " | " | " |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9 5/8 | MANN | 40# KS | 67 | 2785.07 | 7.60 | 2760 | |

**TIME DISTRIBUTION—HOURS**

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 3¾ | 13¼ | |
| REAMING | 1¼ | | |
| CONDITIONING MUD & CIRCULATING | | 6¼ | 5 |
| TRIPS | 3 | | |
| LUBRICATE RIG | 1¼ | | |
| DEVIATION SURVEY | 1¼ | | |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | ½ | | |
| REPAIR RIG | | | |
| CASING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

**TIME SUMMARY (OFFICE USE ONLY)**

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

**WIRE LINE RECORD**

REEL NO.

NO. OF LINES 8 SIZE 11/8

FEET SLIPPED 23'

FEET CUT OFF 55'

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | | |
|---|---|---|---|
| 24 | STANDS D.P. | 2298.59 | FT. |
| 2 | SINGLES D.P. | 62.80 | FT. |
| 21 | D.C. 8 7/8 I.D. 6 3/4 O.D. | 618.24 | FT. |
| | D.C. I.D. O.D. | | FT. |
| 7 | STB. BODY O.D. | | FT. |
| 1 | STB. BODY O.D. | 8.14 | FT. |
| 1 | RMR. BODY O.D. | 8.17 | FT. |
| 1 | SUBS O.D. | 3.45 | FT. |
| | BIT OR C.B. | | FT. |
| 1 | Shock Sub | 9.46 | FT. |
| | KELLY DOWN | 32.15 | FT. |
| | TOTAL | 3010 | FT. |

WT. OF STRING 96 M LBS.

**BIT RECORD**

| | | | |
|---|---|---|---|
| BIT NO. | | 1 | 2 |
| SIZE | | 8½ | 8½ |
| MFG. | | SEC | SEC |
| TYPE | | M4NG | DSJ |
| NOZZLE | NO. | 3 | 1 3/4 |
| | SIZE | 16 | 14/16 |
| SER. NO. | | 79444 | 91228 |
| DEPTH OUT | | 3005 | |
| DEPTH IN | | 2760 | 3005 |
| TOTAL FTG. | | 245 | 5 |
| TOTAL HR. RUN | | 31½ | 1 |
| COND. OF BIT | | 4-6-1 | DOIG |
| REAMER NO. | | | |
| REAMER TYPE | | | |

**MUD RECORD**

| | | |
|---|---|---|
| TIME | 100 | 730 |
| WEIGHT | | 9.6 |
| VISC.-SEC | 32 | 35 |
| W.L.-C.C. | | |
| FL.TR. CK. | | |
| PH | | |
| SD. CONT. % | | |
| PRESSURE GRADIENT | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | 10 | | |
| BENEX | 2 | | |

DRILLER C Hopkins

**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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2987 | 3010 | D | | | 55 | 1B | 1150 | 5½ | 76 | 5½ | | S |
| | | | | | 35 | 1D | 1150 | 5½ | 76 | | | |
| | | | | | | 1S | | | | | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 3004 | 30 | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 1200 | 245 | 2¾ | DRLG 8½ HOLE 615 ~~615~~ ½ RUN IN D.P. |
| 245 | 300 | ¼ | DROP SURVEY 615 700 1¼ BREAK CIRC & CLEAN 25' |
| 300 | 415 | 1¼ | HOIST W/BIT #1 700 800 1 DRLG 8½ HOLE |
| 415 | | | CHANGE BITS, ✓ BLIND RAMS & PICK UP SHOCK SUB & ✓ |
| | 500 | ¾ | STABILIZERS |
| 500 | 530 | ½ | RUN IN D.C.'S |
| 530 | 600 | ½ | SLIP 23' & CUT DRLG LINE |
| 600 | 615 | ¼ | REG SERVICE |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | | |
|---|---|---|---|
| 25 | STANDS D.P. | 2365.90 | FT. |
| | SINGLES D.P. | | FT. |
| 21 | D.C. 2 7/8 X 6 3/4 I.D. O.D. | 618.24 | FT. |
| | D.C. I.D. O.D. | | FT. |
| 1 | STB. BODY O.D. | 8.14 | FT. |
| 1 | STB. BODY O.D. | 8.17 | FT. |
| | RMR. BODY O.D. | | FT. |
| 1 | SUBS O.D. | 3.45 | FT. |
| | BIT OR C.B. | | FT. |
| 1 | Shock Sub | 9.46 | FT. |
| | KELLY DOWN | 16.10 | FT. |
| | TOTAL | 3020 | FT. |

WT. OF STRING 96 M LBS.

**BIT RECORD**

| | | | |
|---|---|---|---|
| BIT NO. | | 2 | |
| SIZE | | 8½ | |
| MFG. | | SEC | |
| TYPE | | DSJ | |
| NOZZLE | NO. | 1 3 | |
| | SIZE | 14 14 | |
| SER. NO. | | 91228 | |
| DEPTH OUT | | | |
| DEPTH IN | | ~~3005~~ 3005 | |
| TOTAL FTG. | | | |
| TOTAL HR. RUN | | 2 3/4 | |
| COND. OF BIT | | RUN | |
| REAMER NO. | | | |
| REAMER TYPE | | | |

**MUD RECORD**

| | | |
|---|---|---|
| TIME | | |
| WEIGHT | | |
| VISC.-SEC | | |
| W.L.-C.C. | | |
| FL.TR. CK. | | |
| PH | | |
| SD. CONT. % | | |
| PRESSURE GRADIENT | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | 45 SAX | SODA ASH | 2 SAX |
| BARIOD | 40 SAX | | |
| BENEX | 8 SAX | | |

DRILLER X Hopkins

**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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3010 | 3020 | D | | | 35 | 26 | 1150 | 5½ | 76 | 5½ | | S |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 800 | 815 | ¼ | ~~CIRC~~ Sample. Drlg |
| 815 | 900 | ¾ | Circ Sample. |
| 900 | 1030 | 1½ | Drlg. |
| 1030 | 400 | 5½ | Circ Cond. Mud |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | | |
|---|---|---|---|
| 25 | STANDS D.P. | 2365.90 | FT. |
| | SINGLES D.P. | | FT. |
| 21 | D.C. 2 7/8 X 6 3/4 I.D. O.D. | 618.24 | FT. |
| | D.C. I.D. O.D. | | FT. |
| 1 | STB. BODY O.D. | 8.14 | FT. |
| 1 | STB. BODY O.D. | 8.17 | FT. |
| | RMR. BODY O.D. | | FT. |
| 1 | SUBS O.D. | 3.45 | FT. |
| | BIT OR C.B. | | FT. |
| 1 | Shock Sub | 9.46 | FT. |
| | KELLY DOWN | 16.10 | FT. |
| | TOTAL | 3020 | FT. |

WT. OF STRING 96 LBS.

**BIT RECORD**

| | | | |
|---|---|---|---|
| BIT NO. | | 2 | |
| SIZE | | 8½ | |
| MFG. | | SEC | |
| TYPE | | DSJ | |
| NOZZLE | NO. | 1 3 | |
| | SIZE | 14 14 | |
| SER. NO. | | 91228 | |
| DEPTH OUT | | | |
| DEPTH IN | | ~~3005~~ 3005 | |
| TOTAL FTG. | | | |
| TOTAL HR. RUN | | 2 3/4 | |
| COND. OF BIT | | RUN | |
| REAMER NO. | | | |
| REAMER TYPE | | | |

**MUD RECORD**

| | | |
|---|---|---|
| TIME | | |
| WEIGHT | | |
| VISC.-SEC | | |
| W.L.-C.C. | | |
| FL.TR CK | | |
| PH | | |
| SD. CONT. % | | |
| PRESSURE GRADIENT | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Barite | 280 SKS | Soda Ash | 2 SKS |
| Benex | 12 SKS | | |
| Gel | 20 SKS | | |

DRILLER R Brundige

**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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3020 | | | | | | | | 5½ | | 5½ | | S |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4 PM | 12 | 8 | CIRC & cond. Mud. |

**DRILLING CREW PAYROLL DATA**

DATE APRIL 12, 1973

WELL NAME & NO. ~~UNION~~ ARLANTX E-38

COMPANY ~~UNION OIL CO.~~ LTD.

TOOL PUSHER Barry D Smathers RIG NO. 1E

MORNING TOUR ____ P.M. ____ A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. | |
|---|---|---|---|---|
| DRILLER | | C. HOPKINS | 8 | T |
| DRKMAN | | G. HIEBERT | 8 | T |
| MTRMAN | | H. KLEEN | 8 | T |
| FIREMAN | | | | |
| FLRMAN | | C. ALBERTSON | 8 | T |
| FLRMAN | | D. WEBBER | 8 | T |
| FLRMAN | | | | |

NO. OF DAYS ____ SINCE LAST LOST-TIME ACCIDENT

DAY TOUR ____ A.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. | |
|---|---|---|---|---|
| DRILLER | | R. Henley | 8 | |
| DRKMAN | | C Campbell | 8 | |
| MTRMAN | | D. McLaughlin | 8 | |
| FIREMAN | | | | |
| FLRMAN | | STan Shumacher | 8 | |
| FLRMAN | | D. JASMAN | 2 | T |
| FLRMAN | | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR 4 PM P.M. 12 AM P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. | |
|---|---|---|---|---|
| DRILLER | | R BRUNDIGE | 9 | T |
| DRKMAN | | E SWYLEAKY | 9 | T |
| MTRMAN | | B LARSEN | 9 | T |
| FIREMAN | | | | |
| FLRMAN | | E. EDGHILL | 9 | T |
| FLRMAN | | B TAYLOR | 9 | T |
| FLRMAN | | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 25 DATE APRIL 11/73

OPERATOR: Union Oil Co. LTD

LEASE: Unocal Aklavik F-38

WELL NO. F-38 FIELD OR DIST. Aklavik COUNTY N.W.T STATE CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. RIG NO. 1E

DRILL PIPE STRING NO. 23 SIZE 4" TOOL JOINT 5" O.D. TYPE THD. 3½ I.F.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: W.R. McIntosh

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry D Armstrong

## PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NATIONAL | K-380 | 14" |
| 2. | NATIONAL | K-380 | 14" |
| 3. | | | |

## LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9 5/8 | Mann. | 40# K-S | 67 | 2765.07 | | 2760 | |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 7½ | 7½ | 7½ |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | | |
| LUBRICATE RIG | ¼ | ½ | ¼ |
| DEVIATION SURVEY | ¼ | ½ | ½ |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| [illegible]RING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

## TIME SUMMARY (OFFICE USE ONLY)

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.

NO. OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 23 | STANDS D.P. | 2167.50 | FT. |
| 1 | SINGLES D.P. | 31.66 | FT. |
| 21 | D.C. 9⅝ I.D. x 6¾ O.D. | 618.24 | FT. |
| | D.C. I.D. O.D. | | FT. |
| 1 | STB. BODY O.D. | 8.14 | FT. |
| 1 | STB. BODY O.D. | 8.17 | FT. |
| | RMR. BODY O.D. | | FT. |
| 1 | SUBS O.D. | 3.45 | FT. |
| | BIT OR C.B. | | FT. |
| | | | FT. |
| | KELLY DOWN | 35.90 | FT. |
| | TOTAL | 2873 | FT. |
| WT. OF STRING | 93M | | LBS. |

### BIT RECORD

| | | |
|---|---|---|
| BIT NO. | | 1 |
| SIZE | | 8½ |
| MFG. | | Sec |
| TYPE | | M4NG |
| NOZZLE | NO. | 3 |
| | SIZE | 16 |
| SER. NO. | | 29444 |
| DEPTH OUT | | |
| DEPTH IN | | 2760 |
| TOTAL FTG. | | 113 |
| TOTAL HR. RUN | | 13¾ |
| COND. OF BIT | | DRLG. |
| REAMER NO. | | |
| REAMER TYPE | | |

### MUD RECORD

| TIME | 2⁰⁰ | 4⁰⁰ | 6⁰⁰ |
|---|---|---|---|
| WEIGHT | 9.4 | 9.4+ | 9.6 |
| VISC.-SEC | 33 | 40 | 34 |
| W.L.-C.C. | | | |
| FL.TR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | 10 SAX | | |
| BENEX | 12 SAX | | |
| BAROID | 100 SAX | | |

DRILLER C. Hopkins

### 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'EL-P COMP'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2815 | 2873 | D | | Fuel 6.8' | 60 | 20 | 1100 | 5½ | 76 | 5½ | | S |
| | | | | | | | 1150 | | | | | |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 2837 | 1¼° | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 1200 | 1215 | ¼ | Rig Serv. & Kelly Cock |
| 1215 | 400 | 3¾ | Drlg 8½" Hole |
| 400 | 415 | ¼ | Survey |
| 415 | 800 | 3¾ | Drlg. |

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 24 | STANDS D.P. | 2261.39 | FT. |
| 2 | SINGLES D.P. | 62.80 | FT. |
| 21 | D.C. 9⅝ x 6¾ I.D. O.D. | 618.24 | FT. |
| | D.C. I.D. O.D. | | FT. |
| 1 | STB. BODY O.D. | 8.14 | FT. |
| 1 | STB. BODY O.D. | 8.17 | FT. |
| | RMR. BODY O.D. | | FT. |
| 1 | SUBS O.D. | 3.45 | FT. |
| | BIT OR C.B. | | FT. |
| | | | FT. |
| | KELLY DOWN | 14.81 | FT. |
| | TOTAL | 2967.00 | FT. |
| WT. OF STRING | 93M | | LBS. |

### BIT RECORD

| | | |
|---|---|---|
| BIT NO. | | 1 |
| SIZE | | 8½ |
| MFG. | | Sec |
| TYPE | | M4NG |
| NOZZLE | NO. | 3 |
| | SIZE | 16 |
| SER. NO. | | 29444 |
| DEPTH OUT | | |
| DEPTH IN | | 2760 |
| TOTAL FTG. | | 207 |
| TOTAL HR. RUN | | 23¾ |
| COND. OF BIT | | Run |
| REAMER NO. | | |
| REAMER TYPE | | |

### MUD RECORD

| TIME | 9⁰⁰ | 12⁰⁰ | 4⁰⁰ |
|---|---|---|---|
| WEIGHT | 9.7 | 9.7 | 9.7 |
| VISC.-SEC | 35 | 37 | 39 |
| W.L.-C.C. | | | |
| FL.TR. CK. | | | |
| PH | 12+ | 12+ | 12+ |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | 14 SAX | | |
| BICARB | 6 SAX | | |
| BENEX | 6 SAX | | |

DRILLER R. Henley

### 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'EL-P COMP'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2873 | 2931 | D | | | 55 | 20 | 1150 | 5½ | 76 | 5½ | | S |
| | | | | | | | | | | | | |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 2870 | 1⅛° | | 2900 | 1½° | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 800 | 830 | ½ | Drlg 8½ Hole |
| 830 | 845 | ¼ | Rig Serv. & BOPs |
| 845 | 900 | ¼ | Survey |
| 900 | 100 | 4 | Drlg 8½ Hole |
| 100 | 115 | ¼ | Survey |
| 115 | 400 | 2¾ | Drlg 8½ Hole |

Held Blow out Drill

## DAY TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 24 | STANDS D.P. | 2261.39 | FT. |
| 2 | SINGLES D.P. | 62.80 | FT. |
| 21 | D.C. 9⅝ x 6¾ I.D. O.D. | 618.24 | FT. |
| | D.C. I.D. O.D. | | FT. |
| 1 | STB. BODY O.D. | 8.14 | FT. |
| 1 | STB. BODY O.D. | 8.17 | FT. |
| | RMR. BODY O.D. | | FT. |
| 1 | SUBS O.D. | 3.45 | FT. |
| | BIT OR C.B. | | FT. |
| | | | FT. |
| | KELLY DOWN | 14.81 | FT. |
| | TOTAL | 2967.00 | FT. |
| WT. OF STRING | 93M | | LBS. |

### BIT RECORD

| | | |
|---|---|---|
| BIT NO. | | 1 |
| SIZE | | 8½ |
| MFG. | | Sec |
| TYPE | | M4NG |
| NOZZLE | NO. | 3 |
| | SIZE | 16 |
| SER. NO. | | 29444 |
| DEPTH OUT | | |
| DEPTH IN | | 2760 |
| TOTAL FTG. | | 207 |
| TOTAL HR. RUN | | 23¾ |
| COND. OF BIT | | Run |
| REAMER NO. | | |
| REAMER TYPE | | |

### MUD RECORD

| TIME | 9⁰⁰ | 11³⁰ | |
|---|---|---|---|
| WEIGHT | 9.6 | 9.7+ | |
| VISC.-SEC | 37 | 36 | |
| W.L.-C.C. | | | |
| FL.TR. CK | | | |
| PH | 12⁰ | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | 15 SAX. | | |
| BENEX | 3 SAX | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PAR'EL-P COMP'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2931 | 2935 | D | | | 55 | 20 | 1150 | 5½ | 76 | | | S |
| | | | | | | 18 | | | | | | |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 2935 | 1½° | | 2962 | 1½° | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 400 | 500 | 1 | Drlg 8½ Hole |
| 500 | 515 | ¼ | Rig Serv |
| 515 | 530 | ¼ | W.L. Survey |
| 530 | 1000 | 4½ | Drlg |
| 1000 | 1015 | ¼ | Survey |
| 1015 | 1200 | 1¾ | Drlg. |

## DRILLING CREW PAYROLL DATA

DATE APRIL 11, 1973

WELL NAME & NO. Union Aklavik F-38

COMPANY Union Oil Co. LTD.

TOOL PUSHER Barry D Armstrong RIG NO. 1E

### MORNING TOUR P.M. A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. HOPKINS | 12 |
| DRKMAN | | G. HERBERT | 12 |
| MTRMAN | | H. KLEEN | 12 |
| FIREMAN | | | |
| FLRMAN | | B. ALBERTSON | 12 |
| FLRMAN | | D. WEBBER | 12 |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST-TIME ACCIDENT

### DAY TOUR A.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R. Henley | 12 |
| DRKMAN | | C Campbell | 12 |
| MTRMAN | | D. McLaughlin | 12 |
| FIREMAN | | | |
| FLRMAN | | STon Shumacher | 12 |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

### EVENING TOUR P.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | K McHale | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 24 DATE APRIL 10/73

OPERATOR: Union Oil Co. LTD.

LEASE: Union Aklavik F-38

WELL NO. F-38 | FIELD OR DIST. Aklavik | COUNTY N.W.T. | STATE CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. | RIG NO. 1E

DRILL PIPE STRING: NO. 2 & 3, SIZE 4" | TOOL JOINT: 5" O.D., TYPE THD. 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry D Armstrong

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NATIONAL | K-380 | 14" |
| 2. | NATIONAL | K-380 | 14" |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 9⅝ | MANN | 40# K5 | 67 | 2715.07 | | 2760 | |

## TIME DISTRIBUTION—HOURS

| | MOR. | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | | | 6¼ |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | 3½ | 1 |
| LUBRICATE RIG | | | ¼ |
| DEVIATION SURVEY | | | 1½ |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| RIGGING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | 6¾ | | |
| DRILL STEM TEST | | | |
| OTHER | 11¼ | 3 | |
| FISHING | | | |
| COMPLETION WORK: A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

## TIME SUMMARY (OFFICE USE ONLY)

| | |
|---|---|
| DAY WORK | |
| HRS. W/DP | |
| HRS. WO/DP | |
| HRS. STANDBY | |
| TOTAL DAY WORK | |

## WIRE LINE RECORD

| | |
|---|---|
| REEL NO. | |
| NO. OF LINES | SIZE |
| FEET SLIPPED | |
| FEET CUT OFF | |
| PRESENT LENGTH | |
| TON MI. OR TRIPS SINCE LAST CUT | |
| CUMULATIVE TON MI. OR TRIPS | |
| NO. OF DAYS FROM SPUD | |
| CUMULATIVE ROTATING HRS. | |

## MORNING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | | |
|---|---|---|---|
| | STANDS D.P. | | FT. |
| | SINGLES D.P. | | FT. |
| | D.C. I.D. O.D. | | FT. |
| | D.C. I.D. O.D. | | FT. |
| | STB. BODY O.D. | | FT. |
| | STB. BODY O.D. | | FT. |
| | RMR. BODY O.D. | | FT. |
| | SUBS O.D. | | FT. |
| | BIT OR C.B. | | FT. |
| | | | FT. |
| | KELLY DOWN | | FT. |
| | TOTAL | | FT. |
| WT. OF STRING | | | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 1 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | M4NG |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 11 |
| SER. NO. | 79444 |
| DEPTH OUT | |
| DEPTH IN | 2760 |
| TOTAL FTG. | |
| TOTAL HR. RUN | |
| COND. OF BIT | |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | |
|---|---|
| TIME | |
| WEIGHT | |
| VISC.-SEC | |
| W.L.-C.C. | |
| FL.TR. CK. | |
| PH | |
| SD. CONT. % | |
| PRESSURE GRADIENT | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2760 | | | | PRESSURE TEST BLIND RAMS TO 1200 P.S.I - 15 MIN O.K | | | | | | | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

| TIME LOG FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12⁰⁰ | 6¼ | 6¾ | W.O.C. |
| 6¼ | 8⁰⁰ | 1¾ | PICKING UP STABILIZERS, BIT SUB & MAKE UP BIT |

## DAY TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | | |
|---|---|---|---|
| 22 | STANDS D.P. | 2074.97 | FT. |
| | SINGLES D.P. | | FT. |
| | D.C. I.D. O.D. | | FT. |
| 21 | D.C. I.D. O.D. | 618.24 | FT. |
| 1 | STB. BODY O.D. | 8.14 | FT. |
| 1 | STB. BODY O.D. | 8.17 | FT. |
| | RMR. BODY O.D. | | FT. |
| | SUBS O.D. | | FT. |
| 1 | BIT OR C.B. | 3.45 | FT. |
| | | | FT. |
| | KELLY DOWN | 16.76 | FT. |
| | TOTAL | 2760 | FT. |
| WT. OF STRING | | 90M | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 1 |
| SIZE | 8 3/4 |
| MFG. | SEC |
| TYPE | M4NG |
| NOZZLE NO. | 3/16 |
| NOZZLE SIZE | |
| SER. NO. | 79484 |
| DEPTH OUT | |
| DEPTH IN | 2760 |
| TOTAL FTG. | 2760 |
| TOTAL HR. RUN | |
| COND. OF BIT | 1-1-1 |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | |
|---|---|
| TIME | |
| WEIGHT | |
| VISC.-SEC | |
| W.L.-C.C. | |
| FL.TR. CK. | |
| PH | |
| SD. CONT. % | |
| PRESSURE GRADIENT | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R Henley

**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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2760 | | | | | | | | | | | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

| TIME LOG FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8⁰⁰ | 9¼ | 1¼ | Run in w/ DC & Picked up 6 ctr Collars |
| 9.15 | 10.30 | 1¼ | Run in w/ Bit #1 |
| 10.30 | 1.30 | 3 | Drill out Float & Shoe |
| 1.30 | 4.00 | 2½ | Trip for Plug Bit. |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | | |
|---|---|---|---|
| 23 | STANDS D.P. | 2138.55 | FT. |
| | SINGLES D.P. | | FT. |
| | D.C. I.D. O.D. | | FT. |
| 21 | 27/8 D.C. I.D. 6 1/4 O.D. | 618.24 | FT. |
| 1 | STB. BODY O.D. | 8.14 | FT. |
| 1 | STB. BODY O.D. | 8.17 | FT. |
| | RMR. BODY O.D. | | FT. |
| | SUBS O.D. | | FT. |
| 1 | BIT OR C.B. | 3.45 | FT. |
| | | | FT. |
| | KELLY DOWN | 11.00 | FT. |
| | TOTAL | 2826.00 | FT. |
| WT. OF STRING | | 93 M | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 1 |
| SIZE | 8½ |
| MFG. | SEC |
| TYPE | M4NG |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 79484 |
| DEPTH OUT | |
| DEPTH IN | 2760 |
| TOTAL FTG. | 55 |
| TOTAL HR. RUN | 6¼ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | |
|---|---|
| TIME | 9:30 |
| WEIGHT | 9.4 |
| VISC.-SEC | 37 |
| W.L.-C.C. | |
| FL.TR. CK. | |
| PH | |
| SD. CONT. % | |
| PRESSURE GRADIENT | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | 12 SAX | SODA ASH | 5 SAX |
| SODA ASH | 5 SAX | BICARB | 3 SAX |
| BICARB | 3 SAX | DIESEL | |

DRILLER

**FOOTAGE 55**

| 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2760 | 2815 | D | | | 55 | 20 | 1050 | 5½ | 42 | 5½ | | S |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 2224 | 10 | | 2810 | 1½ | | | | |

| TIME LOG FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4⁰⁰ | 5⁰⁰ | 1 | Finish Trip. |
| 5⁰⁰ | 8⁰⁰ | 3 | Drlg |
| 8⁰⁰ | 8.15 | ¼ | Rig. Serv & U 4" Rams |
| 8.15 | 8.30 | ¼ | Survey |
| 8.30 | 11.45 | 3¼ | Drlg. |
| 11.45 | 12⁰⁰ | ¼ | Survey |

## DRILLING CREW PAYROLL DATA

DATE APRIL 10, 1973

WELL NAME & NO. Union Aklavik F-38

COMPANY Union Oil Co. LTD.

TOOL PUSHER Barry D Armstrong RIG NO. 1E

**MORNING TOUR** P.M. A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. HOPKINS | 12 |
| DRKMAN | | G. HIEBERT | 12 |
| MTRMAN | | H. KLEIN | 12 |
| FIREMAN | | | |
| FLRMAN | | A. ALBERTSON | 12 |
| FLRMAN | | D. WEBBER | 12 |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST-TIME ACCIDENT

**DAY TOUR** A.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R. Henley | 12 |
| DRKMAN | | C. Campbell | 12 |
| MTRMAN | | K. McHale | 12 |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | Stan Shumacher | 12 |
| FLRMAN | | D. McLaughlin | 12 |
| FLRMAN | | J. Carmichael | 12 |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

**EVENING TOUR** P.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 23 DATE APRIL 9/73

OPERATOR: UNION OIL CO. LTD.

LEASE: UNION AKLAVIK F-38

WELL NO. F38 | FIELD OR DIST. AKLAVIK | COUNTY N.W.T. | STATE CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. | RIG NO. 15

DRILL PIPE STRING: NO. 253, SIZE 4" | TOOL JOINT 5" O.D. | TYPE THD. 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: W. K. MacLeod

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry D. Smithey

PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NATIONAL | K-800 | 14" |
| 2. | NATIONAL | K-380 | 14" |
| 3. | | | |

LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 13 3/8 | K-55 | 68# KS | 15 | 510.38 | | 505 | CEMENT TO SURF |
| 9 5/8 | MANN | 40# KS | 67 | 2726.07 | | 2760 | FACE W/ 1200 SAX DIWELL CEM. |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | | | |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | 1¾ | |
| TRIPS | | | |
| LUBRICATE RIG | | | |
| DEVIATION SURVEY | | | |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| BOILER | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | 3¾ | |
| WAITING ON CEMENT | | 11¼ | 8 8 |
| DRILL STEM TEST | | | |
| OTHER | | 1¼ | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

## TIME SUMMARY (OFFICE USE ONLY)

| | | | |
|---|---|---|---|
| DAY WORK | | | |
| HRS. W/DP | | | |
| HRS. WO/DP | | | |
| HRS. STANDBY | | | |
| TOTAL DAY WORK | | | |

## WIRE LINE RECORD

REEL NO.

NO. OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | FT. |
|---|---|---|
| | STANDS D.P. | |
| | SINGLES D.P. | |
| | D.C. I.D. O.D. | |
| | D.C. I.D. O.D. | |
| | STB. BODY O.D. | |
| | STB. BODY O.D. | |
| | RMR. BODY O.D. | |
| | SUBS O.D. | |
| | BIT OR C.B. | |
| | | |
| | KELLY DOWN | |
| | TOTAL | |
| WT. OF STRING | | LBS. |

### BIT RECORD

BIT NO.
SIZE
MFG.
TYPE
NOZZLE NO. / SIZE
SER. NO.
DEPTH OUT
DEPTH IN
TOTAL FTG.
TOTAL HR. RUN
COND. OF BIT
REAMER NO.
REAMER TYPE

### MUD RECORD

TIME
WEIGHT
VISC.-SEC
W.L.-C.C.
FLTR. CK.
PH
SD. CONT. %
PRESSURE GRADIENT

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER C. Hopkins

### FOOTAGE

| FROM | TO |
|---|---|
| 2760 | |

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 | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 1200 | 1215 | 1/4 | RUN CSG. |
| 1215 | 200 | 13¾ | RIG TO & CIRC. CSG. |
| 900 | 315 | 11¼ | ~~RIG TO & CEMENT CSG~~ PRESSURE TEST CEMENT LINE & REPAIR |
| 315 | 645 | 3½ | RIG TO & CEMENT CSG. |
| 645 | 800 | 1¼ | W.O.C. |
| Ran 2760 ft of 9 5/8-40# KS (new) 8RD Casing - Cemented with 1300 sax Diwell Cement to Surface - Plug down @ 640 AM - WK Date | | | |

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | FT. |
|---|---|---|
| | STANDS D.P. | |
| | SINGLES D.P. | |
| | D.C. I.D. O.D. | |
| | D.C. I.D. O.D. | |
| | STB. BODY O.D. | |
| | STB. BODY O.D. | |
| | RMR. BODY O.D. | |
| | SUBS O.D. | |
| | BIT OR C.B. | |
| | | |
| | KELLY DOWN | |
| | TOTAL | |
| WT. OF STRING | | LBS. |

### BIT RECORD

BIT NO.
SIZE
MFG.
TYPE
NOZZLE NO. / SIZE
SER. NO.
DEPTH OUT
DEPTH IN
TOTAL FTG.
TOTAL HR. RUN
COND. OF BIT
REAMER NO.
REAMER TYPE

### MUD RECORD

TIME
WEIGHT
VISC.-SEC
W.L.-C.C.
FLTR. CK.
PH
SD. CONT. %
PRESSURE GRADIENT

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R. Henley

### FOOTAGE

| FROM | TO |
|---|---|
| 2760 | |

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 | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 800 | 400 | 8 | W.O.C. |

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | FT. |
|---|---|---|
| | STANDS D.P. | |
| | SINGLES D.P. | |
| | D.C. I.D. O.D. | |
| | D.C. I.D. O.D. | |
| | STB. BODY O.D. | |
| | STB. BODY O.D. | |
| | RMR. BODY O.D. | |
| | SUBS O.D. | |
| | BIT OR C.B. | |
| | | |
| | KELLY DOWN | |
| | TOTAL | |
| WT. OF STRING | | LBS. |

### BIT RECORD

BIT NO.
SIZE
MFG.
TYPE
NOZZLE NO. / SIZE
SER. NO.
DEPTH OUT
DEPTH IN
TOTAL FTG.
TOTAL HR. RUN
COND. OF BIT
REAMER NO.
REAMER TYPE

### MUD RECORD

TIME
WEIGHT
VISC.-SEC
W.L.-C.C.
FLTR. CK.
PH
SD. CONT. %
PRESSURE GRADIENT

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. 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 | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 400 | 1200 | 8 | W.O.C. |

## DRILLING CREW PAYROLL DATA

DATE APRIL 9, 1973

WELL NAME & NO. UNION AKLAVIK F-38

COMPANY UNION OIL CO. LTD.

TOOL PUSHER Barry D. Smithey RIG NO. 15

MORNING TOUR P.M. A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. HOPKINS | 16 |
| DRKMAN | | C. HEBERT | 16 |
| MTRMAN | | H KLEEN | 16 |
| FIREMAN | | | |
| FLRMAN | | G. ALBERTSON | 16 |
| FLRMAN | | D. WEBBER | 16 |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

DAY TOUR A.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R. Henley | 14 |
| DRKMAN | | C Campbell | 14 |
| MTRMAN | | K McHale | 14 |
| FIREMAN | | | |
| FLRMAN | | Stan Shumacher | 14 |
| FLRMAN | | D McLaughlin | 14 |
| FLRMAN | | J Carmichael | 14 |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

EVENING TOUR P.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 23 DATE APRIL 9/73

OPERATOR: UNION OIL CO. LTD.

LEASE: UNION AKLAVIK F-38

WELL NO. F-38 FIELD OR DIST. AKLAVIK COUNTY W.W.T. STATE CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. RIG NO. 15

DRILL PIPE STRING NO. 2&3 SIZE 4" TOOL JOINT 5" O.D. TYPE THD. 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: W. R. MacKitrick

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry D. Armstrong

PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NATIONAL | K-800 | 14" |
| 2. | NATIONAL | K-380 | 14" |
| 3. | | | |

LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 13 3/8 | K-55 | 68# KS | 15 | 610.38 | | 505 | CEMENT TO SURF |
| 9 5/8 | MANN | 40# KS | 67 | 2765.07 | | 2760 | FACE W/ 1300 SAX DIVWELL CEM. |

## TIME DISTRIBUTION–HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | | | |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | 13¼ | | |
| TRIPS | | | |
| LUBRICATE RIG | | | |
| DEVIATION SURVEY | | | |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| REAMING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | 3¾ | | |
| WAITING ON CEMENT | 1¼ | 8 | 8 |
| DRILL STEM TEST | | | |
| OTHER | 1¼ | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

## TIME SUMMARY (OFFICE USE ONLY)

| | | | |
|---|---|---|---|
| DAY WORK | | | |
| HRS. W/DP | | | |
| HRS. WO/DP | | | |
| HRS. STANDBY | | | |
| TOTAL DAY WORK | | | |

## WIRE LINE RECORD

REEL NO.

NO. OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| | STANDS D.P. | | FT. |
| | SINGLES D.P. | | FT. |
| | D.C. I.D. | O.D. | FT. |
| | D.C. I.D. | O.D. | FT. |
| | STB. BODY | O.D. | FT. |
| | STB. BODY | O.D. | FT. |
| | RMR. BODY | O.D. | FT. |
| | SUBS | O.D. | FT. |
| | BIT OR C.B. | | FT. |
| | | | FT. |
| | KELLY DOWN | | FT. |
| | TOTAL | | FT. |
| WT. OF STRING | | | LBS. |

BIT RECORD

| | | |
|---|---|---|
| BIT NO. | | |
| SIZE | | |
| MFG. | | |
| TYPE | | |
| NOZZLE | NO. | |
| | SIZE | |
| SER. NO. | | |
| DEPTH OUT | | |
| DEPTH IN | | |
| TOTAL FTG. | | |
| TOTAL HR. RUN | | |
| COND. OF BIT | | |
| REAMER NO. | | |
| REAMER TYPE | | |

MUD RECORD

| | | | |
|---|---|---|---|
| TIME | | | |
| WEIGHT | | | |
| VISC.–SEC | | | |
| W.L.–C.C. | | | |
| FLTR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER C. Hopkins

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'EL–P COM'D–C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2760 | | | | | | | | | | | | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 MN | 12:15 | 1/4 | RUN CSG. |
| 12:15 | 2 00 | 1¾ | RIG TO & CSG. CSG. |
| 9 00 | 3:15 | 11¼ | ~~RIG TO & CEMENT CSG~~ PRESSURE TEST CEMENT LINE & REPAIR |
| 3:15 | 6 45 | 3½ | RIG TO & CEMENT CSG. |
| 6 45 | 8 00 | 1¼ | W.O.C. |
| Ran 2760 ft of 9 5/8-40#KS(man)8RD Casing – Cemented with: 1300 sax Diwelled Cement to surface – Plug down @ 640 AM-WK | | | |

## EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| | STANDS D.P. | | FT. |
| | SINGLES D.P. | | FT. |
| | D.C. I.D. | O.D. | FT. |
| | D.C. I.D. | O.D. | FT. |
| | STB. BODY | O.D. | FT. |
| | STB. BODY | O.D. | FT. |
| | RMR. BODY | O.D. | FT. |
| | SUBS | O.D. | FT. |
| | BIT OR C.B. | | FT. |
| | | | FT. |
| | KELLY DOWN | | FT. |
| | TOTAL | | FT. |
| WT. OF STRING | | | LBS. |

BIT RECORD

| | | |
|---|---|---|
| BIT NO. | | |
| SIZE | | |
| MFG. | | |
| TYPE | | |
| NOZZLE | NO. | |
| | SIZE | |
| SER. NO. | | |
| DEPTH OUT | | |
| DEPTH IN | | |
| TOTAL FTG. | | |
| TOTAL HR. RUN | | |
| COND. OF BIT | | |
| REAMER NO. | | |
| REAMER TYPE | | |

MUD RECORD

| | | | |
|---|---|---|---|
| TIME | | | |
| WEIGHT | | | |
| VISC.–SEC | | | |
| W.L.–C.C. | | | |
| FLTR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R. Henley

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'EL–P COM'D–C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2760 | | | | | | | | | | | | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8 00 | 4 00 | 8 | W.O.C. |

## EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| | STANDS D.P. | | FT. |
| | SINGLES D.P. | | FT. |
| | D.C. I.D. | O.D. | FT. |
| | D.C. I.D. | O.D. | FT. |
| | STB. BODY | O.D. | FT. |
| | STB. BODY | O.D. | FT. |
| | RMR. BODY | O.D. | FT. |
| | SUBS | O.D. | FT. |
| | BIT OR C.B. | | FT. |
| | | | FT. |
| | KELLY DOWN | | FT. |
| | TOTAL | | FT. |
| WT. OF STRING | | | LBS. |

BIT RECORD

| | | |
|---|---|---|
| BIT NO. | | |
| SIZE | | |
| MFG. | | |
| TYPE | | |
| NOZZLE | NO. | |
| | SIZE | |
| SER. NO. | | |
| DEPTH OUT | | |
| DEPTH IN | | |
| TOTAL FTG. | | |
| TOTAL HR. RUN | | |
| COND. OF BIT | | |
| REAMER NO. | | |
| REAMER TYPE | | |

MUD RECORD

| | | | |
|---|---|---|---|
| TIME | | | |
| WEIGHT | | | |
| VISC.–SEC | | | |
| W.L.–C.C. | | | |
| FLTR. CK | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. 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 | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4.00 | 12 MN | 8 | W.O.C. |

## DRILLING CREW PAYROLL DATA

DATE APRIL 9, 1973

WELL NAME & NO. UNION AKLAVIK F-38

COMPANY UNION OIL CO. LTD.

TOOL PUSHER Barry D. Armstrong RIG NO. 15

MORNING TOUR ____ P.M. ____ A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. HOPKINS | 16 |
| DRKMAN | | C. HEBERT | 16 |
| MTRMAN | | H KLEEN | 16 |
| FIREMAN | | | |
| FLRMAN | | G. ALBERTSON | 16 |
| FLRMAN | | D. WEBBER | 16 |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

DAY TOUR ____ A.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R. Henley | 14 |
| DRKMAN | | C Campbell | 14 |
| MTRMAN | | K McHale | 14 |
| FIREMAN | | | |
| FLRMAN | | STan Shumacher | 14 |
| FLRMAN | | D. McLaughlin | 14 |
| FLRMAN | | J Carmichael | 14 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR ____ P.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 22 DATE APRIL 8/73

OPERATOR: UNION OIL CO. LTD.

LEASE: UNION AKLAVIK C-38

WELL NO. C-38 | FIELD OR DIST. AKLAVIK | COUNTY N.W.T. | STATE CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. | RIG NO. 1E

DRILL PIPE STRING: NO. 23 SIZE 4" | TOOL JOINT 5" O.D. TYPE THD. 3½ I.F.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: W.K. McShort

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry Armstrong

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NATIONAL | K-380 | 14" |
| 2. | NATIONAL | K-380 | 14" |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 13⅜ | K-55 | 68# KS | 15 | 510.38 | | 505 | |

## TIME DISTRIBUTION – HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 8 | 15¼ | |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | 1¼ | ¼ |
| TRIPS | | 1¼ | 13¼ |
| LUBRICATE RIG | | ¼ | |
| DEVIATION SURVEY | | | |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| DRING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | 5 |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | 1 |
| FISHING | | | |
| A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

COMPLETION WORK

## TIME SUMMARY (OFFICE USE ONLY)

DAY WORK
HRS. W/DP
HRS. WO/DP
HRS. STANDBY
TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.
NO. OF LINES SIZE
FEET SLIPPED
FEET CUT OFF
PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.

## MORNING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 23 | STANDS D.P. | 2074.93 FT. |
| | SINGLES D.P. | FT. |
| 3 | D.C. 8" x 9" I.D. O.D. | 809.94 FT. |
| 15 | D.C. 2⅞ x 6¼ I.D. O.D. | 441.94 FT. |
| 1 | STB. BODY O.D. | 7.35 FT. |
| | STB. BODY O.D. | FT. |
| | RMR. BODY O.D. | FT. |
| 4 | SUBS O.D. | 11.75 FT. |
| | BIT OR C.B. | FT. |
| | | FT. |
| | KELLY DOWN | 29.49 FT. |
| | TOT. LL | 2749.00 FT. |
| WT. OF STRING | 98M | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 12A |
| SIZE | 12¼ |
| MFG. | SEC. |
| TYPE | DMNJ |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 16 18 |
| SER. NO. | 346052 |
| DEPTH OUT | |
| DEPTH IN | 2722 |
| TOTAL FTG. | 27 |
| TOTAL HR. RUN | 9¾ |
| COND. OF BIT | RNC. |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 1200 | 300 | 600 |
| WEIGHT | 10.0+ | 10.+ | 10.1 |
| VISC.-SEC | 65 | 67 | 63 |
| W.L.-C.C. | | | |
| FL TR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER C. Hopkins

**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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2727 | 2749 | D | | FUEL | 40 | 40 | 1300 | 5½ | 40 | 5½ | 41 | C |
| | | | | | 40 | 40 | 1050 | 5½ | 74 | 5½ | | S |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12⁰⁰ | 8⁰⁰ | 8 | DRLG. 12¼" HOLE |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 23 | STANDS D.P. | 2074.93 FT. |
| 1 | SINGLES D.P. | 31.62 FT. |
| 3 | D.C. 7¾" x 9" I.D. O.D. | 809.94 FT. |
| 15 | D.C. 2⅞ x 6¼ I.D. O.D. | 441.94 FT. |
| 1 | STB. BODY O.D. | 7.35 FT. |
| | STB. BODY O.D. | FT. |
| | RMR. BODY O.D. | FT. |
| 4 | SUBS O.D. | 7.75 FT. |
| | BIT OR C.B. | FT. |
| | | FT. |
| | KELLY DOWN | 16.76 FT. |
| | TOTAL | 2760 FT. |
| WT. OF STRING | 98M. | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 12A |
| SIZE | ~~12¼~~ 12¾ |
| MFG. | ~~SEC~~ DMNJ |
| TYPE | DMNJ |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 16 18 |
| SER. NO. | 346052 |
| DEPTH OUT | |
| DEPTH IN | 2722 |
| TOTAL FTG. | 38 |
| TOTAL HR. RUN | 15 |
| COND. OF BIT | Run |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | ~~900~~ | 1200 | |
| WEIGHT | 10.0+ | 10.0+ | |
| VISC.-SEC | 65 | 67 | |
| W.L.-C.C. | | | |
| FL TR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| CELEX | 50# | | |
| DEXTRID | 100# | | |
| BENEX | 4# | | |

DRILLER R. Henley

**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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2744 | 2760 | D | | | 40 | 40 | 1300 | 5½ | 40 | 5½ | 41 | C |
| | | | | | 40 | 40 | 1050 | 5½ | 74 | 5½ | 41 | S |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8⁰⁰ | 9.30 | 1½ | DrLG 12¼ Hole |
| 9.30 | 9.45 | ¼ | Rig Serv. x BOPs. |
| 9.45 | 1.30 | 3¾ | Drlg 12¼ Hole |
| 1.30 | 2.15 | ¾ | Circ. to Cond. Hole. |
| 2.15 | 3.30 | 1¼ | Dumpy Trip. |
| 3.30 | 4.00 | ½ | Circ. |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| | STANDS D.P. | FT. |
| | SINGLES D.P. | FT. |
| | D.C. I.D. O.D. | FT. |
| | D.C. I.D. O.D. | FT. |
| | STB. BODY O.D. | FT. |
| | STB. BODY O.D. | FT. |
| | RMR. BODY O.D. | FT. |
| | SUBS O.D. | FT. |
| | BIT OR C.B. | FT. |
| | | FT. |
| | KELLY DOWN | FT. |
| | TOTAL | FT. |
| WT. OF STRING | | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 12A |
| SIZE | 12¼ |
| MFG. | SEC |
| TYPE | DMNJ |
| NOZZLE NO. | 1-2 |
| NOZZLE SIZE | 16-18 |
| SER. NO. | 346052 |
| DEPTH OUT | 2760 |
| DEPTH IN | 2722 |
| TOTAL FTG. | 38 |
| TOTAL HR. RUN | 15 |
| COND. OF BIT | 2-1-1 |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | | | |
| WEIGHT | | | |
| VISC.-SEC | | | |
| W.L.-C.C. | | | |
| FL TR. CK | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2760 | | | | | | | | | | | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4⁰⁰ | 4.15 | ¼ | Circ. |
| 4.15 | 6.00 | 1¾ | Drop Survey x Hoist To Run GSG. |
| 6.00 | 7.00 | 1 | Layed Down 9" Collars |
| 7.00 | 12⁰⁰ | 5 | Riged up to Run Casing |

## DRILLING CREW PAYROLL DATA

DATE APRIL 8, 1973
WELL NAME & NO. UNION AKLAVIK C-38
COMPANY UNION OIL COMPANY LTD.
TOOL PUSHER Barry Armstrong RIG NO. 1E

### MORNING TOUR ____ P.M. ____ A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. HOPKINS | 12 |
| DRKMAN | | B. HIEBERT | 12 |
| MTRMAN | | H. KIEFN | 12 |
| FIREMAN | | | |
| FLRMAN | | B. ALBERTSON | 12 |
| FLRMAN | | D. WEBBER | 12 |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST-TIME ACCIDENT

### DAY TOUR ____ A.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R. Henley | 14 |
| DRKMAN | | C Campbell | 14 |
| MTRMAN | | K McHale | 14 |
| FIREMAN | | | |
| FLRMAN | | Stan Shumacher | 16 |
| FLRMAN | | D McLaughlin | 14 |
| FLRMAN | | J Carmichael | 16 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

### EVENING TOUR ____ P.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 31 DATE APRIL 7/73

OPERATOR: UNION OIL CO LTD.

LEASE: UNION ARKLAVIK C-38

WELL NO. C-38 | FIELD OR DIST. ARKLAVIK | COUNTY N.W.T. | STATE CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. | RIG NO. 1E

DRILL PIPE STRING: NO. 273 SIZE 4" | TOOL JOINT O.D. 6" TYPE THD. 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: W.R. McInnis

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry Armstrong

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NATIONAL | K-380 | 14" |
| 2. | NATIONAL | K-380 | 14" |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 13 3/8 | K-55 | 68# KS | 15 | 510.38 | | 505 | |
| | | | | | | | |

## TIME DISTRIBUTION–HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 7 | 7¼ | 2¾ |
| REAMING | | | 1¼ |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | | 9¾ |
| LUBRICATE RIG | 1/4 | 1/4 | |
| DEVIATION SURVEY | 3¼ | ¼ | 1¼ |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | 1¼ |
| REPAIR RIG | | | |
| BORING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

## TIME SUMMARY (OFFICE USE ONLY)

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.

NO. OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 22 | STANDS D.P. | 2074.93 FT. |
| 1 | SINGLES D.P. | 31.15 FT. |
| 3 | D.C. 8" x 9" I.D. 3" O.D. | 80.94 FT. |
| 15 | D.C. 2 7/8" I.D. 6 3/4" O.D. | 441.94 FT. |
| 1 | STB. BODY O.D. | 7.35 FT. |
| | STB. BODY O.D. | FT. |
| | RMR. BODY O.D. | FT. |
| 4 | SUBS O.D. | 11.75 FT. |
| | BIT OR C.B. | FT. |
| | | FT. |
| | KELLY DOWN | FT. |
| | TOTAL | 2672.07 FT. |

WT. OF STRING 95m LBS.

**BIT RECORD**

| | | |
|---|---|---|
| BIT NO. | | 11A |
| SIZE | | 12¼ |
| MFG. | | SEC. |
| TYPE | | DSJ |
| NOZZLE | NO. | 1 2 |
| | SIZE | 16 18 |
| SER. NO. | | 12982 |
| DEPTH OUT | | |
| DEPTH IN | | 2471 |
| TOTAL FTG. | | 201 |
| TOTAL HR. RUN | | 31¼ |
| COND. OF BIT | | RN6 |
| REAMER NO. | | |
| REAMER TYPE | | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 100 | 400 | 600 |
| WEIGHT | 10.0 | 10.1+ | 10.1 |
| VISC.-SEC | 47 | 50 | 48 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | | Soda Ash | 400# |
| BENEX | 26# | | |
| BARITE | 600# | | |

DRILLER C. Hopkins

**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 PART'L-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2626 | 2672 | D | | KUSK 7' | 35 | 40 | 1050 | 5½ | 74 | 5½ | | S |
| | | | | | 35 | 42 | 1400 | 5½ | 74 | 5½ | 42 | C |
| | | | | ROUGH DRILLING | | | | | | | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 2616 | 7/8° | | 2647 | 1¼° | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12⁰⁰ | 12¹⁵ | ¼ | RIG SERV & U 4" RAMS |
| 12¹⁵ | 12³⁰ | ¼ | SURVEY – MISRUN |
| 12³⁰ | 12⁴⁵ | ¼ | DRLG 12¼" HOLE SURVEY |
| 12⁴⁵ | 5⁰⁰ | 4¼ | DRLG 12¼" HOLE |
| 5⁰⁰ | 5¹⁵ | ¼ | SURVEY – MISRUN |
| 5¹⁵ | 8⁰⁰ | 2¾ | DRLG. |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 22 | STANDS D.P. | 2074.93 FT. |
| 2 | SINGLES D.P. | 67.56 FT. |
| 3 | D.C. 3" x 9" I.D. O.D. | 80.94 FT. |
| 15 | D.C. 2 7/8" I.D. 6 3/4" O.D. | 441.94 FT. |
| 1 | STB. BODY O.D. | 7.35 FT. |
| | STB. BODY O.D. | FT. |
| | RMR. BODY O.D. | FT. |
| 4 | SUBS O.D. | 11.75 FT. |
| | BIT OR C.B. | FT. |
| | | FT. |
| | KELLY DOWN | 41.00 FT. |
| | TOTAL | 2719.29 FT. |

WT. OF STRING 98m. LBS.

**BIT RECORD**

| | | |
|---|---|---|
| BIT NO. | | 11A |
| SIZE | | 12¼ |
| MFG. | | Sec |
| TYPE | | DSJ |
| NOZZLE | NO. | 1 7 7 |
| | SIZE | 16 14 14 |
| SER. NO. | | 12982 |
| DEPTH OUT | | |
| DEPTH IN | | 2471 |
| TOTAL FTG. | | 249 |
| TOTAL HR. RUN | | 38½ |
| COND. OF BIT | | Run |
| REAMER NO. | | |
| REAMER TYPE | | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 10⁰⁰ | 1200 | 400 |
| WEIGHT | 10.0+ | 10.0+ | 10.0+ |
| VISC.-SEC | 49 | 46 | 75 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | 1500# | DESTRID | 100 |
| BENEX | 10# | | |
| CELEX | 5# | | |

DRILLER R Wong

**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 PART'L-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2672 | 2719 | D | | | 30 | 42 | 1050 | 5½ | 74 | 6¾ | | S |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 2680 | 1° | | [illegible] | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8.00 | 9 30 | 1½ | Drlg 12¼ Hole |
| 9 30 | 9 45 | ¼ | Survey |
| 9.45 | 10.00 | ¼ | Rig Serv. & BOPs. |
| 10.00 | 3.45 | 5¾ | Drlg. |
| 3.45 | 4.00 | ¼ | Survey |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 23 | STANDS D.P. | 2169.64 FT. |
| | SINGLES D.P. | FT. |
| 3 | D.C. 3¼" 9" I.D. O.D. | 80.94 FT. |
| 15 | D.C. 2 7/8 XG 3/4 I.D. O.D. | 441.94 FT. |
| 1 | STB. BODY O.D. | 7.35 FT. |
| | STB. BODY O.D. | FT. |
| | RMR. BODY O.D. | FT. |
| 4 | SUBS O.D. | 11.75 FT. |
| | BIT OR C.B. | FT. |
| | | FT. |
| | KELLY DOWN | 41.00 FT. |
| | TOTAL | 2727.29 FT. |

WT. OF STRING 98m LBS.

**BIT RECORD**

| | | | |
|---|---|---|---|
| BIT NO. | | 11A | 12A |
| SIZE | | 12¼ | 12¼ |
| MFG. | | Sec | Sec |
| TYPE | | DSJ | DMNJ |
| NOZZLE | NO. | 1 7 7 | 7 7 7 |
| | SIZE | 16 14 14 | 14 14 14 |
| SER. NO. | | 12982 | 34[illegible] |
| DEPTH OUT | | 2722 | |
| DEPTH IN | | 2471 | 2722 |
| TOTAL FTG. | | 252 | 5 |
| TOTAL HR. RUN | | 39½ | 1¾ |
| COND. OF BIT | | 3-2-1 | RIG |
| REAMER NO. | | | |
| REAMER TYPE | | | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | | | |
| WEIGHT | | | |
| VISC.-SEC | | | |
| W.L.-C.C. | | | |
| FLTR. CK | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PART'L-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2719 | 2727 | D | | STRAP OUT 2 FT CORR LONGER | 25 | 5 | 1050 | 5½ | 74 | 6¼ | | S |
| | | | | | 25 | 20 | 1300 | | 40 | | 41 | C |
| | | | | | | 30 | | | | | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 2710 | 3/4° | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4.00 | 5.00 | 1 | Drlg. 10⁰⁰ 10¹⁵ ¼ BREAK CIRC & CLEAN 8' |
| 5.00 | 5.15 | ¼ | Drlg Survey 10¹⁵ 12⁰⁰ 1¾ DRLG |
| 5.15 | 7.00 | 1¾ | Hoist For Bit Thight Hole |
| 7.00 | 7.15 | ¼ | Break off Bit & Recover Survey |
| 7.15 | 8.00 | ¾ | Make up Bit Check Stab. |
| 8.00 | 8.45 | ¾ | MEASURE & RUN IN DC'S |
| 8.45 | 9.00 | ¼ | SLIP 23' DRLG LINE & SET BRAKES |
| 9.00 | 10.00 | 1 | STRAP & RUN IN DID SLOW. |

## DRILLING CREW PAYROLL DATA

DATE APRIL 7, 1973

WELL NAME & NO. UNION ARKLAVIK C-38

COMPANY UNION OIL CO. LTD.

TOOL PUSHER Barry Armstrong RIG NO. 1E

MORNING TOUR P.M. A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. HOPKINS | 12 |
| DRKMAN | | B. HIEBERT | 12 |
| MTRMAN | | H. KLEEN | 12 |
| FIREMAN | | | |
| FLRMAN | | B. ROBERTSON | 12 |
| FLRMAN | | D. WARDEN | 12 |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST-TIME ACCIDENT

DAY TOUR A.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R. Henley | 12 |
| DRKMAN | | C. Campbell | 12 |
| MTRMAN | | K. McHale | 12 |
| FIREMAN | | | |
| FLRMAN | | Stan Shumacher | 12 |
| FLRMAN | | D McLaughlin | 12 |
| FLRMAN | | J Carmichael | 12 |

NO. OF DAYS SINCE LAST LOST-TIME ACCIDENT

EVENING TOUR P.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST-TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 20 DATE APRIL 6/73

OPERATOR: Union Oil Co. Ltd.

LEASE: Union Aklavik C-38

WELL NO. C-38 | FIELD OR DIST. Aklavik | COUNTY N.W.T. | STATE CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. | RIG NO. 11E

DRILL PIPE STRING: NO. 253 | SIZE 4½ | TYPE THD. 3½ IF | TOOL JOINT 5" O.D.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: W.F. McIntosh

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry D. Armstrong

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NATIONAL | K-380 | 14" |
| 2. | NATIONAL | K-380 | 14" |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 13 3/8 | K-55 | 68# KS | 15 | 510.38 | | 505 | |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 7½ | 7¼ | 7¾ |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | | |
| LUBRICATE RIG | ¼ | ¼ | ¼ |
| DEVIATION SURVEY | 1¼ | ½ | |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| REAMING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK: A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

## TIME SUMMARY (OFFICE USE ONLY)

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.

NO. OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | | FT. |
|---|---|---|---|
| | STANDS D.P. | | FT. |
| | SINGLES D.P. | | FT. |
| 3 | D.C. 3" x 9" I.D. O.D. | | 80.94 FT. |
| 15 | D.C. 2 7/8 x 6 3/4 I.D. O.D. | | 441.94 FT. |
| 1 | STB. BODY O.D. | | 7.35 FT. |
| | STB. BODY O.D. | | FT. |
| | RMR. BODY O.D. | | FT. |
| 4 | SUBS O.D. | | 11.75 FT. |
| | BIT OR C.B. | | FT. |
| | | | FT. |
| | KELLY DOWN | | FT. |
| | TOTAL | | 2596.00 FT. |
| WT. OF STRING | 94M | | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 11A |
| SIZE | 12 1/4 |
| MFG. | Sec |
| TYPE | DSJ |
| NOZZLE NO. | 1 |
| NOZZLE SIZE | 16 18 |
| SER. NO. | 12982 |
| DEPTH OUT | |
| DEPTH IN | 2471 |
| TOTAL FTG. | 55 |
| TOTAL HR. RUN | 9¼ |
| COND. OF BIT | Dnc. |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 12 00 | 3 00 | 6 00 |
| WEIGHT | 9.9 | 10.0+ | 10.1 |
| VISC.-SEC | 43 | 50 | 60 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | 160 x 50 | ~~FLUID LOSS~~ | |
| BENEX | 8 50 x 5 | | |
| BARIOD | 8 55 x 5 | | |

DRILLER C. Hopkins

**FOOTAGE**

| FROM | TO | DR.. 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'EL—P COM'D—C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2477 | 2526 | D | | Bvel 4.04' | 35 | 40 | 1050 | 5½ | 74 | 5½ | | S |
| | | | | Boulder Drilling | 25 | 40 | 1400 | | 90 | | 22 | C |
| | | | | SAFETY MEETING ON CLEAN B.O.P.'S | | | | | | | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 2490 | 1° | | | | | | | |

| TIME LOG FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 00 | 3 45 | 3¾ | DRLG. 12¼" HOLE |
| 3 45 | 4 00 | ¼ | RIG SERV. & U 4½" RAMS |
| 4 00 | 4 15 | ¼ | SURVEY |
| 4 15 | 8 00 | 3¾ | DRLG |

## DAY TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | | FT. |
|---|---|---|---|
| 21 | STANDS D.P. | 1966.41 | FT. |
| 1 | SINGLES D.P. | 31.56 | FT. |
| 3 | D.C. 3"x 9" I.D. O.D. | 80.94 | FT. |
| 15 | D.C. 2 7/8 x 6 3/4 I.D. O.D. | 441.94 | FT. |
| 1 | STB. BODY O.D. | 7.35 | FT. |
| | STB. BODY O.D. | | FT. |
| | RMR. BODY O.D. | | FT. |
| 4 | SUBS O.D. | 11.75 | FT. |
| | BIT OR C.B. | | FT. |
| | KELLY DOWN | 21.11 | FT. |
| | TOTAL | 2564.75 | FT. |
| WT. OF STRING | 95M | 1530 | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 11A |
| SIZE | 12¼ |
| MFG. | Sec |
| TYPE | DSJ |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 16 18 |
| SER. NO. | 12982 |
| DEPTH OUT | |
| DEPTH IN | 2471 |
| TOTAL FTG. | ~~104~~ |
| TOTAL HR. RUN | 16½ 104 |
| COND. OF BIT | Run |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 9 00 | 1 00 | 11 00 |
| WEIGHT | 10.0 | 9.9+ | 9.9+ |
| VISC.-SEC | 48 | HH | 58 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| BARIOD | 2500# | BENEX | 12# |
| SODA ASH | 200# | | |
| CELEX | 100# | | |

DRILLER R. Henley

**FOOTAGE**

| FROM | TO | DR.. RM.. 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'EL—P COM'D—C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2526 | 2575 | D | | | 35 | 40 | 1400 | 5½ | 20 | | 22 | C |
| | | | | | 45 | 40 | 1050 | 5½ | 74 | | | C |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 2525 | 1⅛ | 2555 | ¾ | | | | | |

| TIME LOG FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8 00 | 8 45 | ¾ | Drlg |
| 8 45 | 9 00 | ¼ | R. of Serv. & B.O.P. |
| 9 00 | 9 15 | ¼ | Survey |
| 9 15 | 1 45 | 4½ | Drlg. |
| 1 45 | 2 00 | ¼ | Survey |
| 2 00 | 4 00 | 2 | Drlg. |
| | | | Safety meeting on House Keeping & Escape Buggy BK |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | | FT. |
|---|---|---|---|
| 21 | STANDS D.P. | 1966.08 | FT. |
| 2 | SINGLES D.P. | 62.94 | FT. |
| 3 | D.C. 3"x 9" I.D. O.D. | 80.94 | FT. |
| 15 | D.C. 2 7/8 x 6 3/4 I.D. O.D. | 441.94 | FT. |
| 1 | STB. BODY O.D. | 7.35 | FT. |
| | STB. BODY O.D. | | FT. |
| | RMR. BODY O.D. | | FT. |
| 4 | SUBS O.D. | 11.75 | FT. |
| | BIT OR C.B. | | FT. |
| | | | FT. |
| | KELLY DOWN | 41.00 | FT. |
| | TOTAL | 2626.00 | FT. |
| WT. OF STRING | 95M | | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | HA |
| SIZE | 12¼ |
| MFG. | Sec |
| TYPE | DSJ |
| NOZZLE NO. | 1 2 |
| NOZZLE SIZE | 16 18 |
| SER. NO. | 12982 |
| DEPTH OUT | |
| DEPTH IN | 2471 |
| TOTAL FTG. | 155 |
| TOTAL HR. RUN | 24¼ |
| COND. OF BIT | 1 1 6 |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 7 00 | 9 00 | 11 00 |
| WEIGHT | 10.1+ | 10.1 | 10+ |
| VISC.-SEC | 58 | 50 | 48 |
| W.L.-C.C. | | | |
| FLTR. CK | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| BENEX | 10# | | |
| BARIOD | 800# | | |

DRILLER

**FOOTAGE**

| FROM | TO | DR.. RM.. 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'EL—P COM'D—C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2575 | 2626 | D | | | 45 | 40 | 1050 | 5½ | 74 | 5½ | | S |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 2585 | ¾ | | | | | | | |

| TIME LOG FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4 00 | 7 45 | 3¾ | Drlg. |
| 7 45 | 8 00 | ¼ | Survey |
| 8 00 | 12 00 | 4 | DRLG. |

## DRILLING CREW PAYROLL DATA

DATE April 6, 1973

WELL NAME & NO. Union Aklavik C-38

COMPANY Union Oil Co. Ltd.

TOOL PUSHER Barry D. Armstrong RIG NO. 11E

**MORNING TOUR** P.M. A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. Hopkins | 12 |
| DRKMAN | | G. Hiebert | 12 |
| MTRMAN | | H. Kleen | 12 |
| FIREMAN | | | |
| FLRMAN | | B. Albertson | 12 |
| FLRMAN | | D Webber | 12 |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

**DAY TOUR** A.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R. Henley | 12 |
| DRKMAN | | C. Campbell | 12 |
| MTRMAN | | K McHale | 12 |
| FIREMAN | | | |
| FLRMAN | | Stan Shumacher | 12 |
| FLRMAN | | D McLaughlin | 12 |
| FLRMAN | | J Carmichael | 12 |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

**EVENING TOUR** P.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 19 DATE APRIL 5/73

OPERATOR: UNION OIL CO. LTD.

LEASE: UNION AKLAVIK C-38

WELL NO. C-38 FIELD OR DIST. AKLAVIK COUNTY N.W.T. STATE CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. RIG NO. 1E

DRILL PIPE STRING: NO. 263 SIZE 4" TOOL JOINT 5" O.D. TYPE THD. 3½ I.F

SIGNATURE OF OPERATOR'S REPRESENTATIVE: W.K. McArthur

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry D Armstrong

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NATIONAL | K-380 | 14" |
| 2. | NATIONAL | K-380 | 14" |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 13 3/8 | K-55 | 68# KS | 15 | 510.38 | | 505 | |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 5¼ | 7½ | 4¾ |
| REAMING | 1½ | | 1¼ |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | 1 | | 2¾ |
| LUBRICATE RIG | ¼ | ¼ | ¾ |
| DEVIATION SURVEY | 1¼ | ½ | 1¼ |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | ¾ | | |
| BORING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK: A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

## TIME SUMMARY (OFFICE USE ONLY)

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.

NO. OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 19 | STANDS D.P. | 1790.50 FT. |
| 1 | SINGLES D.P. | 31.24 FT. |
| 15 | D.C. 3" I.D. 6¾" O.D. | 441.94 FT. |
| 3 | D.C. 3" I.D. 9" O.D. | 80.94 FT. |
| 1 | STB. BODY O.D. | 7.35 FT. |
| | STB. BODY O.D. | FT. |
| | RMR. BODY O.D. | FT. |
| 4 | SUBS O.D. | 11.75 FT. |
| | BIT OR C.B. | FT. |
| | | FT. |
| | KELLY DOWN | 39.28 FT. |
| | TOTAL | 2392.80 FT. |

WT. OF STRING 93M LBS.

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 7 RR2A |
| SIZE | 12¼ |
| MFG. | SEC. |
| TYPE | M4N |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 18 |
| SER. NO. | 252446 |
| DEPTH OUT | |
| DEPTH IN | 2350 |
| TOTAL FTG. | 42 |
| TOTAL HR. RUN | 5¼ |
| COND. OF BIT | RN6 |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 3:00 | 5:30 | 6:30 |
| WEIGHT | 9.9 | 9.9 | 9.4 |
| VISC.-SEC | 43 | 46 | 42 |
| W.L.-C.C. | | | |
| FL.TR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | 235 SKS | | |
| BENEX | 10 SKS. | | |
| BARITE | | | |

DRILLER C. Hopkins

**FOOTAGE 42**

| 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 SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2350 | 2392 | D | | FUEL 5.0' | 55 | 30 | 1100 | 5½ | 74 | 5½ | 74 | S |
| | | | | | 60 | 25 | | " | | " | | |
| | | | | | 50 | | | 14 | | 14 | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 2363 | ⅞° | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12:00 | 12:45 | ¾ | MAINTENCE ON MUD LINE |
| 12:45 | 1:00 | ¼ | RIG SERV. |
| 1:00 | 2:00 | 1 | RUN IN HOLE |
| 2:00 | 2:30 | ½ | BREAK CIRC. & CLEAN TO BTM 10' |
| 2:30 | 5:30 | 3 | DRLG. 12¼" HOLE |
| 5:30 | 5:45 | ¼ | SURVEY |
| 5:45 | 8:00 | 2¼ | DRILL |

## DAY TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 20 | STANDS D.P. | 1891.18 FT. |
| | SINGLES D.P. | FT. |
| 3 | D.C. 3" I.D. 9" O.D. | 80.94 FT. |
| 15 | D.C. 2⅞ I.D. 6¾ O.D. | 441.94 FT. |
| 1 | STB. BODY O.D. | 7.35 FT. |
| | STB. BODY O.D. | FT. |
| | RMR. BODY O.D. | FT. |
| 4 | SUBS O.D. | 11.75 FT. |
| | BIT OR C.B. | FT. |
| | | FT. |
| | KELLY DOWN | 27.90 FT. |
| | TOTAL | 2455 FT. |

WT. OF STRING 93M. LBS.

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 7RR2A |
| SIZE | 12¼ |
| MFG. | Sec |
| TYPE | M4N |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 18 |
| SER. NO. | 252446 |
| DEPTH OUT | |
| DEPTH IN | 2350 |
| TOTAL FTG. | 106 |
| TOTAL HR. RUN | 12½ |
| COND. OF BIT | Run. |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 10:00 | 1:00 | 3:00 |
| WEIGHT | 9.9+ | 9.9 | 9.9 |
| VISC.-SEC | 85 | 76 | 54 |
| W.L.-C.C. | | | |
| FL.TR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

Dumped 5 BBLS. SHAKEN TANK

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| BARIOD | 4500# | | |
| BENEX | 12# | | |
| CELEX | 100# | | |

DRILLER B. Henley

**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 SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2392 | 2455 | D | | | 55 | 30 | 1250 | 5½ | 74 | 5½ | 42 | |
| | | | | | | | 1250 | | 42 | | 42 | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 2400 | ⅞ | | 2430 | ⅞ | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8:00 | 9:15 | 1¼ | Drlg. 12¼ hole |
| 9:15 | 9:30 | ¼ | Rig Serv. & BOPs |
| 9:30 | 9:45 | ¼ | Wl. Survey |
| 9:45 | 1:15 | 3½ | Drlg. 12¼ hole. |
| 1:15 | 1:30 | ¼ | Survey |
| 1:30 | 4:00 | 2½ | Drlg 12¼ hole |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 20 | STANDS D.P. | 1896.87 FT. |
| 1 | SINGLES D.P. | 31.54 FT. |
| 3 | D.C. 3"x9" I.D. O.D. | 80.94 FT. |
| 15 | D.C. 2⅞ I.D. 6¾ O.D. | 441.94 FT. |
| 1 | STB. BODY O.D. | 7.35 FT. |
| | STB. BODY O.D. | FT. |
| | RMR. BODY O.D. | FT. |
| 4 | SUBS O.D. | 11.75 FT. |
| | BIT OR C.B. | FT. |
| | | FT. |
| | KELLY DOWN | 18.36 FT. |
| | TOTAL | 2427.05 FT. |

WT. OF STRING 93M LBS.

**BIT RECORD**

| | | |
|---|---|---|
| BIT NO. | 7RR2A | 8A |
| SIZE | 12¼ | 12¼ |
| MFG. | Sec | Sec |
| TYPE | M4N | DSJN |
| NOZZLE NO. | 3 | 1 |
| NOZZLE SIZE | 18 | 16 18 |
| SER. NO. | 252446 | 534 |
| DEPTH OUT | 2471 | |
| DEPTH IN | 2350 | 2471 |
| TOTAL FTG. | 121 | 8A 12¼ Sec 537 |
| TOTAL HR. RUN | 15½ | 12287 |
| COND. OF BIT | 4-3-I | 2471 |
| REAMER NO. | | 5 |
| REAMER TYPE | | 30 |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 5:00 | | 11:00 |
| WEIGHT | 9.9 | | 10.0 |
| VISC.-SEC | 52 | | 47 |
| W.L.-C.C. | | | |
| FL.TR. CK | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. 2 LINER SIZE | PUMP NO. 2 S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2455 | 9477 | D | | | 55 | 30 | 1250 | 5½ | 42 | 5½ | 42 | |
| | | | | | 30 | 5 | | | | | | |
| | | | | | | 30 | | | | | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 2460 | 1° | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| ~~4:00~~ | ~~4:15~~ | | 10:15 12:00 1¾ DRLG. |
| 4:00 | 6:00 | 2 | Drlg. 12¼ Hole |
| 6:00 | 6:15 | ¼ | Survey |
| 6:15 | 7:15 | 1 | Drlg. |
| 7:15 | 8:30 | 1¼ | Dropped Survey, Hoist For Bit |
| 8:30 | 8:45 | ¼ | Recover Survey & Change Bits |
| 8:45 | 10:00 | 1¼ | Run In Hole |
| 10:00 | 10:15 | ¼ | Break Circ. & Clean 6' |

## DRILLING CREW PAYROLL DATA

DATE APRIL 5, 1973

WELL NAME & NO. UNION AKLAVIK C-38

COMPANY UNION OIL COMPANY REMCTED

TOOL PUSHER Barry D Armstrong RIG NO. 1E

MORNING TOUR ✓ P.M. A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. HOPKINS | 12 |
| DRKMAN | | B. HIEBERT | 12 |
| MTRMAN | | H. KLEEN | 12 |
| FIREMAN | | | |
| FLRMAN | | S. KLEEN | 8+4 |
| FLRMAN | | D. WEBBER | 12 |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

DAY TOUR A.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R. Henley | 12 |
| DRKMAN | | C. Campbell | 12 |
| MTRMAN | | K. McHale | 12 |
| FIREMAN | | | |
| FLRMAN | | Stan Shumacher | 12 |
| FLRMAN | | D McLaughlin | 12 |
| FLRMAN | | G. Albertson | 12 |
| | | T. Carmichael | 12 |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

EVENING TOUR P.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| | | R. Armstrong | T |
| | | E. Graumann | T |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

DAILY DRILLING REPORT — REPORT NO. 18 — DATE APRIL 4/73

OPERATOR: Union Oil Co LTD

LEASE: Union Aklavik C-38 — WELL NO. C-38 — FIELD OR DIST. Aklavik — COUNTY N.W.T. — STATE CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. — RIG NO. 1E

DRILL PIPE STRING: NO. 343, SIZE 4" — TOOL JOINT O.D. 5" — TYPE THD. 3½ I.F.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: A. Hutch.

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: G.W. Braumann

PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NATIONAL | K-380 | 14" |
| 2. | NATIONAL | K-380 | 14" |
| 3. | | | |

LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 13 3/8 | K-55 | 68# KS | 15 | 510.38 | | 505' | |
| | | | | | | | |
| | | | | | | | |

## TIME DISTRIBUTION-HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 7¾ | 7½ | 4 |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | | 1¼ |
| LUBRICATE RIG | | ¼ | ¼ |
| DEVIATION SURVEY | ¼ | ¼ | ½ |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | 2 |
| BORING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TURING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

TIME SUMMARY (OFFICE USE ONLY)

| | |
|---|---|
| DAY WORK | |
| HRS. W/DP | |
| HRS. WO/DP | |
| HRS. STANDBY | |
| TOTAL DAY WORK | |

WIRE LINE RECORD

| | |
|---|---|
| REEL NO. | |
| NO. OF LINES | SIZE |
| FEET SLIPPED | |
| FEET CUT OFF | |
| PRESENT LENGTH | |
| TON MI. OR TRIPS SINCE LAST CUT | |
| CUMULATIVE TON MI. OR TRIPS | |
| NO. OF DAYS FROM SPUD | |
| CUMULATIVE ROTATING HRS. | |

## MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 18 | STANDS D.P. | 1696.61 FT. |
| 1 | SINGLES D.P. | 31.70 FT. |
| 3 | D.C. 3" x 9" I.D. O.D. | 80.94 FT. |
| 15 | D.C. 2 7/8" x 6 1/4" I.D. O.D. | 441.47 FT. |
| 1 | STB. BODY O.D. | 7.35 FT. |
| | STB. BODY O.D. | FT. |
| | RMR. BODY O.D. | FT. |
| 4 | SUBS O.D. | 11.75 FT. |
| | BIT OR C.B. | FT. |
| | | FT. |
| | KELLY DOWN | 39.19 FT. |
| | TOTAL | 2309 FT. |
| WT. OF STRING | 93M | LBS. |

BIT RECORD

| | |
|---|---|
| BIT NO. | 6A |
| SIZE | 12¼ |
| MFG. | Sec |
| TYPE | DMNJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 18 |
| SER. NO. | 406864 |
| DEPTH OUT | |
| DEPTH IN | 2228 |
| TOTAL FTG. | 83 |
| TOTAL HR. RUN | 14¾ |
| COND. OF BIT | RNG |
| REAMER NO. | |
| REAMER TYPE | |

MUD RECORD

| TIME | 2:00 | 4:00 | 6:00 |
|---|---|---|---|
| WEIGHT | 9.9 | 9.9 | 10.0 |
| VISC.-SEC | 56 | 62 | 50 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | 10 SKS | | |
| BENEX | 9 SKS. | | |

DRILLER: C. Hopkins

FOOTAGE 46

| 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2263 | 2309 | D | | 5.80' | 35 | 40 | 1100 | 5½ | 60 | 5½ | 74 | S |
| | | | | | 40 | 40 | | | | | | |
| | | | | HELD BLOW-OUT DRILL | | | | | | | | |

DEVIATION RECORD: DEPTH 2289 — DEV. 7/8°

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12:00 | 2:00 | 2 | DRLG. 12¼" HOLE |
| 2:00 | 2:15 | ¼ | RIG SERV. & U 4" RAMS & SURVEY |
| 2:15 | 8:00 | 5¾ | DRILL |

## DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 18 | STANDS D.P. | 1696.16 FT. |
| 2 | SINGLES D.P. | 62.83 FT. |
| 3 | D.C. 3" x 9" I.D. O.D. | 80.94 FT. |
| 15 | D.C. 2 7/8" x 6 3/4" I.D. O.D. | 441.47 FT. |
| 1 | STB. BODY O.D. | 7.35 FT. |
| | STB. BODY O.D. | FT. |
| | RMR. BODY O.D. | FT. |
| 4 | SUBS O.D. | 11.75 FT. |
| | BIT OR C.B. | FT. |
| | | FT. |
| | KELLY DOWN | 36.95 FT. |
| | TOTAL | 2338 FT. |
| WT. OF STRING | 93M. | LBS. |

BIT RECORD

| | |
|---|---|
| BIT NO. | 6A |
| SIZE | 12¼ |
| MFG. | Sec |
| TYPE | DMNJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 18 |
| SER. NO. | 406864 |
| DEPTH OUT | |
| DEPTH IN | 2228 |
| TOTAL FTG. | 112. |
| TOTAL HR. RUN | 22¼ |
| COND. OF BIT | RNG |
| REAMER NO. | |
| REAMER TYPE | |

MUD RECORD

| TIME | 10:00 | 1:00 | 3:30 |
|---|---|---|---|
| WEIGHT | 9.9 | 9.9 | 9.9 |
| VISC.-SEC | 46 | 42 | 42 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

DUMPED MUD'S & H TANKS.

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER: R. Henley

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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2309 | 2338 | D | | | 40 | 40 | 1250 | 5½ | 40 | 5½ | 44 | |
| | | | | | 40 | 40 | 1000 | 5½ | 74 | 5½ | | S |

DEVIATION RECORD: DEPTH 2300 — DEV. ½

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8:00 | 8:30 | ½ | Drlg. |
| 8:30 | 8:45 | ¼ | W.L. Survey |
| 8:45 | 9:00 | ¼ | Rig Serv & Bops |
| 9:00 | 4:00 | 7 | Drlg. |

## EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 19 | STANDS D.P. | 1790.97 FT. |
| | SINGLES D.P. | FT. |
| 3 | D.C. 3" x 9" I.D. O.D. | 80.94 FT. |
| 15 | D.C. 2 7/8" x 6 3/4" I.D. O.D. | 441.47 FT. |
| 1 | STB. BODY O.D. | 7.35 FT. |
| | STB. BODY O.D. | FT. |
| | RMR. BODY O.D. | FT. |
| 4 | SUBS O.D. | 11.75 FT. |
| | BIT OR C.B. | FT. |
| | | FT. |
| | KELLY DOWN | 17.52 FT. |
| | TOTAL | 2350 FT. |
| WT. OF STRING | 93M | LBS. |

BIT RECORD

| | | |
|---|---|---|
| BIT NO. | 6A | 7R |
| SIZE | 12¼ | 12¼ |
| MFG. | Sec | Sec |
| TYPE | DMNJ | TM80 |
| NOZZLE NO. | 3 | 3 |
| NOZZLE SIZE | 18 | 18 |
| SER. NO. | 406404 | 340335 |
| DEPTH OUT | 2350 | |
| DEPTH IN | 2228 | 2350 |
| TOTAL FTG. | 122 | |
| TOTAL HR. RUN | 26¼ | |
| COND. OF BIT | 4-3-1 | |
| REAMER NO. | | |
| REAMER TYPE | | |

MUD RECORD

| TIME | 5:00 | | |
|---|---|---|---|
| WEIGHT | 9.8 | | |
| VISC.-SEC | 40 | | |
| W.L.-C.C. | | | |
| FLTR. CK | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2338 | 2350 | D | | | 40 | 40 | 1000 | 5½ | 74 | 5½ | | S |
| | | | | | 45 | | | | | | | |

DEVIATION RECORD: DEPTH 2335 — DEV. 3/4 — DEPTH 2350 — DEV. 7/8

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4:00 | 5:00 | 1 | Drlg. |
| 5:00 | 5:15 | ¼ | Survey |
| 5:15 | 5:30 | ¼ | Rig Serv. |
| 5:30 | 8:30 | 3 | Drill |
| 8:30 | 8:45 | ¼ | DROP SURVEY |
| 8:45 | 10:00 | 1¼ | HOIST |
| 10:00 | 12:00 | 2 | ~~FAKE DOWN STAND PIPE & KEL~~ MAINTANCE ON MUD LINE |

## DRILLING CREW PAYROLL DATA

DATE APRIL 4, 1973

WELL NAME & NO. Union Aklavik C-38

COMPANY Union Oil Co. LTD.

TOOL PUSHER G.W. Braumann — RIG NO. 1E

MORNING TOUR ____ P.M. ____ A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. HOPKINS | 12 |
| DRKMAN | | B. HIEBERT | 12 |
| MTRMAN | | H. KLEEN | 12 |
| FIREMAN | | | |
| FLRMAN | | S. KLEEN | 12 |
| FLRMAN | | D WEBBER | 12 |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST-TIME ACCIDENT

DAY TOUR ____ A.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R Henley | 12 |
| DRKMAN | | C. Campbell | 12 |
| MTRMAN | | K McHale | 12 |
| FIREMAN | | | |
| FLRMAN | | Stan Shumacher | 12 |
| FLRMAN | | D. McLaughlin | 12 |
| FLRMAN | | G. Albertson | 12 |
| | | T Carmichael | 12 |

NO. OF DAYS ____ SINCE LAST LOST-TIME ACCIDENT

EVENING TOUR ____ P.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST-TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 17 DATE April 3/73

OPERATOR: Union Oil Co. LTD.

LEASE: Union Aklavik C-38

WELL NO. C-38 | FIELD OR DIST. Aklavik | COUNTY N.W.T. | STATE Canada

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. | RIG NO. 1E

DRILL PIPE STRING NO. 253 SIZE 4½ | TOOL JOINT 5" O.D. TYPE THD. 3½ I.F.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: E.W. Baumann

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NATIONAL | K-380 | 14" |
| 2. | NATIONAL | K-380 | 14" |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 13 3/8 | K-55 | 68# KS | 15 | 510.38 | | 505' | |

## TIME DISTRIBUTION - HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 7½ | 4¾ | 7 |
| REAMING | | | 1½ |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | 2¾ | |
| LUBRICATE RIG | 1/4 | ¼ | 1/4 |
| DEVIATION SURVEY | 1/4 | ¼ | |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| [illegible]RING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

## TIME SUMMARY (OFFICE USE ONLY)

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.

NO. OF LINES | SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

| NO. | DRILLING ASSEMBLY AT END OF TOUR | |
|---|---|---|
| 17 | STANDS D.P. | 1592.91 FT. |
| | SINGLES D.P. | 31.63 FT. |
| 3 | D.C. 8" x 9" I.D. O.D. | 80.94 FT. |
| 15 | D.C. 2 7/8" x 6 3/4" I.D. O.D. | 441.47 FT. |
| 1 | STB. BODY O.D. | 7.35 FT. |
| | STB. BODY O.D. | FT. |
| | RMR. BODY O.D. | FT. |
| 4 | SUBS O.D. | 11.75 FT. |
| | BIT OR C.B. | FT. |
| | | FT. |
| | KELLY DOWN | 39.87 FT. |
| | TOTAL | 2206.00 FT. |
| WT. OF STRING | 92M | LBS. |

| BIT RECORD | | |
|---|---|---|
| BIT NO. | 5A | |
| SIZE | 12¼ | |
| MFG. | SEC. | |
| TYPE | DSJ | |
| NOZZLE NO. | 3 | |
| NOZZLE SIZE | 18 | |
| SER. NO. | 429494 | |
| DEPTH OUT | | |
| DEPTH IN | 8018 | |
| TOTAL FTG. | 188 | |
| TOTAL HR. RUN | 3¾ | |
| COND. OF BIT | RNG | |
| REAMER NO. | | |
| REAMER TYPE | | |

| MUD RECORD | | | |
|---|---|---|---|
| TIME | 9:00 | 4:00 | 7:00 |
| WEIGHT | 9.8 | 9.7 | 9.6+ |
| VISC.-SEC | 54 | 97 | 59 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | 255 SKS. | | |
| BENEX | 75 SKS. | | |
| Soda Ash | 1 BX. | | |

DRILLER C. Hopkins

| FOOTAGE 37 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.-T PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2169 | 2206 | D | | FUEL 6.3' | 35 | 40 | 1100 | 5½ | 44 | 5½ | 42 | C |
| | | | | | 40 | | | 5½ | 74 | | | S |

| DEVIATION RECORD | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|---|
| | 2174 | 1/8° | | | | | | | |

| TIME LOG FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12:00 | 3:00 | 3 | DRLG. 12¼" HOLE |
| 3:00 | 3:15 | 1/4 | RIG SERV. & BOPs |
| 3:15 | 3:30 | 1/4 | SURVEY |
| 3:30 | 8:00 | 4½ | DRLG |
| | | | ROUGH DRLG |

## EVENING TOUR

| NO. | DRILLING ASSEMBLY AT END OF TOUR | |
|---|---|---|
| 17 | STANDS D.P. | 1592.91 FT. |
| 2 | SINGLES D.P. | 63.17 FT. |
| 3 | D.C. 8" x 9" I.D. O.D. | 80.94 FT. |
| 15 | D.C. 2 7/8" x 6 3/4" I.D. O.D. | 441.47 FT. |
| 1 | STB. BODY O.D. | 7.35 FT. |
| | STB. BODY O.D. | FT. |
| | RMR. BODY O.D. | FT. |
| 4 | SUBS O.D. | 11.75 FT. |
| | BIT OR C.B. | FT. |
| | | FT. |
| | KELLY DOWN | 21.43 FT. |
| | TOTAL | 2228 FT. |
| WT. OF STRING | 92M | LBS. |

| BIT RECORD | | |
|---|---|---|
| BIT NO. | 5A | 6A |
| SIZE | 12¼ | 12¼ |
| MFG. | Sec | Sec |
| TYPE | DSJ | DMNT |
| NOZZLE NO. | 3 | 3 |
| NOZZLE SIZE | 18 | 14 |
| SER. NO. | 429444 | 0446 |
| DEPTH OUT | 2228 | |
| DEPTH IN | 2018 | 2228 |
| TOTAL FTG. | 210 | |
| TOTAL HR. RUN | 3¾ | 4¾ |
| COND. OF BIT | 5-3-1 | |
| REAMER NO. | | |
| REAMER TYPE | | |

| MUD RECORD | | | |
|---|---|---|---|
| TIME | 9:00 | 12 PM | |
| WEIGHT | 9.6 | 9.7 | |
| VISC.-SEC | 55 | 55 | |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| BARAID | 500# | | |

DRILLER R. Henley

| 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.-T PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2206 | 2228 | D | | | 40 | 40 | 1100 | 5½ | 44 | 5½ | 42 | C |

| DEVIATION RECORD | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|---|
| | 2210 | 3/4 | | 2228 | 1/4 | | | | |

| TIME LOG FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8:00 | 9:30 | 1½ | Drlg |
| 9:30 | 9:45 | 1/4 | Rig Serv & BOPs. |
| 9:45 | 10:00 | 1/4 | Survey |
| 10:00 | 1:15 | 3¼ | Drlg. |
| 1:15 | 2:45 | 1½ | Drop. survey & Trip For Bit. |
| 2:45 | 4:00 | 1¼ | Make up Bit & Run in w Bit #6A |

## EVENING TOUR

| NO. | DRILLING ASSEMBLY AT END OF TOUR | |
|---|---|---|
| 18 | STANDS D.P. | 1696.61 FT. |
| | SINGLES D.P. | FT. |
| 3 | D.C. 8" x 9" I.D. O.D. | 80.94 FT. |
| 15 | D.C. 2 7/8" x 6 3/4" I.D. O.D. | 441.47 FT. |
| 1 | STB. BODY O.D. | 7.35 FT. |
| | STB. BODY O.D. | FT. |
| | RMR. BODY O.D. | FT. |
| 4 | SUBS O.D. | 11.75 FT. |
| | BIT OR C.B. | FT. |
| | | FT. |
| | KELLY DOWN | 34.78 FT. |
| | TOTAL | 2263.00 FT. |
| WT. OF STRING | 92M | LBS. |

| BIT RECORD | |
|---|---|
| BIT NO. | 6A |
| SIZE | 12¼ |
| MFG. | Sec |
| TYPE | DMNT |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 14 |
| SER. NO. | 406864 |
| DEPTH OUT | |
| DEPTH IN | 2228 |
| TOTAL FTG. | 37 |
| TOTAL HR. RUN | 2¾ |
| COND. OF BIT | RNG |
| REAMER NO. | |
| REAMER TYPE | |

| MUD RECORD | | | |
|---|---|---|---|
| TIME | 3:00 | 8:00 | 9:30 |
| WEIGHT | 9.7 | 9.8 | 9.9 |
| VISC.-SEC | 52 | 56 | 45 |
| W.L.-C.C. | | | |
| FLTR. CK | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| RADIO | 7000# | | |

DRILLER

| FOOTAGE 37 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.-T PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2228 | 2263 | D | | | 40 | 20 | 1000 | 5½ | | 5½ | 74 | S |
| | | | | | 30 | 40 | | | | | | |

ROUGH DRLG

| DEVIATION RECORD | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|---|
| | 2237 | 1/8 | | | | | | | |

| TIME LOG FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4:00 | 4:30 | ½ | Clean 15' to Bottom. |
| 4:30 | 8:45 | 4¼ | DRLG 12¼" HOLE |
| 8:45 | 9:00 | 1/4 | RIG SERV & BOPs |
| 9:00 | 9:15 | 1/4 | SURVEY |
| 9:15 | 12:00 | 2¾ | DRLG. |

## DRILLING CREW PAYROLL DATA

DATE April 3, 1973

WELL NAME & NO. Union Aklavik C-38

COMPANY Union Oil Co. LTD.

TOOL PUSHER E.W. Baumann RIG NO. 1E

### MORNING TOUR ____ P.M. ____ A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. HOPKINS | 12 |
| DRKMAN | | G. HIEBERT | 12 |
| MTRMAN | | H. KLEEN | 12 |
| FIREMAN | | | |
| FLRMAN | | E. KLEEN | 12 |
| FLRMAN | | D. WEBBER | 12 |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST-TIME ACCIDENT

### DAY TOUR ____ A.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R. Henley | 12 |
| DRKMAN | | C. Campbell | 12 |
| MTRMAN | | K. McHale | 12 |
| FIREMAN | | | |
| FLRMAN | | Stan Shumacher | 12 |
| FLRMAN | | D. McLaughlin | 12 |
| FLRMAN | | G. Albertson | 12 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

### EVENING TOUR ____ P.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 16 DATE APRIL 2/73

OPERATOR: UNION OIL CO. LTD

LEASE: UNION AKLAVIK C-38

WELL NO. C-38 | FIELD OR DIST. AKLAVIK | COUNTY N.W.T. | STATE CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. | RIG NO.

DRILL PIPE STRING: NO. 8 | SIZE 3½" | TOOL JOINT 5" O.D. | TYPE THD. 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: E.W. Braumann

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NATIONAL | K-380 | 14" |
| 2. | NATIONAL | K-380 | 14" |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 13 3/8 | K-55 | 68# KS | 15 | 610.30 | | 505 | |

**TIME DISTRIBUTION—HOURS**

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 7¼ | 7½ | 7½ |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | | |
| LUBRICATE RIG | ¼ | ¼ | ¼ |
| DEVIATION SURVEY | ¼ | ¼ | ¼ |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| LOGGING WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

**TIME SUMMARY (OFFICE USE ONLY)**

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

**WIRE LINE RECORD**

REEL NO.

NO. OF LINES | SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 16 | STANDS D.P. | 1507.13 FT. |
| | SINGLES D.P. | FT. |
| 3 | D.C. 3" x 9" I.D. O.D. | 80.94 FT. |
| 15 | D.C. 2 7/8" x 6 3/4" I.D. O.D. | 441.45 FT. |
| 1 | STB. BODY O.D. | 7.35 FT. |
| | STB. BODY O.D. | FT. |
| | RMR. BODY O.D. | FT. |
| 4 | SUBS O.D. | 11.75 FT. |
| | BIT OR C.B. | FT. |
| | | FT. |
| | KELLY DOWN | 36.38 FT. |
| | TOTAL | 2075.00 FT. |
| | WT. OF STRING | 90M LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 6A |
| SIZE | 12¼ |
| MFG. | SEC. |
| TYPE | DSJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 18 |
| SER. NO. | 424944 |
| DEPTH OUT | |
| DEPTH IN | 2018 |
| TOTAL FTG. | 57 |
| TOTAL HR. RUN | 19¼ |
| COND. OF BIT | RNG. |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 800 | 400 | 700 |
| WEIGHT | 10.2 | 10.1 | 10.0 |
| VISC.-SEC | 60 | 56 | 85 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | 12 SKS | | |
| BENEX | 10# | | |
| SODA ASH | 90# | | |

DRILLER: C. Hopkins

**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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2027 | 2075 | D | | FWCL 3.5' | 40 | 30 | 1250 | 5½ | 44 | 5½ | 42 | C. |
| | | | | | 40 | 40 | | | | | | |
| | | | | | 35 | 40 | | | | | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 2049 | 3/4 | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 1200 | 1215 | ¼ | RIG SERVICE, TIDE RAMS & KELLY COCK |
| 1215 | 415 | 4 | DRLG. 12¼" HOLE |
| 415 | 430 | ¼ | SURVEY |
| 430 | 800 | 3½ | DRILL |

## DAY TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 16 | STANDS D.P. | 1502.13 FT. |
| 2 | SINGLES D.P. | 63.09 FT. |
| 3 | D.C. 3" x 9" I.D. O.D. | 80.94 FT. |
| 15 | D.C. 2 7/8" x 6 3/4" I.D. O.D. | 441.45 FT. |
| 1 | STB. BODY O.D. | 7.35 FT. |
| | STB. BODY O.D. | FT. |
| | RMR. BODY O.D. | FT. |
| 4 | SUBS O.D. | 11.75 FT. |
| | BIT OR C.B. | FT. |
| | | FT. |
| | KELLY DOWN | 10.29 FT. |
| | TOTAL | 2122 FT. |
| | WT. OF STRING | 92M LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 5A |
| SIZE | 12¼ |
| MFG. | Sec |
| TYPE | DSJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 18 |
| SER. NO. | 424944 |
| DEPTH OUT | |
| DEPTH IN | 2018 |
| TOTAL FTG. | 104 |
| TOTAL HR. RUN | 26½ |
| COND. OF BIT | Run |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 1000 | 100 | 300 |
| WEIGHT | 10.1 | 10.1 | 10.2 |
| VISC.-SEC | 90 | 80 | 48 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | 120# | | |
| BENEX | 12# | | |

DRILLER: R. Henley

**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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2075 | 2122 | D | | | 35 | 40 | 1250 | 5½ | 44 | 5½ | 42 | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 2080 | 3/8 | | 2120 | ½ | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 800 | 930 | 1½ | Drlg. |
| 930 | 945 | ¼ | Rig Serv. & Bops |
| 945 | 1000 | ¼ | Survey |
| 1000 | 330 | 5½ | Drlg. |
| 330 | 345 | ¼ | Survey |
| 345 | 400 | ¼ | Drlg |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 17 | STANDS D.P. | 1602.41 FT. |
| | SINGLES D.P. | FT. |
| 3 | D.C. 3" x 9" I.D. O.D. | 80.94 FT. |
| 15 | D.C. 2 7/8" x 6 3/4" I.D. O.D. | 441.45 FT. |
| 1 | STB. BODY O.D. | 7.35 FT. |
| | STB. BODY O.D. | FT. |
| | RMR. BODY O.D. | FT. |
| 4 | SUBS O.D. | 11.75 FT. |
| | BIT OR C.B. | FT. |
| | | FT. |
| | KELLY DOWN | 25.10 FT. |
| | TOTAL | 2169.00 FT. |
| | WT. OF STRING | 92M LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 5A |
| SIZE | 12¼ |
| MFG. | Sec |
| TYPE | DSJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 18 |
| SER. NO. | 424944 |
| DEPTH OUT | |
| DEPTH IN | 2018 |
| TOTAL FTG. | 151 |
| TOTAL HR. RUN | 34 |
| COND. OF BIT | RNG |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 600 | 1000 | 1100 |
| WEIGHT | 9.9 | 9.8 | 9.8 |
| VISC.-SEC | 95 | 65 | 68 |
| W.L.-C.C. | | | |
| FLTR. CK | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2122 | 2169 | D | | | 35 | 40 | 1250 | 5½ | 44 | 5½ | 42 | C |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 2142 | 1/2° | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 400 | 930 | 5½ | Drlg. |
| 930 | 945 | ¼ | Rig Serv. & BOPs |
| 945 | 1000 | ¼ | Survey |
| 1000 | 1200 | 2 | Drlg. |

**DRILLING CREW PAYROLL DATA**

DATE APRIL 2/73

WELL NAME & NO. UNION AKLAVIK C-38

COMPANY UNION OIL CO. LTD.

TOOL PUSHER E.W. Braumann RIG NO. 1E

**MORNING TOUR** P.M. A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. HOPKINS | 12 |
| DRKMAN | | B. HIEBERT | 12 |
| MTRMAN | | H. KLEEN | 12 |
| FIREMAN | | | |
| FLRMAN | | S. KLEEN | 12 |
| FLRMAN | | D. WEBBER | 12 |
| FLRMAN | | | |
| | | S. KLEEN SLIPPED | |
| | | & KELLY DN SLIP | |
| | | HANDLE W/ BACK. | |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

**DAY TOUR** A.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R. Henley | 12 |
| DRKMAN | | C. Campbell | 12 |
| MTRMAN | | K. McHale | 12 |
| FIREMAN | | | |
| FLRMAN | | Stan Shumacher | 12 |
| FLRMAN | | D. McLaughlin | 12 |
| FLRMAN | | G. Albertson | 12 |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

**EVENING TOUR** P.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 15 — DATE ~~MARCH~~ APRIL 1/73

OPERATOR: UNION OIL CO. LTD

LEASE: UNION AKLAVIK C-38

WELL NO. C-38 — FIELD OR DIST. AKLAVIK — COUNTY N.W.T. — STATE CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. — RIG NO. 1E

DRILL PIPE STRING: NO. 2&3 SIZE 4" — TOOL JOINT 5" O.D. TYPE THD. 3½ I.F.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: E.D. Graumann

## PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NATIONAL | K-380 | 14" |
| 2. | NATIONAL | K-380 | 14" |
| 3. | | | |

## CASING / TUBING OR LINER

| | SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|---|
| LAST CASING | 13 3/8 | K-55 | 68# KS | 15 | 510.30 | | 505 | |
| TUBING OR LINER | | | | | | | | |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 6¾ | 2¼ | 11½ |
| ~~REAMING~~ CLEAN | | | ½ |
| CONDITIONING MUD & CIRCULATING | | | ¼ |
| TRIPS | | 1½ | 1½ |
| LUBRICATE RIG | ¼ | ¼ | |
| DEVIATION SURVEY | ¼ | | ¼ |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | ¼ | |
| REPAIR RIG | | | |
| BOILER | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | ~~8 00~~ ¼ | | |
| DRILL STEM TEST | | | |
| OTHER CIRC. SAMPLE | 3¾ | | |
| FISHING 2 3/8 O.D. Bit sub | 3¾ | 4¾ | |
| COMPLETION WORK: A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

## TIME SUMMARY (OFFICE USE ONLY)

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.

NO. OF LINES 8 — SIZE 1 1/8

FEET SLIPPED 23

FEET CUT OFF 23

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 15 | STANDS D.P. | 1414.86 FT. | |
| 1 | SINGLES D.P. | 31.21 FT. | |
| 3 | D.C. 8" X 9" I.D. O.D. | 80.94 FT. | |
| 15 | D.C. 8 1/8 I.D. X 6 1/4 O.D. | 441.45 FT. | |
| 1 | STB. BODY O.D. | 7.35 FT. | |
| | STB. BODY O.D. | FT. | |
| | RMR. BODY O.D. | FT. | |
| 4 | SUBS O.D. | 11.75 FT. | |
| | BIT OR C.B. | FT. | |
| | | FT. | |
| | KELLY DOWN | 13.44 FT. | |
| | TOTAL | 1921.00 FT. | |
| WT. OF STRING | 93M | LBS. | |

### BIT RECORD

| | |
|---|---|
| BIT NO. | 4A |
| SIZE | 12¼ |
| MFG. | SEC |
| TYPE | DSJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 20 |
| SER. NO. | 403462 |
| DEPTH OUT | |
| DEPTH IN | 1685 |
| TOTAL FTG. | 316 |
| TOTAL HR. RUN | 48½ |
| COND. OF BIT | RN6 |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 12⁰⁰ | 3⁰⁰ | 6⁰⁰ |
| WEIGHT | 10.2 | 10.2 | 10.2 |
| VISC.-SEC | 61 | 75 | 78 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| CEL | 1000# | | |
| BENEX | 9# | | |

DRILLER C. Hopkins

### 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | ~~2001~~ | D | | FUEL→ 4' | 40 | 40 | 1250 | 5½ | 44 | 5½ | 42 | C |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 1987 | 3/8 | | | | | | | |

### TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

| FROM | TO | ELAPSED TIME | DETAILS |
|---|---|---|---|
| 12⁰⁰ | 1⁰⁰ | 1 | DRLG 12¼" HOLE |
| 1⁰⁰ | 1¹⁵ | ¼ | RIG SERV & V RIDE RAMS |
| 1¹⁵ | 5⁴⁵ | 4½ | DRILL |
| 5⁴⁵ | 6¹⁵ | ½ | CIRC. BTM HOLE SAMPLE |
| 6¹⁵ | 6³⁰ | ¼ | W.O.D. |
| 6³⁰ | 6⁴⁵ | ¼ | DRILL |
| 6⁴⁵ | 7⁰⁰ | ¼ | SURVEY |
| 7⁰⁰ | 8⁰⁰ | 1 | DRLG |

## DAY TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 15 | STANDS D.P. | 1414.86 FT. | |
| 1 | SINGLES D.P. | 31.21 FT. | |
| 3 | D.C. 8" X 9" I.D. O.D. | 80.94 FT. | |
| 15 | D.C. 8 1/8 I.D. X 6 1/4 O.D. | 441.45 FT. | |
| 1 | STB. BODY O.D. | 7.35 FT. | |
| | STB. BODY O.D. | FT. | |
| | RMR. BODY O.D. | FT. | |
| 4 | SUBS O.D. | 11.75 FT. | |
| | BIT OR C.B. | FT. | |
| | | FT. | |
| | KELLY DOWN | ~~27.44~~ FT. | |
| | TOTAL | 2018 FT. | |
| WT. OF STRING | 93M | LBS. | |

### BIT RECORD

| | |
|---|---|
| BIT NO. | 4A |
| SIZE | 12¼ |
| MFG. | SEC |
| TYPE | DST |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 20 |
| SER. NO. | 403462 |
| DEPTH OUT | ~~1685~~ 2018 |
| DEPTH IN | 1685 |
| TOTAL FTG. | 333 |
| TOTAL HR. RUN | 50¾ |
| COND. OF BIT | 3-1-1 |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 9⁰⁰ | | |
| WEIGHT | 10.1 | | |
| VISC.-SEC | 65 | | |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R Henley

### 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2001 | 2018 | | | | 40 | 40 | 1250 | 4¼ | 54 | 4½ | 42 | |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 2018 | 3/8 | | | | | | | |

### TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

| FROM | TO | ELAPSED TIME | DETAILS |
|---|---|---|---|
| 8⁰⁰ | 10¹⁵ | 2¼ | Drlg |
| 10¹⁵ | 11⁴⁵ | 1½ | Trip For Bit. |
| 11⁴⁵ | 12⁰⁰ | ¼ | Rig Serv & BOPs |
| 12⁰⁰ | 12⁴⁵ | ¾ | Slip & Cut Line |
| 12⁴⁵ | 4⁰⁰ | 3¼ | W.O. Bit sub. |

Changed Oil & Filters in 337 LP
Fixed Fuel Lines 379 Cat

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 15 | STANDS D.P. | 1415.76 FT. | |
| 1 | SINGLES D.P. | 31.21 FT. | |
| 3 | D.C. 8" X 9" I.D. O.D. | 80.94 FT. | |
| 15 | D.C. 8 1/8 I.D. X 6 1/4 O.D. | 441.45 FT. | |
| 1 | STB. BODY O.D. | 7.35 FT. | |
| | STB. BODY O.D. | FT. | |
| | RMR. BODY O.D. | FT. | |
| 4 | SUBS O.D. | 11.75 FT. | |
| | BIT OR C.B. | FT. | |
| | | FT. | |
| | KELLY DOWN | 38.54 FT. | |
| | TOTAL | 2027 FT. | |
| WT. OF STRING | 89 | LBS. | |

### BIT RECORD

| | |
|---|---|
| BIT NO. | 5A |
| SIZE | 12¼ |
| MFG. | Sec |
| TYPE | DSJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 18 |
| SER. NO. | 424944 |
| DEPTH OUT | |
| DEPTH IN | 2018 |
| TOTAL FTG. | 9 |
| TOTAL HR. RUN | 1½ |
| COND. OF BIT | RNG |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | | |
|---|---|---|---|---|
| TIME | | | | 1100 |
| WEIGHT | | | | 10.1 |
| VISC.-SEC | | | | 69 |
| W.L.-C.C. | | | | |
| FLTR. CK | | | | |
| PH | | | | |
| SD. CONT. % | | | | |
| PRESSURE GRADIENT | | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2018 | 8027 | D | | | 30 | 20 | 1150 | 5½ | 75 | | | S |
| | | | | | | | | | | | | C |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

### TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

| FROM | TO | ELAPSED TIME | DETAILS |
|---|---|---|---|
| 4⁰⁰ | 8³⁰ | 4½ | W.O. Bit sub. |
| 8³⁰ | 10⁰⁰ | 1½ | MAKE UP BIT, BIT SUB & RUN IN |
| 10⁰⁰ | 10³⁰ | ½ | CLEAN 35' FILL |
| 10³⁰ | 12⁰⁰ | 1½ | DRLG 12¼" HOLE |

## DRILLING CREW PAYROLL DATA

DATE APRIL 1/73

WELL NAME & NO. UNION AKLAVIK C-38

COMPANY UNION OIL CO. LTD

TOOL PUSHER E.D. Graumann — RIG NO. 1E

### MORNING TOUR ____ P.M. ____ A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. HOPKINS | 12 |
| DRKMAN | | G. HIEBERT | 12 |
| MTRMAN | | H. KLEEN | 12 |
| FIREMAN | | | |
| FLRMAN | | S. KLEEN | 12 |
| FLRMAN | | D. WEBBER | 12 |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST-TIME ACCIDENT

### DAY TOUR ____ A.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R. Henley | 12 |
| DRKMAN | | C Campbell | 12 |
| MTRMAN | | K McHale | 12 |
| FIREMAN | | | |
| FLRMAN | | Stan Shumacher | 12 |
| FLRMAN | * | D McLaughlin | 12 |
| FLRMAN | | G Albertson | 12 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

### EVENING TOUR ____ P.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 15 DATE MARCH 31/73

OPERATOR: UNION OIL CO. LTD.

LEASE: UNION AKLAVIK C-38

WELL NO. C-38 FIELD OR DIST. AKLAVIK COUNTY N.W.T. STATE CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. RIG NO. 1E

DRILL PIPE STRING NO. 3 SIZE 4½ TOOL JOINT 5" O.D. TYPE THD. 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: E.W. Kraumann

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NATIONAL | K-380 | 14" |
| 2. | NATIONAL | K-380 | 14" |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 13 3/8 | K-55 | 68 | 15 | 510.30 | | 505 | |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 7¼ | 7¼ | 7¼ |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | | 1¼ |
| LUBRICATE RIG | ¼ | ¼ | ¼ |
| DEVIATION SURVEY | ½ | ½ | |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| REAMING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

## TIME SUMMARY (OFFICE USE ONLY)

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.

NO. OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 13 | STANDS D.P. | 1226.3 FT. |
| 2 | SINGLES D.P. | 63.62 FT. |
| 3 | D.C. 3¼ I.D. 9" O.D. | 80.94 FT. |
| 15 | D.C. 6 7/8" I.D. 6 3/4" O.D. | 441.45 FT. |
| 1 | STB. BODY O.D. | 7.35 FT. |
| | STB. BODY O.D. | FT. |
| | RMR. BODY O.D. | FT. |
| 4 | SUBS O.D. | 11.75 FT. |
| | BIT OR C.B. | FT. |
| | | FT. |
| | KELLY DOWN | 38.51 FT. |
| | TOTAL | 1863.00 FT. |
| | WT. OF STRING 92M | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 4A |
| SIZE | 12¼ |
| MFG. | SEC. |
| TYPE | DSJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 20 |
| SER. NO. | 403462 |
| DEPTH OUT | |
| DEPTH IN | 1685 |
| TOTAL FTG. | 188 |
| TOTAL HR. RUN | 27 |
| COND. OF BIT | RW6. |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 200 | 500 | 600 |
| WEIGHT | 9.9 | 9.9 | 10.1 |
| VISC.-SEC | 55 | 58 | 70 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | 600# | | |
| BENEX | 2# | | |
| SODA ASH | 100# | | |

DRILLER C. Hopkins

**FOOTAGE**

| FROM | TO | DR.-D RM.-R CORE.-C | CORE NO. | FORMATION (SHOW CORE RECOVERY) | ROTARY RPM | WT. ON BIT 1000 # |
|---|---|---|---|---|---|---|
| 1812 | 1863 | D | | | 40 | 30 |
| | | | | | | 32 |
| | | | | | | 34 |

| 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'EL-P COM'D-C |
|---|---|---|---|---|---|
| 1250 | 5½ | 46 | 5½ MWD | 46 | C |
| 1050 | | | | | S |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 1832 | 1¼° | MEG DWN | 1832 | 1¼° | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 1200 | 400 | 4 | DRLG 12¼" HOLE |
| 400 | 415 | ¼ | BIG SERV |
| 415 | 430 | ¼ | SURVEY @ MIDRUN |
| 430 | 445 | ¼ | SURVEY |
| 445 | 800 | 3¾ | DRLG |

HELD BLOW-OUT DRILL

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 14 | STANDS D.P. | 1322.86 FT. |
| 1 | SINGLES D.P. | 63.88 FT. |
| 3 | D.C. 3¼ I.D. 9" O.D. | 80.94 FT. |
| 15 | D.C. 6 7/8" I.D. 6 3/4" O.D. | 441.45 FT. |
| 1 | STB. BODY O.D. | 7.35 FT. |
| | STB. BODY O.D. | FT. |
| | RMR. BODY O.D. | FT. |
| 4 | SUBS O.D. | 11.75 FT. |
| | BIT OR C.B. | FT. |
| | | FT. |
| | KELLY DOWN | 38.51 FT. |
| | TOTAL | 1960.00 FT. |
| | WT. OF STRING 93M | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 4A |
| SIZE | 12¼ |
| MFG. | SEC. |
| TYPE | DSJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 20 |
| SER. NO. | 403462 |
| DEPTH OUT | |
| DEPTH IN | 1685 |
| TOTAL FTG. | 275 |
| TOTAL HR. RUN | 41¾ |
| COND. OF BIT | RNG |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 900 | 1500 | 2300 |
| WEIGHT | 10.1 | 10.1 | 10.1 |
| VISC.-SEC | 70 | 68 | 68 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R. Henley

**FOOTAGE**

| FROM | TO | DR.-D RM.-R CORE.-C | CORE NO. | FORMATION (SHOW CORE RECOVERY) | ROTARY RPM | WT. ON BIT 1000 # |
|---|---|---|---|---|---|---|
| 1863 | 1909 | D | | | 40 | 34 |
| | | | | | 40 | |

| PUMP PRESS | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN |
|---|---|---|---|---|---|
| 1250 | 5½ | 40 | 5½ | 42 | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 1670 | ½° | | 1900 | ½° | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 800 | 930 | 1½ | Drlg. |
| 930 | 945 | ¼ | Rig Serv ✓ BOPs ✓ Kelly Cock |
| 945 | 1000 | ¼ | Survey |
| 1000 | 300 | 5 | Drlg |
| 300 | 315 | ¼ | Survey |
| 315 | 400 | 3¾ | Drlg |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 14 | STANDS D.P. | 1323.86 FT. |
| 2 | SINGLES D.P. | 63.88 FT. |
| 3 | D.C. 3¼ I.D. 9" O.D. | 80.94 FT. |
| 15 | D.C. 6 7/8" I.D. 6 3/4" O.D. | 441.45 FT. |
| 1 | STB. BODY O.D. | 7.35 FT. |
| | STB. BODY O.D. | FT. |
| | RMR. BODY O.D. | FT. |
| 4 | SUBS O.D. | 11.75 FT. |
| | BIT OR C.B. | FT. |
| | | FT. |
| | KELLY DOWN | 38.51 FT. |
| | TOTAL | 1960.00 FT. |
| | WT. OF STRING 93M | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 4A |
| SIZE | 12¼ |
| MFG. | SEC. |
| TYPE | DSJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 20 |
| SER. NO. | 403462 |
| DEPTH OUT | |
| DEPTH IN | 1685 |
| TOTAL FTG. | 275 |
| TOTAL HR. RUN | 41¾ |
| COND. OF BIT | RNG |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 830 | 1100 | 1100 |
| WEIGHT | 10.2 | 10.2 | 9.8 |
| VISC.-SEC | 60 | 63 | 57 |
| W.L.-C.C. | | | |
| FLTR. CK | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER

**FOOTAGE**

| FROM | TO | DR.-D RM.-R CORE.-C | CORE NO. | FORMATION (SHOW CORE RECOVERY) | ROTARY RPM | WT. ON BIT 1000 # |
|---|---|---|---|---|---|---|
| 1909 | 1960 | D | | | 40 | 40 |

| 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'EL-P COM'D-C |
|---|---|---|---|---|---|
| 1250 | 5½ | 44 | 6½ | 42 | C |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 1927 | ¼° | | 0 | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 400 | 800 | 4 | Drlg. |
| 800 | 815 | ¼ | Rig Serv ✓ BOPs |
| 815 | 830 | ¼ | SURVEY |
| 830 | 1200 | 3½ | DRLG |

DRLG. VERY Rough.

## DRILLING CREW PAYROLL DATA

DATE MARCH 30/73

WELL NAME & NO. UNION AKLAVIK C-38

COMPANY UNION OIL CO. LTD.

TOOL PUSHER E.W. Kraumann RIG NO. 1E

MORNING TOUR 1200 P.M. 0 A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | C. HOPKINS | 12 |
| DRKMAN | | G. HEBERT | 12 |
| MTRMAN | | H. KLEEN | 12 |
| FIREMAN | | | |
| FLRMAN | | S. KLEEN | 12 |
| FLRMAN | | D. WEBBER | 12 |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST-TIME ACCIDENT

DAY TOUR A.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R. Henley | 12 |
| DRKMAN | | C. Campbell | 12 |
| MTRMAN | | K. McHale | 12 |
| FIREMAN | | | |
| FLRMAN | | G. Albertson | 12 |
| FLRMAN | | STan Shumacher | 12 |
| FLRMAN | | J. Carmichael | 6 |
| | | | |
| | | | |
| | | R. Henley Steel in eyes. | - |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

EVENING TOUR P.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| | | | |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

POOR COPY

# DAILY DRILLING REPORT

REPORT NO. 14 — DATE MARCH 30/73

OPERATOR: UNION OIL CO. LTD.

LEASE: UNION AKLAVIK — WELL NO. C-38 — FIELD OR DIST. AKLAVIK — COUNTY N.W.T. — STATE CANADA

CONTRACTOR: S&T DRILLING (WESTERN) CO. LTD. — RIG NO. 1E

DRILL PIPE STRING: NO. 2 3/4, SIZE 4" — TOOL JOINT 5" O.D., TYPE THD. 3 1/2" IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: E. Graumann

## PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NATIONAL | K-380 | 14" |
| 2. | NATIONAL | K-380 | 14" |
| 3. | | | |

LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 13 3/8 | K-55 | 68KS | 15 | 510.30 | | 505 | |

## TIME DISTRIBUTION — HOURS

| | MDNT | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 5 | 7 1/2 | 7 1/2 |
| REAMING | 3 | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | | |
| LUBRICATE RIG | | 1/2 | 1/2 |
| DEVIATION SURVEY | | 1/2 | 1/2 |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| BORING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

## TIME SUMMARY (OFFICE USE ONLY)

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.

NO. OF LINES — SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 12 | STANDS D.P. | 1135.98 | FT. |
| | SINGLES D.P. | | FT. |
| 3 | D.C. 3" x 9" I.D. O.D. | 809.4 | FT. |
| 15 | D.C. 2 7/8 x 6 3/4 I.D. O.D. | 441.45 | FT. |
| 1 | STB. BODY O.D. | 7.35 | FT. |
| | STB. BODY O.D. | | FT. |
| | RMR. BODY O.D. | | FT. |
| 4 | SUBS O.D. | 11.75 | FT. |
| | BIT OR C.B. | | FT. |
| | | | FT. |
| | KELLY DOWN | 38.58 | FT. |
| | TOTAL | 1714.00 | FT. |
| WT. OF STRING | 88m | | LBS. |

### BIT RECORD

| | |
|---|---|
| BIT NO. | 4A |
| SIZE | 12 1/4 |
| MFG. | SEC. |
| TYPE | DSJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 20 |
| SER. NO. | 403462 |
| DEPTH OUT | |
| DEPTH IN | 1685 |
| TOTAL FTG. | 29 |
| TOTAL HR. RUN | 1/2 |
| COND. OF BIT | RW6 |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 430 | 530 | 700 |
| WEIGHT | 100 | 10.0 | 10.0 |
| VISC.-SEC | 63 | 59 | 61 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER C. Hopkins

### 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 SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1685 | 1714 | D | | | 52 | 20 | 1250 | 5 1/2 | 50 | 5 1/2 | 40 | C |
| | | | | | 45 | | | | | | | |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12.00 | 3.00 | 3 | REAM FROM 1285' TO 1685 |
| 3.00 | 8.00 | 5 | DRLG. 12 1/4" HOLE |

## DAY TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 12 | STANDS D.P. | 1135.98 | FT. |
| 2 | SINGLES D.P. | 63.13 | FT. |
| 3 | D.C. 3" x 9" I.D. O.D. | 80.94 | FT. |
| 15 | D.C. 2 7/8 x 6 3/4 I.D. O.D. | 441.45 | FT. |
| 1 | STB. BODY O.D. | 7.35 | FT. |
| | STB. BODY O.D. | | FT. |
| | RMR. BODY O.D. | | FT. |
| 4 | SUBS O.D. | 11.75 | FT. |
| | BIT OR C.B. | | FT. |
| | | | FT. |
| | KELLY DOWN | 38.58 | FT. |
| | TOTAL | 1767 | FT. |
| WT. OF STRING | 90m | | LBS. |

### BIT RECORD

| | |
|---|---|
| BIT NO. | 4A |
| SIZE | 12 1/4 |
| MFG. | Sec. |
| TYPE | DSJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 20 |
| SER. NO. | 403462 |
| DEPTH OUT | |
| DEPTH IN | 1685 |
| TOTAL FTG. | 82 |
| TOTAL HR. RUN | 12 1/4 |
| COND. OF BIT | Run |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 9.00 | 12.00 | 11.00 |
| WEIGHT | 10.2 | 9.9 | 9.9 |
| VISC.-SEC | 65 | 58 | 62 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | 1000# | | |
| SODA ASH | 100# | | |
| BENEX | 6# | | |

DRILLER R. Henley

### 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1714 | 1767 | D | | | 40 | 25 | 1250 | 5 1/2 | 50 | 5 1/2 | | |
| | | | | | | 28 | 1100 | 5 1/2 | | | | |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 1710 | 3/4 | | 1740 | 3/4 | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8.00 | 8.15 | 1/4 | Rig Serv |
| 8.15 | 8.30 | 1/4 | Survey & BOPs |
| 8.30 | 12.30 | 4 | Drlg. |
| 12.30 | 12.45 | 1/4 | Survey |
| 12.45 | 4.00 | 3 1/4 | Drlg. |

& Motor shut off. Held Blow out Drill

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 13 | STANDS D.P. | 1249.72 | FT. |
| 1 | SINGLES D.P. | 32.05 | FT. |
| 3 | D.C. 3" x 9" I.D. O.D. | 80.94 | FT. |
| 15 | D.C. 2 7/8 x 6 3/4 I.D. O.D. | 441.45 | FT. |
| 1 | STB. BODY O.D. | 7.35 | FT. |
| | STB. BODY O.D. | | FT. |
| | RMR. BODY O.D. | | FT. |
| 4 | SUBS O.D. | 11.75 | FT. |
| | BIT OR C.B. | | FT. |
| | | | FT. |
| | KELLY DOWN | 11.09 | FT. |
| | TOTAL | 1817.00 | FT. |
| WT. OF STRING | 90m | | LBS. |

### BIT RECORD

| | |
|---|---|
| BIT NO. | 4A |
| SIZE | 12 1/4 |
| MFG. | Sec |
| TYPE | DSJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 20 |
| SER. NO. | 403462 |
| DEPTH OUT | |
| DEPTH IN | 1685 |
| TOTAL FTG. | 132 |
| TOTAL HR. RUN | 19 1/4 |
| COND. OF BIT | RW6 |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 7.00 | 8.30 | 11.00 |
| WEIGHT | 9.9 | 9.8 | 9.8+ |
| VISC.-SEC | 57 | 50 | 59 |
| W.L.-C.C. | | | |
| FLTR. CK | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1767 | 1817 | | | | 40 | 25 | 1250 | 5 1/2 | 48 | 5 1/2 | 49 | C |
| | | | | | | | | | | | | |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 1770 | 3/4 | | 1804 | 3/4 | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4.00 | 5.30 | 1 1/2 | Drlg. |
| 5.30 | 5.45 | 1/4 | Rig Serv. |
| 5.45 | 6.00 | 1/4 | Survey |
| 6.00 | 11.30 | 5 1/2 | DRILL |
| 11.30 | 11.45 | 1/4 | SURVEY |
| 11.45 | 12.00 | 1/4 | DRILL |

## DRILLING CREW PAYROLL DATA

DATE MARCH 30/73

WELL NAME & NO. UNION AKLAVIK C-38

COMPANY UNION OIL CO. LTD.

TOOL PUSHER E. Graumann — RIG NO. 1E

### MORNING TOUR 12.00 P.M. 8.00 A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. | |
|---|---|---|---|---|
| DRILLER | | C. HOPKINS | 12 | T |
| DRKMAN | | G. HERBERT | 12 | |
| MTRMAN | | H. KLEEN | 12 | |
| FIREMAN | | | | |
| FLRMAN | | S. KLEEN | 12 | |
| FLRMAN | | D. WEBBER | 12 | |
| FLRMAN | | | | |

NO. OF DAYS _____ SINCE LAST LOST-TIME ACCIDENT

### DAY TOUR _____ A.M. _____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R. Henley | 12 |
| DRKMAN | | C. Campbell | 12 |
| MTRMAN | | K. McHale | 12 |
| FIREMAN | | | |
| FLRMAN | | | 12 |
| FLRMAN | | G. Abbertson | 12 |
| FLRMAN | | Stan Schumacher | 12 |
| FLRMAN | | J. Carmichael | 12 |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

### EVENING TOUR _____ P.M. _____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIL.EMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 13 — DATE MARCH 29/73

OPERATOR: UNION OIL CO. LTD.

LEASE: UNION AKLAVIK C-38

WELL NO. C-38 — FIELD OR DIST. AKLAVIK — COUNTY NWT — STATE CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. — RIG NO. 1F

DRILL PIPE STRING: NO. 2 — SIZE 4 — TOOL JOINT O.D. 5 — TYPE THD. 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: E.W. Traumann

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NAT | 4380 | 14 |
| 2. | NAT | 4380 | 14 |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 13⅜ | USS | 68KS | 15 | 570.30 | | 580 | |

**TIME DISTRIBUTION — HOURS**

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 7¼ | 7½ | 3½ |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | | 3 |
| LUBRICATE RIG | | | ¼ |
| DEVIATION SURVEY | ¼ | ½ | ¼ |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| SPRING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | 1 |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

**TIME SUMMARY (OFFICE USE ONLY)**

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

**WIRE LINE RECORD**

REEL NO.

NO. OF LINES — SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON-MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | | |
|---|---|---|---|
| 11 | STANDS D.P. | 1037.57 FT. | |
| 1 | SINGLES D.P. | 32.15 FT. | |
| 3 | D.C. 3 I.D. 9 O.D. | 80.94 FT. | |
| 13 | D.C. 2 2/3 I.D. 6 2/3 O.D. | 441.45 FT. | |
| | STB. BODY O.D. | FT. | |
| | STB. BODY O.D. | FT. | |
| | RMR. BODY O.D. | FT. | |
| 4 | SUBS O.D. | 11.75 FT. | |
| | BIT OR C.B. | FT. | |
| | | FT. | |
| | KELLY DOWN | 15 FT. | |
| | TOTAL | 1620 FT. | |
| WT. OF STRING | 88 M. | LBS. | |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 3A |
| SIZE | 12¼ |
| MFG. | SMITH |
| TYPE | DTJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 20 |
| SER. NO. | GS142 |
| DEPTH OUT | |
| DEPTH IN | 1427 |
| TOTAL FTG. | 193 |
| TOTAL HR. RUN | 35¼ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 10:00 | 3:00 | 6:00 |
| WEIGHT | 9.8 | 9.8 | 8.8 |
| VISC.-SEC | 50 | 85 | 68 |
| W.L.-C.C. | | | |
| FL.TR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL. | 200 | | |
| BENEX | 8 | | |

DRILLER: R Brundidge

**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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1284 | 1620 | D | | | 120 | 6/8 | 1200 | 5½ | 53 | 5½ | 53 | C |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 1614 | 1 | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 00 | 4 15 | 4¼ | DRLG. |
| 4 15 | 4 30 | ¼ | SURVEY. |
| 4 30 | 8 00 | 3½ | DRLG. |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | | |
|---|---|---|---|
| 11 | STANDS D.P. | 1101.10 FT. | |
| 2 | SINGLES D.P. | FT. | |
| 3 | D.C. 3 I.D. 9" O.D. | 80.94 FT. | |
| 13 | D.C. 2 2/3 I.D. 6 2/3 O.D. | 441.45 FT. | |
| | STB. BODY O.D. | FT. | |
| | STB. BODY O.D. | FT. | |
| | RMR. BODY O.D. | FT. | |
| 4 | SUBS O.D. | 11.75 FT. | |
| | BIT OR C.B. | FT. | |
| | | FT. | |
| | KELLY DOWN | 28.28 FT. | |
| | TOTAL | 1665.00 FT. | |
| WT. OF STRING | | LBS. | |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 3A |
| SIZE | 12¼ |
| MFG. | SMITH |
| TYPE | DT-J |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 20 |
| SER. NO. | GS142 |
| DEPTH OUT | |
| DEPTH IN | 1427 |
| TOTAL FTG. | 238 |
| TOTAL HR. RUN | 42¾ |
| COND. OF BIT | Run |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 9:00 | 12:00 | 2:00 |
| WEIGHT | 9.9 | 10.1 | 10.1 |
| VISC.-SEC | 62 | 58 | 59 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER: Don Doyle

**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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1620 | 1665 | D | | | 120 | 8 | 1200 | 5⅔ X 14 | 53 | 5½ X 14 | 53 | C |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 1640 | 1 | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8:00 | 1:30 | 5½ | DRLG. |
| 1:30 | 2:00 | ½ | SURVEY |
| 2:00 | 4:00 | 2 | DRLG |

## DAY TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | | |
|---|---|---|---|
| 12 | STANDS D.P. | 1133.93 FT. | |
| | SINGLES D.P. | FT. | |
| 3 | D.C. 3 I.D. 9" O.D. | 80.94 FT. | |
| 15 | D.C. 2 2/3 I.D. 6 3/4 O.D. | 441.45 FT. | |
| | STB. BODY O.D. | 7.35 FT. | |
| | STB. BODY O.D. | FT. | |
| | RMR. BODY O.D. | FT. | |
| 4 | SUBS O.D. | 11.75 FT. | |
| | BIT OR C.B. | FT. | |
| | | FT. | |
| | KELLY DOWN | 9.54 FT. | |
| | TOTAL | 1685 FT. | |
| WT. OF STRING | 88 M. | LBS. | |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 3A |
| SIZE | 12¼ |
| MFG. | Smith |
| TYPE | DTJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 20 |
| SER. NO. | GS142 |
| DEPTH OUT | 1685 |
| DEPTH IN | 1427 |
| TOTAL FTG. | 258 |
| TOTAL HR. RUN | 46¼ |
| COND. OF BIT | 2-1 |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 5:00 | | |
| WEIGHT | 10.0 | | |
| VISC.-SEC | 57 | | |
| W.L.-C.C. | | | |
| FLTR. CK | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER: R Henley

**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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1665 | 1685 | | | | 120 | 8 | 1200 | 5½ X 14 | | | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 1670 | 1° | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4:00 | 6:00 | 2 | Drlg. |
| 6:00 | 6:15 | ¼ | Survey |
| 6:15 | 6:30 | ¼ | Rig Serv |
| 6:30 | 8:00 | 1½ | Drlg |
| 8:00 | 10:00 | 2 | Trip out Tight Hole |
| 10:00 | 11:00 | 1 | Steam out Stab & make it up. |
| 11:00 | 12:00 | 1 | Run in slow |

## DRILLING CREW PAYROLL DATA

DATE MARCH 29/73

WELL NAME & NO. UNION AKLAVIK C-38

COMPANY UNION OIL CO. LTD.

TOOL PUSHER E.W. Traumann — RIG NO. 1F

MORNING TOUR 12:00 P.M. 8:00 A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. | |
|---|---|---|---|---|
| DRILLER | | R BRUNDIDGE | 8 | T |
| DRKMAN | | C CAMPBELL | 16 | |
| MTRMAN | | S KLEEN. | 8 | |
| FIREMAN | | | | |
| FLRMAN | | G ALBERTSON | 16 | |
| FLRMAN | | D IRISH | 8 | T |
| FLRMAN | | | | |

NO. OF DAYS _____ SINCE LAST LOST-TIME ACCIDENT

DAY TOUR 8:00 A.M. 4:00 P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. | |
|---|---|---|---|---|
| DRILLER | | D. DOYLE | 5 | T |
| DRKMAN | | G. HIEBERT | 8 | |
| MTRMAN | | H. KLEEN | 8 | |
| FIREMAN | | | | |
| FLRMAN | | D. ULRICH | 4 | T |
| FLRMAN | | D. WEAVER | 8 | |
| FLRMAN | | B. TAYLOR | 4 | T |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR _____ P.M. _____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. | |
|---|---|---|---|---|
| DRILLER | | R Henley | 8 | T |
| DRKMAN | | | | |
| MTRMAN | | K. McHale | 8 | T |
| FIREMAN | | | | |
| FLRMAN | | Stan Schumacher | 8 | T |
| FLRMAN | | | | |
| FLRMAN | | J Carmichael | 12 | |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 12 — DATE March 28/73

OPERATOR: Union Oil Co LTD.

LEASE: Union AKLAVIK C38

WELL NO. C38 — FIELD OR DIST. AKLAVIK — COUNTY N WT — STATE CANADA.

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. — RIG NO. 11

DRILL PIPE STRING: NO. 2 — SIZE 4½ — TOOL JOINT O.D. 5½ — TYPE THD 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: E.D. Hausman

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NAT | K380 | 14 |
| 2. | NAT | K380 | 14 |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 13⅜ | USS | 68#S | 15 | 640.30 | | 505 | |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 7¼ | 7½ | 7¼ |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | | |
| LUBRICATE RIG | ¼ | ¼ | ¼ |
| DEVIATION SURVEY | ½ | ¼ | ½ |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| DRING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |

COMPLETION WORK: A. PERFORATING; B. TUBING TRIPS; C. SWABBING; D. TESTING; E. ADDITIONAL

TOTALS: 8 8 8

### TIME SUMMARY (OFFICE USE ONLY)

DAY WORK; HRS. W/DP; HRS. WO/DP; HRS. STANDBY; TOTAL DAY WORK

### WIRE LINE RECORD

REEL NO.; NO. OF LINES; SIZE; FEET SLIPPED; FEET CUT OFF; PRESENT LENGTH; TON MI. OR TRIPS SINCE LAST CUT; CUMULATIVE TON MI. OR TRIPS; NO. OF DAYS FROM SPUD; CUMULATIVE ROTATING HRS.

## MORNING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 10 | STANDS D.P. | 943.02 FT. |
| | SINGLES D.P. | FT. |
| 3 | D.C. 3" I.D. 9" O.D. | 80.94 FT. |
| 15 | D.C. 2⅞ I.D. 6¾ O.D. | 441.45 FT. |
| | STB. BODY O.D. | FT. |
| | STB. BODY O.D. | FT. |
| | RMR. BODY O.D. | FT. |
| 4 | SUBS O.D. | 11.71 FT. |
| | BIT OR C.B. | FT. |
| | | FT. |
| | KELLY DOWN | 21 FT. |
| | TOTAL | 1497 FT. |

WT. OF STRING: 84 M. LBS.

### BIT RECORD

| | |
|---|---|
| BIT NO. | 3A |
| SIZE | 12¼ |
| MFG. | SMITH |
| TYPE | DTJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 20 |
| SER. NO. | GS 142 |
| DEPTH OUT | |
| DEPTH IN | 1427 |
| TOTAL FTG. | 70 |
| TOTAL HR. RUN | 12¾ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | |
|---|---|---|
| TIME | 12[AM] | 4[00] |
| WEIGHT | 100 | 10.0 |
| VISC.-SEC | 55 | 56 |
| W.L.-C.C. | | |
| FL.TR. CK. | | |
| PH | | |
| SD. CONT. % | | |
| PRESSURE GRADIENT | | |

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

DRILLER: R Brundige

### 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1458 | 1499 | D | | | 120 | 8 | 850 | 5½ | 76 | 5½ | | S |
| | | | | | 110 | | | | | | | |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 1458 | ¾° | | 1479 | 1 | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12[AM] | 12[15] | ¼ | Rig SERV |
| 12[15] | 12[30] | ¼ | SURVEY. |
| 12[30] | 5[15] | 4¾ | DRLG. |
| 5[15] | 5[30] | ¼ | SURVEY. |
| 5[30] | 8[AM] | 2½ | DRLG. |

## DAY TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 10 | STANDS D.P. | 943.02 FT. |
| 1 | SINGLES D.P. | 31.09 FT. |
| 3 | D.C. 3" I.D. 9" O.D. | 80.94 FT. |
| 15 | D.C. 2⅞ I.D. 6¾ O.D. | 441.45 FT. |
| | STB. BODY O.D. | FT. |
| | STB. BODY O.D. | FT. |
| | RMR. BODY O.D. | FT. |
| 4 | SUBS O.D. | 11.71 FT. |
| | BIT OR C.B. | FT. |
| | | FT. |
| | KELLY DOWN | 23.97 FT. |
| | TOTAL | 1534.00 FT. |

WT. OF STRING: 85 M LBS.

### BIT RECORD

| | |
|---|---|
| BIT NO. | 3A |
| SIZE | 12¼ |
| MFG. | SMITH |
| TYPE | DT-J |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 20 |
| SER. NO. | GS142 |
| DEPTH OUT | |
| DEPTH IN | 1427 |
| TOTAL FTG. | 107 |
| TOTAL HR. RUN | 26¼ |
| COND. OF BIT | DRLG. |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 8:30 | 12:00 | 2:00 |
| WEIGHT | 10.2 | 10.2 | 10.0 |
| VISC.-SEC | 48 | 86 | 74 |
| W.L.-C.C. | | | |
| FL.TR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | 1200# | CELEX | 50# |
| BENEX | 6# | DEXTRID | 200# |
| SODA ASH | 100# | | |

DRILLER: D. Doyle

### 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 SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1497 | 1534 | D | | | 120 | 6 | 850 | 5½ | 76 | 5½ | | S |
| | | | | | 120 | 6 | 1200 | X | 55 | X | 55 | C |
| | | | | | | | | 14 | | 14 | | |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 1519 | 1° | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8:00 | 12:45 | 4¾ | DRLG. |
| 12:45 | 1:00 | ¼ | Rig SERV. |
| 1:00 | 1:15 | ¼ | SURVEY |
| 1:15 | 4:00 | 2¾ | DRLG. |

HELD B.O.P. DRILL

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | |
|---|---|---|
| 11 | STANDS D.P. | 1037.79 FT. |
| | SINGLES D.P. | FT. |
| 3 | D.C. 3" I.D. 9" O.D. | 80.94 FT. |
| 15 | D.C. 2⅞ I.D. 6¾ O.D. | 441.45 FT. |
| | STB. BODY O.D. | FT. |
| | STB. BODY O.D. | FT. |
| | RMR. BODY O.D. | FT. |
| 4 | SUBS O.D. | 11.71 FT. |
| | BIT OR C.B. | FT. |
| | | FT. |
| | KELLY DOWN | 11 FT. |
| | TOTAL | 1584 FT. |

WT. OF STRING: 88 LBS.

### BIT RECORD

| | |
|---|---|
| BIT NO. | 3A |
| SIZE | 12¼ |
| MFG. | SMITH |
| TYPE | DT-J |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 20 |
| SER. NO. | GS142 |
| DEPTH OUT | |
| DEPTH IN | 1427 |
| TOTAL FTG. | 147 |
| TOTAL HR. RUN | 27½ |
| COND. OF BIT | DRLG |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 4:30 | 7[00] | 11[00] |
| WEIGHT | 9.9 | 9.9 | 9.9 |
| VISC.-SEC | 70 | 60 | 50 |
| W.L.-C.C. | | | |
| FL.TR. CK | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

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

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. 2 LINER SIZE | PUMP NO. 2 S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1534 | 1584 | D | | | | | 1200 | 5½ | 55 | 5½ | 55 | C |
| | | | | | | | | X | | X | | |
| | | | | | | | | 14 | | 14 | | |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 1551 | ¾° | | 1582 | 1 | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4:00 | 6:30 | 2½ | DRLG. |
| 6:30 | 6:45 | ¼ | Rig SERV. |
| 6:45 | 7:00 | ¼ | SURVEY |
| 7:00 | 11[30] | 4½ | DRLG. |
| 11[30] | 11[45] | ¼ | SURVEY. |
| 11[45] | 12[AM] | ¾ | DRLG. |

## DRILLING CREW PAYROLL DATA

DATE March 27/73

WELL NAME & NO. Union AKLAVIK C38

COMPANY Union Oil & Co. LTD.

TOOL PUSHER E.D. Hausman — RIG NO. 11

MORNING TOUR 12[AM] P.M. 8[00] A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R BRUNDIGE | 12 |
| DRKMAN | | C. CAMPBELL | 12 |
| MTRMAN | | S. KLEEN. | 12 |
| FIREMAN | | | |
| FLRMAN | | G. ALBERISON | 12 |
| FLRMAN | | O'IRISH. | 12 |
| FLRMAN | | | |

NO. OF DAYS _____ SINCE LAST LOST-TIME ACCIDENT

DAY TOUR 8:00 A.M. 4:00 P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | D. DOYLE | 12 |
| DRKMAN | | C. HIEBERT | 12 |
| MTRMAN | | H. KLEEN | 12 |
| FIREMAN | | | |
| FLRMAN | | D. ULRICH | 12 |
| FLRMAN | | D. WEBBER | 12 |
| FLRMAN | | B. TAYLOR | 12 |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR 4:00 P.M. 12:00 P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 11 — DATE MARCH 27/73

OPERATOR: UNION OIL CO. LTD.

LEASE: Union AKLAVIK AKLAVIK C38 — WELL NO. C38 — FIELD OR DIST. AKLAVIK — COUNTY NWT — STATE CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. — RIG NO. 1E

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: E.W. Braumann

DRILL PIPE STRING: NO. 3, SIZE 4½ — TOOL JOINT O.D. 5" — TYPE THD. 3½ IF

PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NAT | K 380 | 14 |
| 2. | NAT | K 380 | 14 |
| 3. | | | |

LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 13⅜ | USS | KJKS | 15 | 510.30 | | 508' | |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 7½ | 14½ | 5¾ |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | 2¾ | 3¼ |
| LUBRICATE RIG | ¼ | ¼ | ¼ |
| DEVIATION SURVEY | ½ | ½ | |
| TEST B.O.P. | | ¼ | |
| CUT OFF 85' SLIP DRILLING LINE | | ½ | |
| REPAIR RIG | | | |
| CORING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | 1½ |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

## TIME SUMMARY (OFFICE USE ONLY)

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.

NO. OF LINES 8 — SIZE 1¼

FEET SLIPPED 23'

FEET CUT OFF 85'

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 8 | STANDS D.P. | 7543 FT. | |
| 2 | SINGLES D.P. | 63.82 FT. | |
| 3 | D.C. 7" I.D. 9" O.D. | 80.94 FT. | |
| 15 | D.C. 2¾" I.D. 6¼" O.D. | 441.45 FT. | |
| | STB. BODY O.D. | FT. | |
| | STB. BODY O.D. | FT. | |
| | RMR. BODY O.D. | FT. | |
| 4 | SUBS O.D. | 11.71 FT. | |
| | BIT OR C.B. | FT. | |
| | | FT. | |
| | KELLY DOWN | 41 FT. | |
| | TOTAL | 1396.23 FT. | |
| WT. OF STRING | 80 M | LBS. | |

### BIT RECORD

| | | |
|---|---|---|
| BIT NO. | BR | 1A |
| SIZE | | 12¼ |
| MFG. | | SMITH |
| TYPE | | OTJ |
| NOZZLE NO. | | 3 |
| NOZZLE SIZE | | 20 |
| SER. NO. | | GN432 |
| DEPTH OUT | | |
| DEPTH IN | | 1111 |
| TOTAL FTG. | | 285 |
| TOTAL HR. RUN | | 32¾ |
| COND. OF BIT | | OBLg |
| REAMER NO. | | |
| REAMER TYPE | | |

### MUD RECORD

| | | | |
|---|---|---|---|
| TIME | 10:00 | 4:00 | 8:00 |
| WEIGHT | 9.8 | 9.9 | 9.9 |
| VISC.-SEC | 50 | 43 | 40 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | 1200 | | |
| BENEX | 6# | | |

DRILLER: R Brundige

### 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1324 | 1396 | D | | | 100 | 10 | 800 | 5½ | 76 | 5½ | | S |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 1333 | 1/2° | | 1364 | 1/2 | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 00 | 1 00 | 1 | DRLg. |
| 1 00 | 1 15 | 1/4 | SURVEY. |
| 1 15 | 1 30 | 1/4 | RIG SERV. |
| 1 30 | 4 30 | 3 | DRLg. |
| 4 30 | 4 45 | 1/4 | SURVEY |
| 4 45 | 8 00 | 3 1/4 | DRLg. |

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 9 | STANDS D.P. | 850.63 FT. | |
| | SINGLES D.P. | FT. | |
| 3 | D.C. 9" I.D. 9" O.D. | 80.94 FT. | |
| 15 | D.C. 2¾" I.D. 6¼" O.D. | 441.45 FT. | |
| | STB. BODY O.D. | FT. | |
| | STB. BODY O.D. | FT. | |
| | RMR. BODY O.D. | FT. | |
| 4 | SUBS O.D. | 11.71 FT. | |
| | BIT OR C.B. | FT. | |
| | | FT. | |
| | KELLY DOWN | 41.00 FT. | |
| | TOTAL | 1427.90 FT. | |
| WT. OF STRING | 82 M | LBS. | |

### BIT RECORD

| | | | |
|---|---|---|---|
| BIT NO. | BR | 1A | 3A |
| SIZE | | 12¼ | 12¼ |
| MFG. | | SMITH | SMITH |
| TYPE | | DT-J | DT-J |
| NOZZLE NO. | | 3 | 3 |
| NOZZLE SIZE | | 20 | 20 |
| SER. NO. | | GN432 | GS142 |
| DEPTH OUT | | 1427 | |
| DEPTH IN | | 1111 | 1427 |
| TOTAL FTG. | | 316 | |
| TOTAL HR. RUN | | 37 | |
| COND. OF BIT | | 4 1 1 | |
| REAMER NO. | | | |
| REAMER TYPE | | | |

### MUD RECORD

| | | |
|---|---|---|
| TIME | 9:00 | 11:30 |
| WEIGHT | 9.8 | 9.8 |
| VISC.-SEC | 48 | 50 |
| W.L.-C.C. | | |
| FLTR. CK. | | |
| PH | | |
| SD. CONT. % | | |
| PRESSURE GRADIENT | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER: Don Doyle

### 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1396 | 1427 | D | | | 100 | 10 | 800 | 5½ X 14 | 76 | 5½ | | S |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 1396 | 7/8° | | 1427 | 1 1/4° | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8:00 | 8:15 | 1/4 | Rig SERV. ✓ B.O.P.S |
| 8:15 | 9:30 | 1 1/4 | SURVEY @ 1396 |
| 9:30 | 12:45 | 4 1/4 | DRLg. |
| 12:45 | 1:00 | 1/4 | SURVEY |
| 1:00 | 3:15 | 2 1/4 | HOIST BIT #RR1A HOLE TIGHT |
| 3:15 | 3:30 | 1/4 | ✓ BLIND RAMS & CHANGE BITS |
| 3:30 | 4:00 | 1/2 | SLIP & CUT DRLg. LINE |

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| 9 | STANDS D.P. | 850.63 FT. | |
| 1 | SINGLES D.P. | 30.94 FT. | |
| 3 | D.C. 9" I.D. 9" O.D. | 80.94 FT. | |
| 15 | D.C. 2¾" I.D. 6¼" O.D. | 441.45 FT. | |
| | STB. BODY O.D. | FT. | |
| | STB. BODY O.D. | FT. | |
| | RMR. BODY O.D. | FT. | |
| 4 | SUBS O.D. | 11.71 FT. | |
| | BIT OR C.B. | FT. | |
| | | FT. | |
| | KELLY DOWN | 41 FT. | |
| | TOTAL | 1458 FT. | |
| WT. OF STRING | 84 M | LBS. | |

### BIT RECORD

| | | |
|---|---|---|
| BIT NO. | | 3A |
| SIZE | | 12¼ |
| MFG. | | SMITH |
| TYPE | | DT-J |
| NOZZLE NO. | | 3 |
| NOZZLE SIZE | | 20 |
| SER. NO. | | GS142 |
| DEPTH OUT | | |
| DEPTH IN | | 1427 |
| TOTAL FTG. | | 31 |
| TOTAL HR. RUN | | 5½ |
| COND. OF BIT | | DRLg |
| REAMER NO. | | |
| REAMER TYPE | | |

### MUD RECORD

| | | |
|---|---|---|
| TIME | 7:00 | 10:00 |
| WEIGHT | 10.0 | 10.0 |
| VISC.-SEC | 55 | 57 |
| W.L.-C.C. | | |
| FLTR. CK | | |
| PH | | |
| SD. CONT. % | | |
| PRESSURE GRADIENT | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1427 | 1458 | D | | | 110 | 2 | 800 | 5½ X 14 | | 5½ X 14 | | S |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4:00 | 4:15 | 1/4 | Rig SERV. |
| 4:15 | 5:00 | 3/4 | RUN IN HOLE TO 220' OF BOTTOM |
| 5:00 | 6:30 | 1 1/2 | CLEANING BRIDGES 220' TO BOTTOM |
| 6:30 | 12 00 | 5½ | DRLg. |

## DRILLING CREW PAYROLL DATA

DATE March 27/73

WELL NAME & NO. Union AKLAVIK C38

COMPANY Union Oil CO LTD.

TOOL PUSHER E.W. Braumann — RIG NO. 1E

MORNING TOUR 12 00 P.M. 8 00 A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R BRUNDIGE | 12 |
| DRKMAN | | C CAMPBELL | 12 |
| MTRMAN | | S KLEEN. | 12 |
| FIREMAN | | | |
| FLRMAN | | G ALBERISON | 12 |
| FLRMAN | | D IRISH | 12. |
| FLRMAN | | J. CARMICHAEL | 12. |

NO. OF DAYS _____ SINCE LAST LOST-TIME ACCIDENT

DAY TOUR 8:00 A.M. 4:00 P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | D. DOYLE | 12 |
| DRKMAN | | G. HIEBERT | 12 |
| MTRMAN | | H. KLEEN | 12 |
| FIREMAN | | | |
| FLRMAN | | D. ULRICH | 12 |
| FLRMAN | | D. WEBBER | 12 |
| FLRMAN | | B. TAYLOR | 12 |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR _____ P.M. _____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 10 — DATE March 24/73

OPERATOR: Union Oil Co. Ltd.

LEASE: Union Aklavik C38 — WELL NO. C38 — FIELD OR DIST. Aklavik — COUNTY N.W.T. — STATE Canada

CONTRACTOR: S & T Drilling (Western) Co. Ltd. — RIG NO. 1E

DRILL PIPE STRING: NO. 2, SIZE 4 — TOOL JOINT O.D. 5 — TYPE THD 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: R. Smith

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: E.W. Baumann

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NAT | K380 | 14 |
| 2. | NAT | K380 | 14 |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 13⅜ | VSS | 61 KS | 15 | 610.20 | | 624 | |

## TIME DISTRIBUTION-HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 7½ | 7¾ | 7¾ |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | | |
| LUBRICATE RIG | ¼ | ¼ | |
| DEVIATION SURVEY | ¼ | ¼ | ¼ |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| BORING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK: A. PERFORATING | | | |
| B. TOOLING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | |

## TIME SUMMARY (OFFICE USE ONLY)

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.

NO. OF LINES — SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 4 | STANDS D.P. | FT. |
| 2 | SINGLES D.P. | 61.46 FT. |
| 3 | D.C. 8" I.D. 3" O.D. | 80.94 FT. |
| 13 | D.C. 6¾ I.D. 2¾ O.D. | 441.45 FT. |
| | STB. BODY O.D. | FT. |
| | STB. BODY O.D. | FT. |
| | RMR. BODY O.D. | FT. |
| 1 | SUBS O.D. | 11.71 FT. |
| | BIT OR C.B. | FT. |
| | | FT. |
| | KELLY DOWN | 30 FT. |
| | TOTAL | 1194 FT. |
| WT. OF STRING | 78 M | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | RR 1A |
| SIZE | 12¼ |
| MFG. | SMITH |
| TYPE | DTJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 20 |
| SER. NO. | GN932 |
| DEPTH OUT | |
| DEPTH IN | 1111 |
| TOTAL FTG. | 83 |
| TOTAL HR. RUN | 10¼ |
| COND. OF BIT | ORLG |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | |
|---|---|---|
| TIME | 10⁰⁰ | 5⁰⁰ |
| WEIGHT | 9.1 | 9.9 |
| VISC.-SEC | 50 | 46 |
| W.L.-C.C. | | |
| FLTR. CK. | | |
| PH | 10.0 | 10.0 |
| SD. CONT. % | | |
| PRESSURE GRADIENT | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | 100# | | |
| BENEX | 6# | | |

DRILLER: R. Brundige

**FOOTAGE**

| FROM | TO | DR.-D RM.-R CORE.-C | CORE NO. |
|---|---|---|---|
| 1135 | 1194 | D | |

**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 SGLS-P PAR-EL-P COM'D-C |
|---|---|---|---|---|---|---|---|
| 100 | 10 | 800 | 5½ | 76 | 5½ | | S |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 1173 | 1/2° | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12²⁰ | 1⁰⁰ | 1 | DRLG. |
| 1⁰⁰ | 1¹⁵ | ¼ | RIG SERV |
| 1¹⁵ | 4³⁰ | 3¼ | DRLG |
| 4³⁰ | 4⁴⁵ | ¼ | SURVEY. |
| 4⁴⁵ | 8⁰⁰ | 3¼ | DRLG. |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 7 | STANDS D.P. | 660.66 FT. |
| 1 | SINGLES D.P. | 31.68 FT. |
| 3 | D.C. 9" I.D. 3" O.D. | 80.94 FT. |
| 15 | D.C. 6¾ I.D. 2¾ O.D. | 441.45 FT. |
| | STB. BODY O.D. | FT. |
| | STB. BODY O.D. | FT. |
| | RMR. BODY O.D. | FT. |
| 4 | SUBS O.D. | 11.71 FT. |
| | BIT OR C.B. | FT. |
| | | FT. |
| | KELLY DOWN | 34.67 FT. |
| | TOTAL | 1263.00 FT. |
| WT. OF STRING | 78 M | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | RR 1A |
| SIZE | 12¼ |
| MFG. | SMITH |
| TYPE | DTJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 20 |
| SER. NO. | GN932 |
| DEPTH OUT | |
| DEPTH IN | 1111 |
| TOTAL FTG. | 152 |
| TOTAL HR. RUN | 17¾ |
| COND. OF BIT | ORLG |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 9.00 | 12:00 | 2:30 |
| WEIGHT | 9.8 | 9.8 | 9.9 |
| VISC.-SEC | 55 | 54 | 55 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| SODA ASH | 100# | | |

DRILLER: Don Doyle

**FOOTAGE**

| FROM | TO | DR.-D RM.-R CORE.-C | CORE NO. |
|---|---|---|---|
| 1194 | 1263 | D | |

**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 SGLS-P PAR-EL-P COM'D-C |
|---|---|---|---|---|---|---|---|
| 100 | 10 | 800 | 5½ | 76 | 5½ | | S |
| | | | X | | X | | |
| | | | 14 | | 14 | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 1237 | 3/4° | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8:00 | 8:15 | ¼ | Rig Serv. ✓ B.O.P's |
| 8:15 | 12:45 | 4½ | DRLG. 12¼" Hole |
| 12:45 | 1:00 | ¼ | SURVEY |
| 1:00 | 4:00 | 3 | DRLG. |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 8 | STANDS D.P. | 753.49 FT. |
| | SINGLES D.P. | FT. |
| 3 | D.C. 9" I.D. 3" O.D. | 80.94 FT. |
| 15 | D.C. 6¾ I.D. 2¾ O.D. | 441.45 FT. |
| | STB. BODY O.D. | FT. |
| | STB. BODY O.D. | FT. |
| | RMR. BODY O.D. | FT. |
| 4 | SUBS O.D. | 11.71 FT. |
| | BIT OR C.B. | FT. |
| | | FT. |
| | KELLY DOWN | 33 FT. |
| | TOTAL | 1324 FT. |
| WT. OF STRING | 80 | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | RR 1A |
| SIZE | 12¼ |
| MFG. | SMITH |
| TYPE | DTJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 20 |
| SER. NO. | GN932 |
| DEPTH OUT | |
| DEPTH IN | 1111 |
| TOTAL FTG. | 213 |
| TOTAL HR. RUN | 25½ |
| COND. OF BIT | ORLG |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | | |
|---|---|---|---|
| TIME | 5:00 | 8⁰⁰ | 11⁰⁰ |
| WEIGHT | 9.9 | 9.9 | 9.9 |
| VISC.-SEC | 55 | 55 | 50 |
| W.L.-C.C. | | | |
| FLTR. CK | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER

**FOOTAGE**

| FROM | TO | DR.-D RM.-R CORE.-C | CORE NO. |
|---|---|---|---|
| 1263 | 1324 | D | |

**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 SGLS-P PAR-EL-P COM'D-C |
|---|---|---|---|---|---|---|---|
| 100 | 10 | 800 | 5½ | | 5½ | | S |
| | | | X | | X | | |
| | | | 14 | | 14 | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| ~~4.00~~ 8 | | 4 | DRLG. |
| 8 | 8 | ¼ | SURVEY. |
| 8 | 12 | 3¾ | DRLG. |

## DRILLING CREW PAYROLL DATA

DATE March 24/73

WELL NAME & NO. Union Aklavik C38

COMPANY Union Oil & Co Ltd.

TOOL PUSHER E.W. Baumann — RIG NO. 1E

MORNING TOUR 12 A.M. — P.M. 8 A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R Brundige | 12 |
| DRKMAN | | C Campbell | 12 |
| MTRMAN | | S Kleen. | 12 |
| FIREMAN | | | |
| FLRMAN | | G Albrerison | 12 |
| FLRMAN | | D Irish | 12 |
| FLRMAN | | T. Carmichael | 12 |

NO. OF DAYS _____ SINCE LAST LOST-TIME ACCIDENT

DAY TOUR 8:00 A.M. — 4:00 P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | D. Doyle | 12 |
| DRKMAN | | E. Hibbert | 12 |
| MTRMAN | | H. Kleen | 12 |
| FIREMAN | | | |
| FLRMAN | | D. Ulrich | 12 |
| FLRMAN | | D. Webber | 12 |
| FLRMAN | | B. Taylor | 12 |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR 4:00 P.M. — 12:00 P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 9 DATE MARCH 25/73

OPERATOR: UNION OIL CO. LTD

LEASE: UNION AKLAVIK C38

WELL NO. C38 | FIELD OR DIST. AKLAVIK | COUNTY N.W.T. | STATE CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. | RIG NO. 1E

DRILL PIPE STRING: NO. 2, SIZE 4 | TOOL JOINT O.D. 5" | TYPE THD. 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: E.W. Laumann

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NAT | K380 | 14 |
| 2. | NAT | K380 | 14 |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 13⅜ | USS | 68 KS | 15 | 510.30 | | 505' | |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 7½ | 7½ | 5¼ |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | 2½ | |
| LUBRICATE RIG | ¼ | ¼ | |
| DEVIATION SURVEY | ¼ | ¼ | ¼ |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| BORING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

## TIME SUMMARY (OFFICE USE ONLY)

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.

NO. OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST SLIP

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | | |
|---|---|---|---|
| 5 | STANDS D.P. | 470.98 FT. | |
| | SINGLES D.P. | FT. | |
| 3 | D.C. 9" I.D. O.D. | 80.94 FT. | |
| 15 | D.C. 2⅞ I.D. 6¾ O.D. | 441.45 FT. | |
| | STB. BODY O.D. | FT. | |
| | STB. BODY O.D. | FT. | |
| | RMR. BODY O.D. | FT. | |
| 4 | SUBS O.D. | 11.71 FT. | |
| | BIT OR C.B. | FT. | |
| | | FT. | |
| | KELLY DOWN | 26.00 FT. | |
| | TOTAL | 1032 FT. | |
| WT. OF STRING | 103 275 LBS. | | |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 2A |
| SIZE | 12¼ |
| MFG. | SEC |
| TYPE | M4N |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 252445 |
| DEPTH OUT | |
| DEPTH IN | 923 |
| TOTAL FTG. | 109 |
| TOTAL HR. RUN | 14¾ |
| COND. OF BIT | ORLG |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| TIME | 10:00 | 5:00 | 5:00 |
|---|---|---|---|
| WEIGHT | 9.8 | 9.8 | 9.8 |
| VISC.-SEC | 48 | 43 | 55 |
| W.L.-C.C. | | | |
| FL.TR. CK. | | | |
| PH | 10.0 | 10.0 | 10.0 |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | 500 | | |

DRILLER R. Brundige

**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 SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 983 | 1032.0 | D | | | 70 | 10 | 900 | 5½ | 74 | 5½ | | S |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 986 | ½ | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12:00 | 2:30 | ½ | DRLG. |
| 12:30 | 12:45 | ¼ | RIG SERV. & BOP |
| 12:45 | 1:00 | ¼ | SURVEY. |
| 1:00 | 8:00 | 7 | DRLG. |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | | |
|---|---|---|---|
| 5 | STANDS D.P. | 470.98 FT. | |
| 2 | SINGLES D.P. | 62.35 FT. | |
| 3 | D.C. 9" I.D. O.D. | 80.94 FT. | |
| 15 | D.C. 2⅞ I.D. 6¾ O.D. | 441.45 FT. | |
| | STB. BODY O.D. | FT. | |
| | STB. BODY O.D. | FT. | |
| | RMR. BODY O.D. | FT. | |
| 4 | SUBS O.D. | 11.71 FT. | |
| | BIT OR C.B. | FT. | |
| | | FT. | |
| | KELLY DOWN | 26.75 FT. | |
| | TOTAL | 1096.00 FT. | |
| WT. OF STRING | 76 M LBS. | | |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 2A |
| SIZE | 12¼ |
| MFG. | SEC |
| TYPE | M4N |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 252445 |
| DEPTH OUT | |
| DEPTH IN | 923 |
| TOTAL FTG. | 173 |
| TOTAL HR. RUN | 22¼ |
| COND. OF BIT | Drlg- |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| TIME | 8:00 | 11:00 | 2:00 |
|---|---|---|---|
| WEIGHT | 9.7 | 9.8 | 9.8 |
| VISC.-SEC | 55 | 58 | 60 |
| W.L.-C.C. | | | |
| FL.TR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | 1000# | | |
| Bemex | 10# | | |
| Soda Ash | 100# | | |

DRILLER Don Doyle

**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 SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1032 | 1096 | D | | | 70 | 10 | 900 | 5½ | 75 | 5½ | | S |
| | | | | | | | | X | | X | | |
| | | | | | | | | 14 | | 14 | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8:00 | 9:15 | 1¼ | DRLG. |
| 9:15 | 9:30 | ¼ | Rig SERV. ✓ B.O.P's |
| 9:30 | 9:45 | ¼ | SURVEY |
| 9:45 | 4:00 | 6¼ | DRLG. |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | | |
|---|---|---|---|
| 6 | STANDS D.P. | 564.53 FT. | |
| | SINGLES D.P. | FT. | |
| 3 | D.C. 9" I.D. O.D. | 80.94 FT. | |
| 15 | D.C. 6¾ 2⅞ I.D. O.D. | 441.45 FT. | |
| | STB. BODY O.D. | FT. | |
| | STB. BODY O.D. | FT. | |
| | RMR. BODY O. | FT. | |
| 4 | SUBS O.D. | 11.71 FT. | |
| | BIT OR C.B. | FT. | |
| | | FT. | |
| | KELLY DOWN | 34 FT. | |
| | TOTAL | 1134 FT. | |
| WT. OF STRING | 76 M. LBS. | | |

**BIT RECORD**

| | | |
|---|---|---|
| BIT NO. | 2A | STAB |
| SIZE | 12¼ | 12¼ |
| MFG. | SEC | STR. FH |
| TYPE | M4N | OFJ |
| NOZZLE NO. | 3 | 3 |
| NOZZLE SIZE | 16 | 20 |
| SER. NO. | 252445 | 5HB |
| DEPTH OUT | 1111 | |
| DEPTH IN | 923 | |
| TOTAL FTG. | 188 | 11.11 |
| TOTAL HR. RUN | 24¾ | 2¾ |
| COND. OF BIT | 211 | DRLG |
| REAMER NO. | | |
| REAMER TYPE | | |

**MUD RECORD**

| TIME | 9:00 | 12:00 |
|---|---|---|
| WEIGHT | 9.9 | 9.9 |
| VISC.-SEC | 60 | 57 |
| W.L.-C.C. | | |
| FL.TR. CK | | |
| PH | 10.0 | 10.0 |
| SD. CONT. % | | |
| PRESSURE GRADIENT | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. 2 LINER SIZE | PUMP NO. 2 S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1096 | 1135 | D | | | 70 | 10 | 900 | 5½ | | 5½ | | S |
| | | | | | | | | X | | X | | |
| | | | | | | | | 14 | | 14 | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 11.11 | ¼ | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4:00 | 6:30 | 2½ | DRLG. |
| 6:30 | 6:45 | ¼ | SURVEY |
| 6:45 | 8:00 | 1¼ | Hoist BIT #2A |
| 8:00 | 9:00 | 1 | RWA in HOLE |
| 9:00 | 12:00 | 2¾ | DRILL 12¼ HOLE |

## DRILLING CREW PAYROLL DATA

DATE MARCH 25

WELL NAME & NO. UNION AKLAVIK C38

COMPANY UNION OIL CO LTD

TOOL PUSHER RIG NO. 1E

**MORNING TOUR 12:00 P.M. 8:00 A.M.**

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | A BRUNDIGE | 12 |
| DRKMAN | | C CAMPBELL | 12 |
| MTRMAN | | S KLEEN | 12 |
| FIREMAN | | | |
| FLRMAN | | G ALBERTSON | 12 |
| FLRMAN | | D IRISH | 12 |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST-TIME ACCIDENT

**DAY TOUR 8:00 A.M. 4:00 P.M.**

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | D. DOYLE | 12 |
| DRKMAN | | R. HIEBERT | 12 |
| MTRMAN | | H. KLEEN | 12 |
| FIREMAN | | | |
| FLRMAN | | D. ULRICH | 12 |
| FLRMAN | | D. WEBBER | 12 |
| FLRMAN | | B. TAYLOR | 12 |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

**EVENING TOUR 4:00 P.M. 12:00 P.M.**

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 8 — DATE MARCH 24/73

OPERATOR: UNION OIL CO LTD.

LEASE: UNION AKLAVIK C38

WELL NO. C38 — FIELD OR DIST. AKLAVIK — COUNTY — STATE CANADA.

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. — RIG NO. 11

DRILL PIPE STRING: NO. 2 — SIZE 4 — TOOL JOINT O.D. 5" — TYPE THD. 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: E W Braumann

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NAT | 4380 | 14 |
| 2. | NAT | 4380 | 14 |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKE. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 13⅜ | USS | 68 K55 | 16 | 510.30 | | 505 | |

## TIME DISTRIBUTION-HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 11½ | 5½ | ¼ |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | 5 | 13½ | 5½ |
| LUBRICATE RIG | ¼ | ¼ | |
| DEVIATION SURVEY | ½ | ¼ | |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| BORING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 24 | | |

## TIME SUMMARY (OFFICE USE ONLY)

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.

NO. OF LINES — SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 2 | STANDS D.P. | 190 FT. |
| 2 | SINGLES D.P. | 74 FT. |
| 3 | D.C. 3 I.D. 9 O.D. | 809.4 FT. |
| 15 | D.C. 12 NO. 6¾ O.D. | 441.45 FT. |
| | STB. BODY O.D. | FT. |
| | STB. BODY O.D. | FT. |
| | RMR. BODY O.D. | FT. |
| 4 | SUBS O.D. | 11.71 FT. |
| | BIT OR C.B. | FT. |
| | | FT. |
| | KELLY DOWN | 41.00 FT. |
| | TOTAL | 830 FT. |

WT. OF STRING 76M LBS.

**BIT RECORD**

| | |
|---|---|
| BIT NO. | RR 1A |
| SIZE | 12¼ |
| MFG. | SMITH |
| TYPE | OTI |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 20 |
| SER. NO. | CA932 |
| DEPTH OUT | |
| DEPTH IN | 505 |
| TOTAL FTG. | 325 |
| TOTAL HR. RUN | 12 |
| COND. OF BIT | Orlg. |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | |
|---|---|
| TIME | |
| WEIGHT | |
| VISC.-SEC | |
| W.L.-C.C. | |
| FLTR. CK. | |
| PH | |
| SD. CONT. % | |
| PRESSURE GRADIENT | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R Brundige

**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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 690 | 830 | D | | | 65 | 5 | 800 | 5½ | 76 | 5½ | | S |
| | | | | | 70 | 10 | | | | | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 705 | 0° | [illegible] | 830 | 1/4 | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12:00 | 3:00 | 3 | TRIP FOR mud Ring |
| 3:00 | 4:00 | 1 | DRLg. |
| 4:00 | 4:15 | ¼ | Rig SERV |
| 4:15 | 4:30 | ¼ | SURVEY |
| 4:30 | 7:45 | 3¼ | DRLG |
| 7:45 | 8:00 | ¼ | SURVEY. |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 3 | STANDS D.P. | 284.94 FT. |
| 2 | SINGLES D.P. | 61.74 FT. |
| 3 | D.C. 3" I.D. 9" O.D. | 80.94 FT. |
| 15 | D.C. 12 I.D. 6¾ O.D. | 441.45 FT. |
| | STB. BODY O.D. | FT. |
| | STB. BODY O.D. | FT. |
| | RMR. BODY O.D. | FT. |
| 4 | SUBS O.D. | 11.71 FT. |
| | BIT OR C.B. | FT. |
| | | FT. |
| | KELLY DOWN | 41.00 FT. |
| | TOTAL | 929.00 FT. |

WT. OF STRING LBS.

**BIT RECORD**

| | | |
|---|---|---|
| BIT NO. | RR 1A | 2A |
| SIZE | 12¼ | 12¼ |
| MFG. | SMITH | SEC |
| TYPE | DT-J | M4N |
| NOZZLE NO. | 3 | 3 |
| NOZZLE SIZE | 20 | 16 |
| SER. NO. | CA922 | 252445 |
| DEPTH OUT | 923 | |
| DEPTH IN | 505 | 923 |
| TOTAL FTG. | 418 | |
| TOTAL HR. RUN | 17¾ | |
| COND. OF BIT | | |
| REAMER NO. | | |
| REAMER TYPE | | |

**MUD RECORD**

| | | |
|---|---|---|
| TIME | 8:00 | 12:00 |
| WEIGHT | 9.6 | 9.6 |
| VISC.-SEC | 45 | 46 |
| W.L.-C.C. | | |
| FLTR. CK. | | |
| PH | | |
| SD. CONT. % | | |
| PRESSURE GRADIENT | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Del. Soob Bent | 12 | | |
| 30 Broxen | | | |
| 50 Rebbex | | | |

DRILLER Don Doyle

**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 SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 890 | 923 | D | | | 65 | 5 | 800 | 5½ X 14 | | 5½ X 14 | | S |
| 923 | | D | | | 70 | 10 | 1000 | 5½ X 14 | | 5½ X 14 | | S |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 923 | ½° | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8:00 | 9:30 | 1½ | DRLg. |
| 9:30 | 9:45 | ¼ | Rig SERV. ✓ B.O.P's |
| 9:45 | 2:00 | 4¼ | DRLg. |
| 2:00 | 2:15 | ¼ | SURVEY |
| 2:15 | 3:45 | 1½ | HOIST BIT # 2A ✓ Blind Rams |
| 3:45 | 4:00 | ¼ | Run in w/ BIT #2A |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | |
|---|---|---|
| 4 | STANDS D.P. | 379.10 FT. |
| 1 | SINGLES D.P. | 31.67 FT. |
| 3 | D.C. 9" I.D. O.D. | 80.94 FT. |
| 15 | D.C. 12 I.D. 6¾ O.D. | 441.45 FT. |
| | STB. BODY O.D. | FT. |
| | STB. BODY O.D. | FT. |
| | RMR. BODY O.D. | FT. |
| 4 | SUBS O.D. | 11.71 FT. |
| | BIT OR C.B. | FT. |
| | | FT. |
| | KELLY DOWN | 8 FT. |
| | TOTAL | 983 FT. |

WT. OF STRING LBS.

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 2A |
| SIZE | 12¼ |
| MFG. | SEC |
| TYPE | M4N |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 16 |
| SER. NO. | 252445 |
| DEPTH OUT | |
| DEPTH IN | 923 |
| TOTAL FTG. | 60 |
| TOTAL HR. RUN | 7¼ |
| COND. OF BIT | |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | |
|---|---|---|
| TIME | 5:00 | |
| WEIGHT | 9.8 | |
| VISC.-SEC | 50 | |
| W.L.-C.C. | | |
| FLTR. CK | | 9.0 |
| PH | | 9.7 12.0 |
| SD. CONT. % | | 3.8 4.8 |
| PRESSURE GRADIENT | | 36 45 |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| 15 Caustic | | | |

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. 2 LINER SIZE | PUMP NO. 2 S.P.M. | METHOD RUN SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 923 | | D | | | 70 | 10 | 1000 | 5½ X 14 | | 5½ X 14 | | S |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4:00 | 4:45 | ¾ | Finish in w/ BIT #2A |
| 4:45 | | | DRLg |
| 12 | | 7¼ | |

## DRILLING CREW PAYROLL DATA

DATE MARCH 24/73

WELL NAME & NO. UNION AKLAVIK C 38

COMPANY UNION OIL CO LTD

TOOL PUSHER E W Braumann — RIG NO. 11

**MORNING TOUR** 12 M. P.M. 8 A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R BRUNDIGE | 12 |
| DRKMAN | | C CAMPBELL | 12 |
| MTRMAN | | S KLEIEN | 12 |
| FIREMAN | | | |
| FLRMAN | | G ALBERTSON | 12 |
| FLRMAN | | D PARISH | 12 |
| FLRMAN | | | |

NO. OF DAYS _____ SINCE LAST LOST-TIME ACCIDENT

**DAY TOUR** 8:00 A.M. 4:00 P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | D. DOYLE | 12 |
| DRKMAN | | G. HIEBERT | 12 |
| MTRMAN | | H. KLEIEN | 12 |
| FIREMAN | | | |
| FLRMAN | | D. ULRICH | 12 |
| FLRMAN | | D. WEBBER | 12 |
| FLRMAN | | B. TAYLOR | 12 |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

**EVENING TOUR** 4:00 P.M. 12:00 P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 7 — DATE MARCH 23/73

OPERATOR: UNION OIL CO LTD

LEASE: UNION AKLAVIK C-38

WELL NO. C-38 — FIELD OR DIST. AKLAVIK — COUNTY N.W.T. — STATE CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. — RIG NO. 1E

DRILL PIPE STRING NO. 293 SIZE — TOOL JOINT SIZE 5" O.D. — TYPE THD. 3½ IF

K.B. TO GROUND 16.90

SIGNATURE OF OPERATOR'S REPRESENTATIVE: Fred L Hurst — SIGNATURE OF CONTRACTOR'S TOOL PUSHER: E.W. Baumann

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NAT | K-380 | 14 |
| 2. | NAT | K-380 | 14 |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 13 3/8 | USS | 68# K55 | 15 | 510.30 | | 505 | |

**TIME DISTRIBUTION—HOURS**

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 4½ | 3½ | 4½ |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | 2¾ | |
| LUBRICATE RIG | | ¼ | ¼ |
| DEVIATION SURVEY | | | ¼ |
| TEST B.O.P. | | ¼ | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| BORING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | ¾ | 1¼ | ¾ |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 7 | 16 | |

**TIME SUMMARY (OFFICE USE ONLY)**

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

**WIRE LINE RECORD**

REEL NO.

NO. OF LINES — SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | FT. |
|---|---|---|
| | STANDS D.P. | |
| | SINGLES D.P. | |
| 3 | D.C. 9" I.D. 3" O.D. | 80.94 FT. |
| 13 | D.C. 2 7/8 I.D. 4½ O.D. | 385.74 FT. |
| | STB. BODY O.D. | FT. |
| | STB. BODY O.D. | FT. |
| | RMR. BODY O.D. | FT. |
| 3 | SUBS O.D. 14 6/8 | FT. |
| | BIT OR C.B. | FT. |
| | | FT. |
| | KELLY DOWN 30 | FT. |
| | TOTAL 505 | FT. |
| | WT. OF STRING 65 M. | LBS. |

**BIT RECORD**

| | | |
|---|---|---|
| BIT NO. | RR ~~RR~~ | 1A |
| SIZE | | 12¼ |
| MFG. | | SMITH |
| TYPE | | DT-J |
| NOZZLE NO. | | 3 |
| NOZZLE SIZE | | 18 |
| SER. NO. | | GN932 |
| DEPTH OUT | | |
| DEPTH IN | | 505 |
| TOTAL FTG. | | |
| TOTAL HR. RUN | | |
| COND. OF BIT | | |
| REAMER NO. | | |
| REAMER TYPE | | |

**MUD RECORD**

| | | |
|---|---|---|
| TIME | | |
| WEIGHT | | |
| VISC.-SEC | | |
| W.L.-C.C. | | |
| FL.TR. CK. | | |
| PH | | |
| SD. CONT. % | | |
| PRESSURE GRADIENT | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER: B Baumbridge

**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 | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 PM | 2 PM | 2½ | LAY LINE TO DEGASSER. |
| 2 PM | 7 PM | 4½ | DRLG OUT FLOAT + SHOE & PLUG + CEMENT |
| 7 PM | 8 PM | 1 | WORK ON PUMP |
| | | | TOP OF CEMENT @ 470 |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | FT. |
|---|---|---|
| 1 | STANDS D.P. | 95.10 FT. |
| 1 | SINGLES D.P. | 31.40 FT. |
| 3 | D.C. 9" I.D. 3" O.D. | 80.94 FT. |
| 13 | D.C. 2 7/8 I.D. 4½ O.D. | 441.45 FT. |
| | STB. BODY O.D. | FT. |
| | STB. BODY O.D. | FT. |
| | RMR. BODY O.D. | FT. |
| 4 | SUBS O.D. 14 6/8 | 11.71 FT. |
| | BIT OR C.B. | FT. |
| | | FT. |
| | KELLY DOWN 41.00 | FT. |
| | TOTAL 576.92 | FT. |
| | WT. OF STRING 60 M. | LBS. |

**BIT RECORD**

| | | |
|---|---|---|
| BIT NO. | RR | 1A |
| SIZE | | 12¼ |
| MFG. | | SMITH |
| TYPE | | DT-J |
| NOZZLE NO. | | 3 |
| NOZZLE SIZE | | 20 |
| SER. NO. | | GN932 |
| DEPTH OUT | | |
| DEPTH IN | | 505 |
| TOTAL FTG. | | |
| TOTAL HR. RUN | | 3½ |
| COND. OF BIT | | RNG |
| REAMER NO. | | |
| REAMER TYPE | | |

**MUD RECORD**

| | | |
|---|---|---|
| TIME | 8:30 | 3:00 |
| WEIGHT | 9.8 | 9.8 |
| VISC.-SEC | 55 | 65 |
| W.L.-C.C. | | |
| FL.TR. CK. | | |
| PH | | |
| SD. CONT. % | | |
| PRESSURE GRADIENT | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER: Don Doyle

**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'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 505 | 576 | D | | | 65 | 5/10 | 500 | 6½ | 75 | 5½ | | S |
| | | | | | | | 500 | x | | x | 74 | |
| | | | | | | | | 14 | | 14 | | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4:00 | 8:30 | ½ | CLEAN OUT VALVES IN PUMP |
| 8:30 | 9:00 | ½ | DRLG. |
| 9:00 | 9:15 | ¼ | RIG SERV. √ KELLY COCK |
| 9:15 | 10:45 | 1½ | DRLG. |
| 10:45 | 11:15 | ½ | CLEAN OUT VALVES IN PUMP |
| 11:15 | 1:00 | 1¾ | HOIST PLUGGED BIT |
| 1:00 | 1:15 | ¼ | √ BLIND RAMS & CHANGE JETS |
| 1:15 | 2:15 | 1 | RUN IN HOLE |

2:15-2:30 - ¼ - Hook up Flow Show
2:30-4:00 - 1½ = DRLG.

## DAY TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | FT. |
|---|---|---|
| 1 | STANDS D.P. | 95.10 FT. |
| 1 | SINGLES D.P. | 31.40 FT. |
| 3 | D.C. 9" I.D. 3" O.D. | 80.94 FT. |
| 13 | D.C. 2 7/8 I.D. 4½ O.D. | 441.45 FT. |
| | STB. BODY O.D. | FT. |
| | STB. BODY O.D. | FT. |
| | RMR. BODY O.D. | FT. |
| 4 | SUBS O.D. 14 6/8 | 11.71 FT. |
| | BIT OR C.B. | FT. |
| | | FT. |
| | KELLY DOWN 17. | FT. |
| | TOTAL 687.61 | FT. |
| | WT. OF STRING 65 M. | LBS. |

**BIT RECORD**

| | | |
|---|---|---|
| BIT NO. | RR | 1A |
| SIZE | | 12¼ |
| MFG. | | SMITH |
| TYPE | | DT-J |
| NOZZLE NO. | | 3 |
| NOZZLE SIZE | | 20 |
| SER. NO. | | GN932 |
| DEPTH OUT | | |
| DEPTH IN | | 505 |
| TOTAL FTG. | | |
| TOTAL HR. RUN | | 7¼ |
| COND. OF BIT | | Rng. |
| REAMER NO. | | |
| REAMER TYPE | | |

**MUD RECORD**

| | | |
|---|---|---|
| TIME | | |
| WEIGHT | | |
| VISC.-SEC | | |
| W.L.-C.C. | | |
| FL.TR CK | | |
| PH | | |
| SD. CONT. % | | |
| PRESSURE GRADIENT | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| DRISPAC | 30# | | |
| BARODIN | 200# | | |

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. 2 LINER SIZE | PUMP NO. 2 S.P.M. | METHOD RUN SCL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 576 | 680 | D | | | 65 | 4 | 520 | 5½ | 76 | 5½ | | S |
| | | | | | | 10 | | x | | x | | |
| | | | | | | | | 14 | | 14 | | |

DEVIATION RECORD: DEPTH 608 — DEV. 0° — DIRECTION — DEPTH — DEV. — DIRECTION — DEPTH — DEV. — DIRECTION

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4:00 | 5:00 | 1 | DRLG. |
| 5:00 | 5:15 | ¼ | SURVEY |
| 5:15 | 5:30 | ¼ | RIG SERV. |
| 5:30 | 7:45 | 2¼ | DRLG. |
| 7:45 | 11 PM | 3¼ | FLOWLINE PLUGED DUMPED SHAKER TANK |
| 11 PM | 12 | 1 | DRLG 12¼ HOLE |

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DRILLING CREW PAYROLL DATA

DATE MARCH 23/73

WELL NAME & NO. UNION AKLAVIK C-38

COMPANY UNION OIL CO. LTD.

TOOL PUSHER E.W. Baumann — RIG NO. 1E

MORNING TOUR ____ P.M. ____ A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | B Baumbridge | 12 |
| DRKMAN | | C. CAMPBELL | 12 |
| MTRMAN | | S. KLEEN. | 12 |
| FIREMAN | | | |
| FLRMAN | | G. ALBERTSON. | 12 |
| FLRMAN | | D. IRISH | 12 |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

DAY TOUR 8:00 A.M. 4:00 P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | D. DOYLE | 12 |
| DRKMAN | | E. HIEBERT | 12 |
| MTRMAN | | H. KLEEN | 12 |
| FIREMAN | | | |
| FLRMAN | | D. ULRICH | 12 |
| FLRMAN | | D. WEBBER | 12 |
| FLRMAN | | B. TAYLOR | 13 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR 4:00 P.M. 12:00 P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 6 DATE MARCH 22

OPERATOR: UNION OIL CO LTD.

LEASE: UNION AKLAVIK C38

WELL NO. C38 FIELD OR DIST. AKLAVIK COUNTY N.W.T. STATE CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. RIG NO. 1E

DRILL PIPE STRING NO. SIZE TOOL JOINT O.D. TYPE THD.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: L Smith

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: E W Hausmann

## PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NAT | K3-80 | 14 |
| 2. | NAT | K380 | 14 |
| 3. | | | |

LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 13 3/8 | KSS | 48.48 | 15 | 5/1030 | | 505 | |
| | | | | | | | |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | | | |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | | |
| LUBRICATE RIG | | | |
| DEVIATION SURVEY | | | |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| BORING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | | | |

## TIME SUMMARY (OFFICE USE ONLY)

| | |
|---|---|
| DAY WORK | |
| HRS. W/DP | |
| HRS. WO/DP | |
| HRS. STANDBY | |
| TOTAL DAY WORK | |

## WIRE LINE RECORD

REEL NO.

NO. OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

NO.

| | | |
|---|---|---|
| STANDS D.P. | | FT. |
| SINGLES D.P. | | FT. |
| D.C. I.D. | O.D. | FT. |
| D.C. I.D. | O.D. | FT. |
| STB. BODY | O.D. | FT. |
| STB. BODY | O.D. | FT. |
| RMR. BODY | O.D. | FT. |
| SUBS | O.D. | FT. |
| BIT OR C.B. | | FT. |
| | | FT. |
| KELLY DOWN | | FT. |
| TOTAL | | FT. |
| WT. OF STRING | | LBS. |

### BIT RECORD

| | |
|---|---|
| BIT NO. | |
| SIZE | |
| MFG. | |
| TYPE | |
| NOZZLE NO. | |
| NOZZLE SIZE | |
| SER. NO. | |
| DEPTH OUT | |
| DEPTH IN | |
| TOTAL FTG. | |
| TOTAL HR. RUN | |
| COND. OF BIT | |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | |
|---|---|
| TIME | |
| WEIGHT | |
| VISC.-SEC | |
| W.L.-C.C. | |
| FLTR. CK. | |
| PH | |
| SD. CONT. % | |
| PRESSURE GRADIENT | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER R Baumbridge

### 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 00 | 8 00 | 8 | nippling up. |

## DAY TOUR

### DRILLING ASSEMBLY AT END OF TOUR

NO.

| | | |
|---|---|---|
| STANDS D.P. | | FT. |
| SINGLES D.P. | | FT. |
| D.C. I.D. | O.D. | FT. |
| D.C. I.D. | O.D. | FT. |
| STB. BODY | O.D. | FT. |
| STB. BODY | O.D. | FT. |
| RMR. BODY | O.D. | FT. |
| SUBS | O.D. | FT. |
| BIT OR C.B. | | FT. |
| | | FT. |
| KELLY DOWN | | FT. |
| TOTAL | | FT. |
| WT. OF STRING | | LBS. |

### BIT RECORD

| | |
|---|---|
| BIT NO. | |
| SIZE | |
| MFG. | |
| TYPE | |
| NOZZLE NO. | |
| NOZZLE SIZE | |
| SER. NO. | |
| DEPTH OUT | |
| DEPTH IN | |
| TOTAL FTG. | |
| TOTAL HR. RUN | |
| COND. OF BIT | |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | |
|---|---|
| TIME | |
| WEIGHT | |
| VISC.-SEC | |
| W.L.-C.C. | |
| FLTR. CK. | |
| PH | |
| SD. CONT. % | |
| PRESSURE GRADIENT | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| BIGARB | 200# | | |

DRILLER Don Doyle

### 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8:00 | | | 16 MIN: PRESSURE TEST BLIND RAMS TO 1500 P.S.I. HELD O.K. |
| | | | PRESS. TEST PIPE RAMS TO 1500 P.S.I. 15 MINS HELD O.K. |
| | | | PRES. TEST HYDRIL TO 1500 P.S.I. 15 MIN. HELD O.K. |
| | | | HOOK UP FLARE LINE. |
| 4:00 | | 8 | BUILD SHACK AROUND B.O.P.'S |
| | | | ✓ MOTOR SHUT OFF: ALL O.K. |

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

NO.

| | | |
|---|---|---|
| STANDS D.P. | | FT. |
| SINGLES D.P. | | FT. |
| D.C. I.D. | O.D. | FT. |
| D.C. I.D. | O.D. | FT. |
| STB. BODY | O.D. | FT. |
| STB. BODY | O.D. | FT. |
| RMR. BODY | O.D. | FT. |
| SUBS | O.D. | FT. |
| BIT OR C.B. | | FT. |
| | | FT. |
| KELLY DOWN | | FT. |
| TOTAL | | FT. |
| WT. OF STRING | | LBS. |

### BIT RECORD

| | |
|---|---|
| BIT NO. | |
| SIZE | |
| MFG. | |
| TYPE | |
| NOZZLE NO. | |
| NOZZLE SIZE | |
| SER. NO. | |
| DEPTH OUT | |
| DEPTH IN | |
| TOTAL FTG. | |
| TOTAL HR. RUN | |
| COND. OF BIT | |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | |
|---|---|
| TIME | |
| WEIGHT | |
| VISC.-SEC | |
| W.L.-C.C. | |
| FLTR. CK | |
| PH | |
| SD. CONT. % | |
| PRESSURE GRADIENT | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. 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 | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4:00 | 12 00 | 8 | HOOK UP STEAM LINES & WRAP AROUND TEST LINES |
| | | 8 | BUILD SHACK AROUND B.O.P. |

## DRILLING CREW PAYROLL DATA

DATE MARCH 22/72

WELL NAME & NO. UNION AKLAVIK C38

COMPANY UNION OIL CO LTD.

TOOL PUSHER E W Hausmann RIG NO. 1E

MORNING TOUR 12 P.M. 8 A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. | |
|---|---|---|---|---|
| DRILLER | | R BRUNDIGE | 12 | |
| DRKMAN | | F SWYERYK | 8 | T |
| MTRMAN | | L COLLINS | 8 | T |
| FIREMAN | | | | |
| FLRMAN | | T HANSON | 8 | T |
| FLRMAN | | D IRISH | 8 | T |
| FLRMAN | | | | |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

DAY TOUR _____ A.M. _____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. | |
|---|---|---|---|---|
| DRILLER | | D. DOYLE | 12 | |
| DRKMAN | | G. HIEBERT | 12 | |
| MTRMAN | | H. KLEEN | 12 | |
| FIREMAN | | | | |
| FLRMAN | | D. ULRICH | 12 | |
| FLRMAN | | D. WEBBER | 12 | |
| FLRMAN | | R. TAYLOR | 12 | |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR _____ P.M. _____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. | |
|---|---|---|---|---|
| DRILLER | | | | |
| DRKMAN | | A. LINT & AMBELL | 4 | T |
| MTRMAN | | S KLEEN | 4 | T |
| FIREMAN | | | | |
| FLRMAN | | G. ALBERTSON | 4 | T |
| FLRMAN | | | | |
| FLRMAN | | | | |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 5 DATE MARCH 21

OPERATOR: UNION OIL CO LTD.

LEASE: UNION AKLAVIK C38

WELL NO. C38 | FIELD OR DIST. AKLAVIK | COUNTY N.W.T. | STATE CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. | RIG NO. 1E

DRILL PIPE STRING: NO. | SIZE | TOOL JOINT O.D. | TYPE THD.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: J C Sanderson

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry D Smithey

PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | OAT | K380 | 14 |
| 2. | OAT | K380 | 14 |
| 3. | | | |

LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 13⅜ | USS | 48 KS | 13 | 510.50 | | 504 | |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | | | |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | | |
| LUBRICATE RIG | | | |
| DEVIATION SURVEY | | | |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| BORING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | 8 | | |
| DRILL STEM TEST | | | |
| OTHER | | | |
| FISHING | | | |
| COMPLETION WORK: A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | | |

## TIME SUMMARY (OFFICE USE ONLY)

| | |
|---|---|
| DAY WORK | |
| HRS. W/DP | |
| HRS. WO/DP | |
| HRS. STANDBY | |
| TOTAL DAY WORK | |

## WIRE LINE RECORD

| | |
|---|---|
| REEL NO. | |
| NO. OF LINES | SIZE |
| FEET SLIPPED | |
| FEET CUT OFF | |
| PRESENT LENGTH | |
| TON MI. OR TRIPS SINCE LAST CUT | |
| CUMULATIVE TON MI. OR TRIPS | |
| NO. OF DAYS FROM SPUD | |
| CUMULATIVE ROTATING HRS. | |

## MORNING TOUR

| NO. | DRILLING ASSEMBLY AT END OF TOUR | | BIT RECORD | MUD RECORD | 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'EL–P COM'D–C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | STANDS D.P. | FT. | BIT NO. | TIME | | | | | | | | | | | | | |
| | SINGLES D.P. | FT. | SIZE | WEIGHT | | | | | | | | | | | | | |
| | D.C. I.D. O.D. | FT. | MFG. | VISC.–SEC | | | | | | | | | | | | | |
| | D.C. I.D. O.D. | FT. | TYPE | W.L.–C.C. | | | | | | | | | | | | | |
| | D.C. I.D. O.D. | FT. | NOZZLE NO. / SIZE | FLTR. CK. | | | | | | | | | | | | | |
| | STB. BODY O.D. | FT. | SER. NO. | PH | | | | | | | | | | | | | |
| | STB. BODY O.D. | FT. | DEPTH OUT | SD. CONT. % | | | | | | | | | | | | | |
| | RMR. BODY O.D. | FT. | DEPTH IN | PRESSURE GRADIENT | | | | | | | | | | | | | |
| | SUBS O.D. | FT. | TOTAL FTG. | MUD & CHEMICALS ADDED: TYPE / AMT. / TYPE / AMT. | | | | | | | | | | | | | |
| | BIT OR C.B. | FT. | TOTAL HR. RUN | | | | | | | | | | | | | | |
| | | FT. | COND. OF BIT | | | | | | | | | | | | | | |
| | KELLY DOWN | FT. | REAMER NO. | | | | | | | | | | | | | | |
| | TOTAL | FT. | REAMER TYPE | DRILLER R Brundige | | | | | | | | | | | | | |
| | WT. OF STRING | LBS. | | | | | | | | | | | | | | | |

| DEVIATION RECORD | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

| TIME LOG FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12:00 | 8:00 | 8 | W.O.C. |

## DAY TOUR

| NO. | DRILLING ASSEMBLY AT END OF TOUR | | BIT RECORD | MUD RECORD | 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'EL–P COM'D–C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | STANDS D.P. | FT. | BIT NO. | TIME | | | | | | | | | | | | | |
| | SINGLES D.P. | FT. | SIZE | WEIGHT | | | | | | | | | | | | | |
| | D.C. I.D. O.D. | FT. | MFG. | VISC.–SEC | | | | | | | | | | | | | |
| | D.C. I.D. O.D. | FT. | TYPE | W.L.–C.C. | | | | | | | | | | | | | |
| | D.C. I.D. O.D. | FT. | NOZZLE NO. / SIZE | FLTR. CK. | | | | | | | | | | | | | |
| | STB. BODY O.D. | FT. | SER. NO. | PH | | | | | | | | | | | | | |
| | STB. BODY O.D. | FT. | DEPTH OUT | SD. CONT. % | | | | | | | | | | | | | |
| | RMR. BODY O.D. | FT. | DEPTH IN | PRESSURE GRADIENT | | | | | | | | | | | | | |
| | SUBS O.D. | FT. | TOTAL FTG. | MUD & CHEMICALS ADDED: TYPE / AMT. / TYPE / AMT. | | | | | | | | | | | | | |
| | BIT OR C.B. | FT. | TOTAL HR. RUN | | | | | | | | | | | | | | |
| | | FT. | COND. OF BIT | | | | | | | | | | | | | | |
| | KELLY DOWN | FT. | REAMER NO. | | | | | | | | | | | | | | |
| | TOTAL | FT. | REAMER TYPE | DRILLER Don Doyle | | | | | | | | | | | | | |
| | WT. OF STRING | LBS. | | | | | | | | | | | | | | | |

| DEVIATION RECORD | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

| TIME LOG FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8:00 | | | CUT OFF CONDUCTOR BBL. CUT OFF CASG & WELD ON |
| | 4:00 | 8 | CASG. BOWL |

## EVENING TOUR

| NO. | DRILLING ASSEMBLY AT END OF TOUR | | BIT RECORD | MUD RECORD | 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'EL–P COM'D–C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | STANDS D.P. | FT. | BIT NO. | TIME | | | | | | | | | | | | | |
| | SINGLES D.P. | FT. | SIZE | WEIGHT | | | | | | | | | | | | | |
| | D.C. I.D. O.D. | FT. | MFG. | VISC.–SEC | | | | | | | | | | | | | |
| | D.C. I.D. O.D. | FT. | TYPE | W.L.–C.C. | | | | | | | | | | | | | |
| | D.C. I.D. O.D. | FT. | NOZZLE NO. / SIZE | FLTR. CK | | | | | | | | | | | | | |
| | STB. BODY O.D. | FT. | SER. NO. | PH | | | | | | | | | | | | | |
| | STB. BODY O.D. | FT. | DEPTH OUT | SD. CONT. % | | | | | | | | | | | | | |
| | RMR. BODY O.D. | FT. | DEPTH IN | PRESSURE GRADIENT | | | | | | | | | | | | | |
| | SUBS O.D. | FT. | TOTAL FTG. | MUD & CHEMICALS ADDED: TYPE / AMT. / TYPE / AMT. | | | | | | | | | | | | | |
| | BIT OR C.B. | FT. | TOTAL HR. RUN | | | | | | | | | | | | | | |
| | | FT. | COND. OF BIT | | | | | | | | | | | | | | |
| | KELLY DOWN | FT. | REAMER NO. | | | | | | | | | | | | | | |
| | TOTAL | FT. | REAMER TYPE | DRILLER | | | | | | | | | | | | | |
| | WT. OF STRING | LBS. | | | | | | | | | | | | | | | |

| DEVIATION RECORD | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

| TIME LOG FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4:00 | 12:00 | 8 | HEADING UP |

## DRILLING CREW PAYROLL DATA

DATE MARCH 21/73

WELL NAME & NO. Union AKLAVIK C-38

COMPANY Union Oil CO LTD

TOOL PUSHER Barry D Smithey RIG NO. 1E

MORNING TOUR 12 P.M. 8 A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | A BRUNDIGE | 12 |
| DRKMAN | | E SWYRIDUK | 12 |
| MTRMAN | | L COLLINS | 12 |
| FIREMAN | | | |
| FLRMAN | | T HANSON | 12 |
| FLRMAN | | D IRISH | 12 |
| FLRMAN | | | |

NO. OF DAYS _____ SINCE LAST LOST-TIME ACCIDENT

DAY TOUR 8:00 A.M. 4:00 P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | D. DOYLE | 12 |
| DRKMAN | | G. HIEBERT | 12 |
| MTRMAN | | H. KLEEN | 12 |
| FIREMAN | | | |
| FLRMAN | | D. ULRICH | 12 |
| FLRMAN | | D. WEBBER | 12 |
| FLRMAN | | B. TAYLOR | 12 |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR _____ P.M. _____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 4 DATE March 20

OPERATOR

CONTRACTOR UNION OIL CO LTD. / S & T DRILLING (WESTERN) CO. LTD.

RIG NO. 1E

LEASE

WELL NO. C-38 FIELD OR DIST. AKLAVIK COUNTY MACKENZIE STATE N.W.T.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: J C Saunderson

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry D Armstrong

DRILLING STRING — NO. / SIZE / TOOL JOINT O.D. / TYPE THD.

PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NAT | 4 3TD | 14 |
| 2. | NAT | K 3B6 | 14 |
| 3. | | | |

LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| 13 3/8 | USS | 68# K55 | 15 | 510.30 | | ~~510.30~~ 505.0 | |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | | | |
| REAMING | 4 1/2 | | |
| CONDITIONING MUD & CIRCULATING | 1/2 | | 1/2 |
| TRIPS | 2 1/2 | | |
| LUBRICATE RIG | 1/2 | | |
| DEVIATION SURVEY | 1/2 | | |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| BOILERING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | 8 | 3 1/2 |
| WAITING ON CEMENT | | | 5 1/2 |
| DRILL STEM TEST | | | |
| OTHER | 1/2 | | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 8 | 8 | 8 |

## TIME SUMMARY (OFFICE USE ONLY)

| | |
|---|---|
| DAY WORK | |
| HRS. W/DP | |
| HRS. WO/DP | |
| HRS. STANDBY | |
| TOTAL DAY WORK | |

## WIRE LINE RECORD

| | |
|---|---|
| REEL NO. | |
| NO. OF LINES / SIZE | |
| FEET SLIPPED | |
| FEET CUT OFF | |
| PRESENT LENGTH | |
| TON MI. OR TRIPS SINCE LAST CUT | |
| CUMULATIVE TON MI. OR TRIPS | |
| NO. OF DAYS FROM SPUD | |
| CUMULATIVE ROTATING HRS. | |

## MORNING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| NO. | | | |
|---|---|---|---|
| | STANDS D.P. | | FT. |
| 1 | SINGLES D.P. | 31.65 | FT. |
| 3 | D.C. 9 I.D. 3 O.D. | 109.95 | FT. |
| 12 | D.C. 27 I.D. 8 1/4 O.D. | 367.65 | FT. |
| | STB. BODY O.D. | | FT. |
| | STB. BODY O.D. | | FT. |
| | RMR. BODY O.D. | | FT. |
| | SUBS O.D. | | FT. |
| 4 | BIT OR C.B. | 1.75 | FT. |
| | | | FT. |
| | KELLY DOWN | | FT. |
| | TOTAL | 510.30 | FT. |

WT. OF STRING 42M LBS.

### BIT RECORD

| | |
|---|---|
| BIT NO. | 2A |
| SIZE | 17 1/2 |
| MFG. | SEC |
| TYPE | REAMER |
| NOZZLE NO. | |
| NOZZLE SIZE | |
| SER. NO. | X4459 |
| DEPTH OUT | 505' |
| DEPTH IN | 0 |
| TOTAL FTG. | 505' |
| TOTAL HR. RUN | 16 3/4 |
| COND. OF BIT | 2 1 1 |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | |
|---|---|---|
| TIME | 9:00 | 4:00 |
| WEIGHT | 10.8 | 10.0 |
| VISC.-SEC | 55 | 75 |
| W.L.-C.C. | | |
| FLTR. CK. | | |
| PH | | |
| SD. CONT. % | | |
| PRESSURE GRADIENT | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Del | 25 sks | | |
| Bench | 5 sks | | |

DRILLER R Brundige

### 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 314 | 505' | R. | | | 45 | 2 | 400 | 7 1/4 | | 5 3/4 | 60 | S |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 505 | 1/4 | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 00 | 4 45 | 4 1/4 | REAMING 12 1/4 TO 17 1/2 HOLES |
| 4 15 | 4 45 | 1/2 | CIRC. |
| 4 45 | 5 15 | 1/2 | ~~HOIST~~. RIG SERV & SURVEY. |
| 5 15 | 7 30 | 2 1/4 | HOIST |
| 7 30 | 8 00 | 1/2 | RIG TO RUN CSGing |

## DAY TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| | | |
|---|---|---|
| STANDS D.P. | | FT. |
| SINGLES D.P. | | FT. |
| D.C. I.D. O.D. | | FT. |
| D.C. I.D. O.D. | | FT. |
| STB. BODY O.D. | | FT. |
| STB. BODY O.D. | | FT. |
| RMR. BODY O.D. | | FT. |
| SUBS O.D. | | FT. |
| BIT OR C.B. | | FT. |
| | | FT. |
| KELLY DOWN | | FT. |
| TOTAL | | FT. |

WT. OF STRING LBS.

### BIT RECORD

| | |
|---|---|
| BIT NO. | |
| SIZE | |
| MFG. | |
| TYPE | |
| NOZZLE NO. | |
| NOZZLE SIZE | |
| SER. NO. | |
| DEPTH OUT | |
| DEPTH IN | |
| TOTAL FTG. | |
| TOTAL HR. RUN | |
| COND. OF BIT | |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | |
|---|---|---|
| TIME | | |
| WEIGHT | | |
| VISC.-SEC | | |
| W.L.-C.C. | | |
| FLTR. CK. | | |
| PH | | |
| SD. CONT. % | | |
| PRESSURE GRADIENT | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER Don Doyle

### 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | |

### DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

### TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8:00 | 4:00 | 8 | Rig to & run Casg. Ran 15 Jts 13 3/4 K.S 68 Lb U.S.S STC. Casing Total 510.15 L.T 505 K.B Cement W/ 900 Sx Inland Cement + 3% CaCl Displaced W/ 71 BBls Mud Cip @ 6.50 P.M. March 20/73 W/ 1000 PSi 40 BBls Cement Retur |

## EVENING TOUR

### DRILLING ASSEMBLY AT END OF TOUR

| | | |
|---|---|---|
| STANDS D.P. | | FT. |
| SINGLES D.P. | | FT. |
| D.C. I.D. O.D. | | FT. |
| D.C. I.D. O.D. | | FT. |
| STB. BODY O.D. | | FT. |
| STB. BODY O.D. | | FT. |
| RMR. BODY O.D. | | FT. |
| SUBS O.D. | | FT. |
| BIT OR C.B. | | FT. |
| | | FT. |
| KELLY DOWN | | FT. |
| TOTAL | | FT. |

WT. OF STRING LBS.

### BIT RECORD

| | |
|---|---|
| BIT NO. | |
| SIZE | |
| MFG. | |
| TYPE | |
| NOZZLE NO. | |
| NOZZLE SIZE | |
| SER. NO. | |
| DEPTH OUT | |
| DEPTH IN | |
| TOTAL FTG. | |
| TOTAL HR. RUN | |
| COND. OF BIT | |
| REAMER NO. | |
| REAMER TYPE | |

### MUD RECORD

| | | |
|---|---|---|
| TIME | | |
| WEIGHT | | |
| VISC.-SEC | | |
| W.L.-C.C. | | |
| FLTR. CK | | |
| PH | | |
| SD. CONT. % | | |
| PRESSURE GRADIENT | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. 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 | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4:00 | ~~4~~ 4:30 | 1/2 | Circ. Casg. |
| 4:30 | ~~6:45~~ 6:45 | 2 1/4 | Cement Casg. |
| ~~6:45~~ 6:45 | 12 | 5 1/4 | W. O. C. |

## DRILLING CREW PAYROLL DATA

DATE MARCH 20/73

WELL NAME & NO. UNION AKLAVIK C-38

COMPANY UNION OIL CO LTD

TOOL PUSHER Barry D Armstrong RIG NO. 1E

### MORNING TOUR ____ P.M. ____ A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R BRUNDIGE | 16 |
| DRKMAN | | E SNYDER | 16 |
| MTRMAN | | L COLLINS | 16 |
| FIREMAN | | | |
| FLRMAN | | T HANSON | 16 |
| FLRMAN | | D IRISH | 16 |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST-TIME ACCIDENT

### DAY TOUR 8:00 A.M. 4:00 P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | D. DOYLE | 12 |
| DRKMAN | | G. HIEBERT | 12 |
| MTRMAN | | H. KLEEN | 12 |
| FIREMAN | | | |
| FLRMAN | | D. ULRICH | 12 |
| FLRMAN | | D. WEBBER | 12 |
| FLRMAN | | B. TAYLOR | 12 |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

### EVENING TOUR ____ P.M. ____ P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 8 DATE MARCH 19

OPERATOR: UNION OIL CO LTD.

LEASE: UNION AKLAVIK C-38

WELL NO. C-38 FIELD OR DIST. AKLAVIK COUNTY NWT STATE CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. RIG NO. #1

DRILL PIPE STRING NO. SIZE | TOOL JOINT O.D. TYPE THD.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: L.C. Sandersmith

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry D Armstrong

PUMPS

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | BAT | K380 | 14 |
| 2. | WAT | K380 | 14 |
| 3. | | | |

LAST CASING TUBING OR LINER

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | 1 | |
| DRILLING ACTUAL | | | |
| REAMING | | 4½ | 7¾ |
| CONDITIONING MUD & CIRCULATING | | | |
| TRIPS | | | |
| LUBRICATE RIG | | | ¼ |
| DEVIATION SURVEY | | | |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| CORING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | 3½ | |
| FISHING | | | |

COMPLETION WORK: A. PERFORATING; B. TUBING TRIPS; C. SWABBING; D. TESTING; E. ADDITIONAL

TOTALS 8

## TIME SUMMARY (OFFICE USE ONLY)

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.

NO. OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

| NO. | DRILLING ASSEMBLY AT END OF TOUR | | |
|---|---|---|---|
| | STANDS D.P. | | FT. |
| | SINGLES D.P. | | FT. |
| | D.C. I.D. O.D. | | FT. |
| | D.C. I.D. O.D. | | FT. |
| | STB. BODY O.D. | | FT. |
| | STB. BODY O.D. | | FT. |
| | RMR. BODY O.D. | | FT. |
| | SUBS O.D. | | FT. |
| | BIT OR C.B. | | FT. |
| | | | FT. |
| | KELLY DOWN | | FT. |
| | TOTAL | | FT. |
| | WT. OF STRING | | LBS. |

BIT RECORD: BIT NO.; SIZE; MFG.; TYPE; NOZZLE NO.; NOZZLE SIZE; SER. NO.; DEPTH OUT; DEPTH IN; TOTAL FTG.; TOTAL HR. RUN; COND. OF BIT; REAMER NO.; REAMER TYPE

MUD RECORD: TIME; WEIGHT; VISC.-SEC; W.L.-C.C.; FLTR. CK.; PH; SD. CONT. %; PRESSURE GRADIENT

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

DRILLER R Bundigé

| 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 MID | 4 AM | 4 | BREAK OFF CASING BOWL & SWEDGE |
| 4 AM | 8 AM | 4 | MAKE-UP CONDUCTOR BARREL |

## DAY TOUR

| NO. | DRILLING ASSEMBLY AT END OF TOUR | | |
|---|---|---|---|
| | STANDS D.P. | | FT. |
| | SINGLES D.P. | | FT. |
| 2 | D.C. 5" I.D. 9" O.D. | 50.32 | FT. |
| | D.C. I.D. O.D. | | FT. |
| | STB. BODY O.D. | | FT. |
| | STB. BODY O.D. | | FT. |
| | RMR. BODY O.D. | | FT. |
| 4 | SUBS O.D. | 12.45 | FT. |
| | BIT OR C.B. | | FT. |
| | | | FT. |
| | KELLY DOWN | 41.00 | FT. |
| | TOTAL | 103.00 | FT. |
| | WT. OF STRING | 30 M | LBS. |

BIT RECORD: BIT NO. 2A; SIZE 17½; MFG. SEC-; TYPE REAMER; NOZZLE NO.; NOZZLE SIZE; SER. NO. X4409; DEPTH OUT; DEPTH IN 0; TOTAL FTG. 103; TOTAL HR. RUN 4½; COND. OF BIT Rng.; REAMER NO.; REAMER TYPE

MUD RECORD: TIME; WEIGHT; VISC.-SEC; W.L.-C.C.; FLTR. CK.; PH; SD. CONT. %; PRESSURE GRADIENT

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

DRILLER Don Doyle

| 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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 103 | R | | | 65 | 2 | 400 | | | 5½ | 58 | S |
| | | | | | | | | | | X | | |
| | | | | | | | | | | 14 | | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8:00 | 10:30 | 2½ | WELD CONDUCTOR BBL. ON, Hook up Flow Line |
| 10:30 | 11:30 | 1 | Blow Mud Lines Pick up Reaming Eqmt. |
| 11:30 | 4:00 | 4½ | Reaming 12¼" TO 17½" Hole |

## EVENING TOUR

| NO. | DRILLING ASSEMBLY AT END OF TOUR | | |
|---|---|---|---|
| | STANDS D.P. | | FT. |
| | SINGLES D.P. | | FT. |
| 3 | D.C. 5" I.D. 9" O.D. | 80.94 | FT. |
| 1 | D.C. 2 7/8 I.D. 5 3/4 O.D. | 1.82 | FT. |
| | STB. BODY O.D. | | FT. |
| | STB. BODY O.D. | | FT. |
| | RMR. BODY O.D. | | FT. |
| 4 | SUBS O.D. | 12.45 | FT. |
| | BIT OR C.B. | | FT. |
| | | | FT. |
| | KELLY DOWN | 41.00 | FT. |
| | TOTAL | 316.77 | FT. |
| | WT. OF STRING | 54 M | LBS. |

BIT RECORD: BIT NO. 2A; SIZE 17½; MFG. SEC; TYPE REAMER; NOZZLE NO.; NOZZLE SIZE; SER. NO. X4409; DEPTH OUT; DEPTH IN 0; TOTAL FTG. 314; TOTAL HR. RUN 12¾; COND. OF BIT Rng; REAMER NO.; REAMER TYPE

MUD RECORD: TIME; WEIGHT; VISC.-SEC; W.L.-C.C.; FLTR. CK; PH; SD. CONT. %; PRESSURE GRADIENT

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

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 103 | 314 | R | | | 45 | 2 | 400 | 7¾ | | 5½ | 58 | S |
| | | | | | | | | | | | | |

DEVIATION RECORD

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

TIME LOG

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4:00 | 4:15 | ¼ | Rig SERV. |
| 4:15 | 12 MID | 7¾ | REAMING 12¼" TO 17½" HOLE |

## DRILLING CREW PAYROLL DATA

DATE MARCH 19/73

WELL NAME & NO. UNION AKLAVIK C-38

COMPANY UNION OIL CO LTD

TOOL PUSHER Barry D Armstrong RIG NO. #1

MORNING TOUR P.M. A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R BBundigé | 12 |
| DRKMAN | | E SWYTENKY | 12 |
| MTRMAN | | L COLLINS | 12 |
| FIREMAN | | | |
| FLRMAN | | T HANSON | 12 |
| FLRMAN | | D IRISH | 12 |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST-TIME ACCIDENT

DAY TOUR 8:00 A.M. 4:00 P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | D. DOYLE | 12 |
| DRKMAN | | G. HIEBERT | 12 |
| MTRMAN | | H. KLEEN | 12 |
| FIREMAN | | | |
| FLRMAN | | D. ULRICH | 12 |
| FLRMAN | | D. WEBBER | 12 |
| FLRMAN | | B. TAYLOR | 12 |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

EVENING TOUR P.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 2 — DATE MARCH 18/73

OPERATOR: UNION OIL CO. LTD

LEASE: UNION AKLAVIK C-38

WELL NO. C-38 — FIELD OR DIST.: AKLAVIK — COUNTY: N. WT — STATE: CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. — RIG NO. 1F

DRILL PIPE STRING NO. | SIZE — TOOL JOINT O.D. TYPE THD.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: A C Saudernsmith

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry D Armstrong

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NAT | K370 | 14 |
| 2. | NAT. | K380 | 14 |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 6¼ | 6¼ | |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | | ¼ | |
| TRIPS | | ½ | |
| LUBRICATE RIG | | ¼ | ¼ |
| DEVIATION SURVEY | ¾ | ¾ | |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| BORING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | ¼ | | ¼ |
| FISHING | | | |

COMPLETION WORK: A. PERFORATING; B. TUBING TRIPS; C. SWABBING; D. TESTING; E. ADDITIONAL

TOTALS: 8 — 8

## TIME SUMMARY (OFFICE USE ONLY)

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

## WIRE LINE RECORD

REEL NO.

NO. OF LINES — SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | | |
|---|---|---|---|
| | STANDS D.P. | | FT. |
| | SINGLES D.P. | | FT. |
| | D.C. | | |
| 3 | I.D. 9 O.D. | 80.94 | FT. |
| | D.C. | | |
| 9 | I.D. 2¼ O.D. 6¼ | 311.37 | FT. |
| | STB. BODY O.D. | | FT. |
| | STB. BODY O.D. | | FT. |
| | RMR. BODY O.D. | | FT. |
| 3 | SUBS O.D. | 10.50 | FT. |
| | BIT OR C.B. | | FT. |
| | | | FT. |
| | KELLY DOWN | 14 | FT. |
| | TOTAL | 375 | FT. |
| | WT. OF STRING | 58 M. | LBS. |

**BIT RECORD**

| | | |
|---|---|---|
| BIT NO. | 1A | |
| SIZE | 12¼ | |
| MFG. | SMITH | |
| TYPE | DTJ | |
| NOZZLE NO. | 3 | |
| NOZZLE SIZE | 18 | |
| SER. NO. | GN932 | |
| DEPTH OUT | | |
| DEPTH IN | 0 | |
| TOTAL FTG. | 375 | |
| TOTAL HR. RUN | 21¾ | |
| COND. OF BIT | ORlg | |
| REAMER NO. | | |
| REAMER TYPE | | |

**MUD RECORD**

| TIME | 7:00 | 5:00 | 7:00 |
|---|---|---|---|
| WEIGHT | 10.1 | 10.2 | 10.4 |
| VISC.-SEC | 56 | 75 | 60 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| Del | 25sks | | |
| Benex | 5sks | | |

DRILLER: R Brundidge

**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'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 225 | 375 | | | | 80 | 2 | 350 | 7¼ | | 6½ | 58 | S |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 225 | ¼ | 284. | ¼. | | | 343 | 0 | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 00 | 12 15 | ¼ | RIG SERV. & SURVEY. |
| 12 15 | 3 00 | 2¾ | DRLg. 12¼ HOLE |
| 3 00 | 3 15 | ¼ | SURVEY |
| 3 15 | 4 30 | 1¼ | WORK ON PUMP |
| 4 30 | 6 30 | 2 | DRLg. |
| 6 30 | 6 45 | ¼ | SURVEY. |
| 6 45 | 8 00 | 1¼ | DRLg. |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | | |
|---|---|---|---|
| | STANDS D.P. | | FT. |
| | SINGLES D.P. | | FT. |
| 9 | D.C. 5" I.D. 9" O.D. | 80.94 | FT. |
| | D.C. I.D. O.D. | | FT. |
| | STB. BODY O.D. | | FT. |
| | STB. BODY O.D. | | FT. |
| | RMR. BODY O.D. | | FT. |
| 3 | SUBS O.D. | 10.50 | FT. |
| | BIT OR C.B. | | FT. |
| | | | FT. |
| | KELLY DOWN | 24.32 | FT. |
| | TOTAL | 500.00 | FT. |
| | WT. OF STRING | 62 M | LBS. |

**BIT RECORD**

| | | |
|---|---|---|
| BIT NO. | 1A | |
| SIZE | 12¼ | |
| MFG. | SMITH | |
| TYPE | DTJ | |
| NOZZLE NO. | 3 | |
| NOZZLE SIZE | 18 | |
| SER. NO. | GN932 | |
| DEPTH OUT | 500 | |
| DEPTH IN | 0 | |
| TOTAL FTG. | 500 | |
| TOTAL HR. RUN | 28¼ | |
| COND. OF BIT | | |
| REAMER NO. | | |
| REAMER TYPE | | |

**MUD RECORD**

| TIME | 10:00 | 12:00 | 2:00 |
|---|---|---|---|
| WEIGHT | 10.0 | 10.0 | 10.0 |
| VISC.-SEC | 55 | 57 | 58 |
| W.L.-C.C. | | | |
| FLTR. CK. | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| GEL | 1500# | | |
| BENEX | 3 SKS | | |

DRILLER: Don Doyle

**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 SGL.-S PAR'EL-P COM'D-C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 375 | | D | | | 80 | 2/5 | | 7¼ | | 6½ | | S |
| | | | | | | | | X | | X | | |
| | | | | | | | | 14 | | 14 | | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 402 | ¼ | | 458 | ½° | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8:00 | 9:00 | 1 | DRLg. 12¼" HOLE |
| 9:00 | 9:15 | ¼ | Rig SERV. |
| 9:15 | 9:45 | ½ | SURVEY |
| 9:45 | 1:15 | 3½ | DRLg. 12¼" HOLE |
| 1:15 | 1:30 | ¼ | SURVEY |
| 1:30 | 3:15 | 1¾ | DRLg. 12¼" HOLE |
| 3:15 | 3:30 | ¼ | CIRC. |
| 3:30 | 4:00 | ½ | Hoist & STAND OUT |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | | |
|---|---|---|---|
| | STANDS D.P. | | FT. |
| | SINGLES D.P. | | FT. |
| | D.C. I.D. O.D. | | FT. |
| | D.C. I.D. O.D. | | FT. |
| | STB. BODY O.D. | | FT. |
| | STB. BODY O.D. | | FT. |
| | RMR. BODY O.D. | | FT. |
| | SUBS O.D. | | FT. |
| | BIT OR C.B. | | FT. |
| | | | FT. |
| | KELLY DOWN | | FT. |
| | TOTAL | | FT. |
| | WT. OF STRING | | LBS. |

**BIT RECORD**

| | | |
|---|---|---|
| BIT NO. | 1A | |
| SIZE | 12¼ | |
| MFG. | SMITH | |
| TYPE | DTJ | |
| NOZZLE NO. | 3 | |
| NOZZLE SIZE | 18 | |
| SER. NO. | GN932 | |
| DEPTH OUT | 500 | |
| DEPTH IN | 0 | |
| TOTAL FTG. | 500 | |
| TOTAL HR. RUN | 28¼ | |
| COND. OF BIT | 4-3-I | |
| REAMER NO. | | |
| REAMER TYPE | | |

**MUD RECORD**

| TIME | | | |
|---|---|---|---|
| WEIGHT | | | |
| VISC.-SEC | | | |
| W.L.-C.C. | | | |
| FLTR. CK | | | |
| PH | | | |
| SD. CONT. % | | | |
| PRESSURE GRADIENT | | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. 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 | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4:00 | 4:15 | ¼ | Rig SERV. |
| 4:15 | 5:45 | 1½ | FINISH Hoisting & Lay 9" COLLARS DOWN |
| 5:45 | 8:00 | 2¼ | PICK UP HOLE OPENER, TAKE KELLY HOSE OFF, BLEED ACUM. OFF |
| 8 00 | 10 00 | ½ | ~~LAY SWAMP LINER.~~ |
| 10 00 | 12:30 | ½ | ~~LAY down S.O.P.~~ |

## DRILLING CREW PAYROLL DATA

DATE MARCH 18/73

WELL NAME & NO. UNION AKLAVIK C-38

COMPANY UNION OIL CO. LTD

TOOL PUSHER Barry D Armstrong — RIG NO. 1F

MORNING TOUR — P.M. — A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R BRUNDIDGE | 12 |
| DRKMAN | | F SWYSENKY | 12 |
| MTRMAN | | L COLLINS | 12 |
| FIREMAN | | | |
| FLRMAN | | T HANSEN | 12 |
| FLRMAN | | D IRISH | 12 |
| FLRMAN | | | |

NO. OF DAYS — SINCE LAST LOST-TIME ACCIDENT

DAY TOUR 8:00 A.M. 4:00 P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | D. DOYLE | 13 |
| DRKMAN | | G. HIEBERT | 13 |
| MTRMAN | | H. KLEEN | 13 |
| FIREMAN | | | |
| FLRMAN | | D. ULRICH | 13 |
| FLRMAN | | D. WEBBER | 13 |
| FLRMAN | | B. TAYLOR | 13 |

NO. OF DAYS — SINCE LAST LOST TIME ACCIDENT

EVENING TOUR — P.M. — P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS — SINCE LAST LOST TIME ACCIDENT

# DAILY DRILLING REPORT

REPORT NO. 1 DATE March 17/73

OPERATOR: Union OIL CO. LTD

LEASE: Union AKLAVIK C38

WELL NO. C38 FIELD OR DIST. AKLAVIK COUNTY N.W.T. STATE CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. RIG NO. 1E

DRILL PIPE STRING NO. 2 SIZE 4 TYPE THD. — TOOL JOINT O.D.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: L.C. Saunderson

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Barry D Armstrong

**PUMPS**

| NO. | MANUFACTURER | TYPE | STROKE LENGTH |
|---|---|---|---|
| 1. | NAT | K380 | 14 |
| 2. | NAT | K380 | 14 |
| 3. | | | |

**LAST CASING TUBING OR LINER**

| SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | RKB. TO CSG. HD. | SET AT | REMARKS |
|---|---|---|---|---|---|---|---|
| | | | | | | | |

## TIME DISTRIBUTION—HOURS

| | MORN | DAY | EVE |
|---|---|---|---|
| RIG UP & TEAR DOWN | | | |
| DRILLING ACTUAL | 2 | 6 | 7½ |
| REAMING | | | |
| CONDITIONING MUD & CIRCULATING | 6. | | |
| TRIPS | | | |
| LUBRICATE RIG | | | |
| DEVIATION SURVEY | | ½ | ½ |
| TEST B.O.P. | | | |
| CUT OFF DRILLING LINE | | | |
| REPAIR RIG | | | |
| [illegible]RING | | | |
| WIRE LINE LOGGING | | | |
| RUNNING CASING & CEMENTING | | | |
| WAITING ON CEMENT | | | |
| DRILL STEM TEST | | | |
| OTHER | | 1½ | |
| FISHING | | | |
| COMPLETION WORK A. PERFORATING | | | |
| B. TUBING TRIPS | | | |
| C. SWABBING | | | |
| D. TESTING | | | |
| E. ADDITIONAL | | | |
| TOTALS | 7 | 8 | |

## TIME SUMMARY (OFFICE USE ONLY)

| | | | |
|---|---|---|---|
| DAY WORK | | | |
| HRS. W/DP | | | |
| HRS. WO/DP | | | |
| HRS. STANDBY | | | |
| TOTAL DAY WORK | | | |

## WIRE LINE RECORD

REEL NO.

NO. OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

## MORNING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | | |
|---|---|---|---|
| | STANDS D.P. | | FT. |
| | SINGLES D.P. | | FT. |
| 1 | D.C. 3 9 I.D. O.D. | 19.62 | FT. |
| | D.C. I.D. O.D. | | FT. |
| | STB. BODY O.D. | | FT. |
| | STB. BODY O.D. | | FT. |
| | RMR. BODY O.D. | | FT. |
| 3 | SUBS O.D. | 10.5 | FT. |
| | BIT OR C.B. | | FT. |
| | | | FT. |
| | KELLY DOWN | 30 | FT. |
| | TOTAL | 60 | FT. |
| | WT. OF STRING 25m | | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 1A |
| SIZE | 12¼ |
| MFG. | Smith |
| TYPE | OTJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 18 |
| SER. NO. | GN932 |
| DEPTH OUT | |
| DEPTH IN | 0 |
| TOTAL FTG. | 60 |
| TOTAL HR. RUN | 2 |
| COND. OF BIT | ORlg |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | |
|---|---|
| TIME | 7:00 |
| WEIGHT | 10.0 |
| VISC.-SEC | 100 |
| W.L.-C.C. | |
| FL.TR. CK. | |
| PH | |
| SD. CONT. % | |
| PRESSURE GRADIENT | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| BARITE | 190 sks. | | |
| Bent A | 5 sks. | | |

DRILLER R. Brundige

**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'EL—P COM'D—C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 60 | | | | 60 | 2. | 400 | 7¼ | | 5½ | 70 | S |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 12 | 6 | 6 | mix MUD & Rig To SPUD. |
| 6 | 8 | 2 | SPUD in 1st 12¼ & DRLg. |

## DAY TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | | |
|---|---|---|---|
| | STANDS D.P. | | FT. |
| | SINGLES D.P. | | FT. |
| 3 | D.C. 9" I.D. O.D. | 80-94 | FT. |
| 3 | D.C. I.D. O.D. | | FT. |
| | STB. BODY O.D. | | FT. |
| | STB. BODY O.D. | | FT. |
| | RMR. BODY O.D. | | FT. |
| 3 | SUBS O.D. | 10.50 | FT. |
| | BIT OR C.B. | | FT. |
| | | | FT. |
| | KELLY DOWN | 41.48 | FT. |
| | TOTAL | 131-98 | FT. |
| | WT. OF STRING 36 M | | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 1A |
| SIZE | 12¼ |
| MFG. | SMITH |
| TYPE | OTJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 18 |
| SER. NO. | GN932 |
| DEPTH OUT | |
| DEPTH IN | 0 |
| TOTAL FTG. | 131 |
| TOTAL HR. RUN | 8 |
| COND. OF BIT | RNg. |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | |
|---|---|---|
| TIME | | 2:00 |
| WEIGHT | | 10.5 |
| VISC.-SEC | | 200+ |
| W.L.-C.C. | | |
| FL.TR. CK. | | |
| PH | | |
| SD. CONT. % | | |
| PRESSURE GRADIENT | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

DRILLER Don Doyle

**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 SGL.—S PAR'EL—P COM'D—C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 60 | 131 | D | | | 60 | 4 | 400 | 7¼ | | 5½ | 70 | S |
| | | | | | 80 | 4 | 350 | | | 5½ | 58 | |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 70' | 0° | | 106' | ½° | | 130' | ½° | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 8:00 | 10:15 | 2¼ | DRLg. 12¼" Hole |
| 10:15 | 10:30 | ¼ | SURVEY |
| 10:30 | 11:30 | 1 | Pick up 9" D.C. |
| 11:30 | 1:15 | 1¾ | DRLg 12¼" Hole |
| 1:15 | 1:30 | ¼ | SURVEY |
| 1:30 | 2:00 | ½ | Pick up 9" D.C. |
| 2:00 | 4:00 | 2 | DRLg. 12¼" Hole |

## EVENING TOUR

**DRILLING ASSEMBLY AT END OF TOUR**

| NO. | | | |
|---|---|---|---|
| | STANDS D.P. | 0 | FT. |
| | SINGLES D.P. | 11 | FT. |
| 3 | D.C. 3" 9" I.D. O.D. | 80.94 | FT. |
| 3 | D.C. 7⅞ 6¼ I.D. O.D. | 135 | FT. |
| | STB. BODY O.D. | | FT. |
| | STB. BODY O.D. | | FT. |
| | RMR. BODY O.D. | | FT. |
| 3 | SUBS O.D. | 10.50 | FT. |
| | BIT OR C.B. | | FT. |
| | | | FT. |
| | KELLY DOWN | 41 | FT. |
| | TOTAL | 22 | FT. |
| | WT. OF STRING 40m | | LBS. |

**BIT RECORD**

| | |
|---|---|
| BIT NO. | 1A |
| SIZE | 12¼ |
| MFG. | SMITH |
| TYPE | OTJ |
| NOZZLE NO. | 3 |
| NOZZLE SIZE | 18 |
| SER. NO. | GN932 |
| DEPTH OUT | |
| DEPTH IN | 0 |
| TOTAL FTG. | 225 |
| TOTAL HR. RUN | 15½ |
| COND. OF BIT | RNg. |
| REAMER NO. | |
| REAMER TYPE | |

**MUD RECORD**

| | | |
|---|---|---|
| TIME | 8:00 | 10:00 |
| WEIGHT | 10.0 | 10.1 |
| VISC.-SEC | 55 | 55 |
| W.L.-C.C. | | |
| FL.TR. CK | | |
| PH | | |
| SD. CONT. % | | |
| PRESSURE GRADIENT | | |

MUD & CHEMICALS ADDED

| TYPE | AMT. | TYPE | AMT. |
|---|---|---|---|
| | | | |

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. 2 LINER SIZE | PUMP NO. 2 S.P.M. | METHOD RUN SGL.—S PAR'EL—P COM'D—C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 131 | 225' | D | | | 80 | 2 | 350 | | | 5½ | 58 | S |

**DEVIATION RECORD**

| DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION |
|---|---|---|---|---|---|---|---|---|
| 163' | ¼° | | | | | | | |

**TIME LOG**

| FROM | TO | ELAPSED TIME | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS |
|---|---|---|---|
| 4:00 | 4:15 | ¼ | SURVEY |
| 4:15 | 7:00 | 2¾ | DRLg. 12¼" Hole |
| 7:00 | 7:15 | ¼ | SURVEY |
| 7:15 | 12 | 4¼ | DRLg. 12¼" Hole |

## DRILLING CREW PAYROLL DATA

DATE MARCH 17/73

WELL NAME & NO. Union AKLAVIK C38

COMPANY Union Oil CO LTD.

TOOL PUSHER Barry D Armstrong RIG NO. 1E

**MORNING TOUR** P.M. A.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | R BRUNDIGE | 12 |
| DRKMAN | | E SWYRYDKY | 12 |
| MTRMAN | | L COLLINS | 12 |
| FIREMAN | | | |
| FLRMAN | | T HANSON | 12 |
| FLRMAN | | D IRISH | 12 |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

**DAY TOUR** 8:00 A.M. 4:00 P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | D. DOYLE | 12 |
| DRKMAN | | G. HIEBERT | 12 |
| MTRMAN | | H. KLEEN | 12 |
| FIREMAN | | | |
| FLRMAN | | D. UHRICH | 12 |
| FLRMAN | | D. WEBBER | 12 |
| FLRMAN | | B. TAYLOR | 12 |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT

**EVENING TOUR** P.M. P.M.

| CREW | SOC. SEC. NO. | NAME | HRS. |
|---|---|---|---|
| DRILLER | | | |
| DRKMAN | | | |
| MTRMAN | | | |
| FIREMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |
| FLRMAN | | | |

NO. OF DAYS SINCE LAST LOST TIME ACCIDENT