AMOCO MURPHY
CORMACK-N-33

Drilling Authority No. 409

Date Issued 22 January 1970

WELL NAME Amoco Murphy Cormack M-33

FIELD

LOCATION Unit M Area

Section 33 Grid 61-00-122-30

Latitude 61-00-47.1 Longitude 122-30-43.6

U.T.L.R 61.07975 -- 122.61211

U.W.I. 300M336100122300

Rig Release Date

Status

Information Release Date

CHANGE OF NAME

DATE RECEIVED	INDEX
22-1-70	Application for a Drilling Authority.
	Well Completion Data.
	Well History Report.
	Application to Amend a Drilling Authority.
	Application to change a Well Name.
	Application to Abandon a Well ~~or Suspend Drilling~~.
	Application to Alter Condition of a Well.
	Well History Supplement.
20/4/70	Well Completion Data.
	Work-over Report No.
	Application to Commingle Production before Measurement.
	Data for Back Pressure Test on Natural Gas Wells - Monograph 7 Method.
	Data for Back Pressure Test on Natural Gas Wells - Vitter's Method.
	M.P.R. - Oil - Calculations.
	New Oil Well Report.
	New Gas Well Report.
	Well Inspection Report.
	Rig Inspection Report.
	Battery Inspection Report.
	Equipment Report.
	Well Card.
	New Service Well Report.
	Monthly Water Flood Operations Report
	Monthly Water Receipts and Disposal of Fluids Report
	Logs. Large scale ..... Small scale .....

LAND 5340 (3-69)

Drilling Authority No. 403

Date Issued 1/22/70

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

WELL COMPLETION DATA

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

Well name and number AMOCO MURPHY CORMACK M-33

Permit No. Lease No. 138-65

Murphy Oil Co. Ltd. (Permittee, Licencee, Lessee) Exploratory Licence No. 1360

Amoco Canada Petroleum Co. Ltd. (Operator) Exploratory Licence No. 1333

Location Unit N Section 33 Grid 61°00': 122°30'

Latitude 60°32'47.1" N Longitude 122°36'43.6" W

From Established Reference Marker

Universal Well Location Reference Lat. 60.87975°N Long. 122.61211°W

	1970	DEPTH
Spudded	Feb. 1	
Suspended	--	
Resumed Operations	--	
Finished Drilling	March 9	6253'
Deepened	--	
Completed (gas, oil)	--	
Abandoned	Mar. 13-14	
Rig released	March 14	
Logger's T.D.		6258'

Pool(s)

Interval(s) open to production NIL

Elevation Gr. 1860 K.B. 1877.95

Rig No. 2

Drilling Contractor Keen Drilling Ltd.

Contractor's Business Licence No. 0594

CASING RECORD

	Casing Size (Inches)	Grade	Weight	Amount	Set at	Sacks of Cement and Additives
1.	9 5/8"	J-55	40#	700'	720'	360 sx + 2% $CaCl_2$ Recemented with 90 sacks + 2%$CaCl_2$.
2.						
3.						
4.						
5.						
6.						

GEOLOGICAL TOPS	ELEVATION Depths	ELEVATION Sub-Sea
KB	0	1878
Ground	18	1860
2nd Hay River	2137	-259
Ft. Simpson Shale	2338	-460
Black Shale	5230	-3352
Mid-Dev. Carb.	5301	-3423
Detrital	6062	-4184
Dolomite	6155	-4277
Pre-Devonian	6224	-4346

CORE RECORD

From	To	Rec.	From	To	Rec.
5310	5370	60			
5370	5430	60			

LOG RECORD

Run No.	Type of Log	From	To
1	BHC	6256	721
1	Porosity-Lithology	6256	5000
1	DIL	6254	721
1	SNP	6257	5000
1	Formation Density	6257	5000
1	Continuous Dipmeter	6250	5000

IAND 82-90 (2) (2-69)

CEMENTING RECORD (Plug Squeeze, etc.)

Date	From	To	Remarks
March 14, 1970	5650	5250	230 sx + 2% $CaCl_2$ Plug @ 5215'
	670	770	60 sx + 3% $CaCl_2$ Plug @ 669'
			5 sx of cement in top of casing

PERFORATING RECORD (Bullet, Jet)

Date	From	To	Remarks
			NIL

SERVICING RECORD (Acidizing, Fracing, etc.)

Date	From	To	Remarks
			NIL

DRILL STEM TESTS

No.	Date	Type	From	To	I.H. (Min.)	I.S.I. (Min.)	F.P. (Min.)	I.S.I.P.	F.S.I.P.	I.F.P.	F.F.P.	H.H.P.	F.H.P.	REMARKS
1	March 3 1970	Mid-...	Carb.	5317	5430	60	60	120	1912	1834	104	235	2595	2542	Weak initial puff increasing slightly and dying in 50 minutes. Recovered 90' gas cut mud 374' salt water

ANALYSIS

No.	Sample	From	To	Status	Remarks
CSP-4-5030	#1	5310	5370	Core	See Attachment
" " "	#2	5370	5430	Core	See Attachment
C-70-3635-J	Water			DST #1	See Attachment (Attachments included on Well History Report)

PRESENT STATUS OF WELL

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

Company: Amoco Canada Petroleum Co. Ltd.

Signed by: [signature]

Title: Area Foreman

Date: April 20, 1970

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

CEMENTING RECORD (Plug, Squeeze, etc.)

Date	From	To	Remarks
March 14, 1970	5650	5250	230 sx + 2% $CaCl_2$ felt @ 5235'
	670	770	60 sx + 3% $CaCl_2$ felt @ 660'
			5 sx of cement in top of casing

PERFORATING RECORD (Bullets, Jets)

Date	From	To	Remarks
			NIL

SERVICING RECORD (Acidized, Previous Tests, etc.)

Date	From	To	Remarks
			NIL

DRILL STEM TESTS

No.	Date	Formation	From	To	I.C.O. Mins.	I.S.I. Mins.	F.S.I. Mins.	I.S.I.P.	F.S.I.P.	I.H.P.	F.H.P.	F.F.P.	S.I.B.H.P.	REMARKS
1	March 3 1970	Mid-Dev. Carb.	5317	5430	60	60	120	1912	1854	104	23½	2595	2542	Weak initial puff increasing slightly and dying in 50 minutes. Recovered 90' gas cut mud 174' salt water

ANALYSIS

Lab. No.	Sample	From	To	Source	Remarks
CWP-4-5030	#1	5310	5370	Core	See Attachment
" " " "	#2	5370	5430	Core	See Attachment
C-70-5835-2	Water			DST #1	See Attachment (Attachments included on Well History Report)

PRESENT STATUS OF WELL

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

Company Amoco Canada Petroleum Co. Ltd.

Signed by [signature]

Title Area Foreman

Date April 20, 1970

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

File No.
Drilling Authority No. 409

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
RESOURCE MANAGEMENT DIVISION
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 Amoco Murphy Germain E-23

Location Unit E Section 33 Grid 61° 00' 122° 30'

Latitude 60° 32' 47.1" N Longitude 122° 36' 43.6" W

From Established Reference Marker

Universal Well Location Reference Lat. 60.79752°N Long. 122.61211°W

Permit No. Lease No. 138-65

Murphy Oil Co. Ltd.
(Permittee, Licensee, Lessee)

Date of commencement of proposed program March 14, 1970

OIL, GAS, AND WATER ENCOUNTERED
(Depths)

Oil at
Gas at
Water at
Total Depth 6236' Date of last operations
Present condition of well

Abandoned

CASING RECORD

	Casing Size O.D. Inches	Weight	Amount	Set At	Sacks of Cement and Additives	Amount Pulled
1.	9 5/8"	40#	19 Jts.	739'KB	360 sx + 2% CaCl2	
2.						
3.						
4.						
5.						

[illegible] ABANDONMENT [illegible]

No.	Plug Position	Geological Formation	Number of Sacks of Cement	Remarks
1.	3650 - 3250'	Mahonni Basa Plateau	256 sx	felt @ 3235'
2.	670 - 770'	Casing	60 sx	felt @ 660'
		spotted 5 sx in casing		
		install riser with identification marker.		

The following logs have been run BHC Sonic, G.R. Caliper, SHP Caliper, Porosity Lithology, Other operations proposed Dipmeter, and Density Caliper. DIL

Operations to be carried out by Loon Drilling Co. Ltd. Contractor Licence No. 0596
Address 6815 Centre Road Address Edmonton, Alberta
Responsible Agent in field Amoco Canada Petroleum Company Ltd.
Dated at Grande Prairie, this 23 Day of March 1970
Signed by [signature] Company Amoco Canada Petroleum Company Ltd.
Title Area Foreman Operator's Exploratory Licence No. 1335

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

(For RESOURCE MANAGEMENT DIVISION use only)

APPROVAL

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

Confirming oral approval given by Mr. B.H.J. Thomas on the 17th March 1970.

Dated 2nd April, 1970

[signature]
Oil Conservation Engineer

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

IAND 32-60 (5) (3-67)

Date of Issue [illegible]

Survey Instructions - Nov. [illegible]
(Please quote these numbers and files above when writing)

Issued to: Mr. [illegible],
Operations Manager,
Canadian Aerial Surveys Ltd.,
Credit Foncier Building,
10271 Jasper Avenue,
Edmonton 15, Alberta.

References: Your files C-[illegible] and C-[illegible], January [illegible], 1970 and C-[illegible], February 12, 1970.

Descriptions: In order of N.T.S. numbers

1) Survey of Target Area in Unit ...., Section ...., Grid Area [illegible], 122°40', N.W.T.

2) Survey of Target Area in Unit ...., Section ...., Grid Area [illegible], 122°30', N.W.T.

3) Survey of Target Area in Unit ...., Section ...., Grid Area [illegible], 122°40', N.W.T.

(Please use these descriptions in your plan titles.)

Statutory Authority and Instructions: Canada Oil and Gas Land Regulations 1961 and the Manual of Instructions for the Survey of Canada Lands supplemented by Part E (Provisional) Territorial Oil and Gas Land Surveys.

Plans Required: Official plans under Section 12 and approved under Section 14 of the Canada Oil and Gas Land Regulations.

Special Remarks: Under 1, 2 and 3 above, you may survey the well locations C-[illegible], C-[illegible] and Imperial Sun Hotle [illegible] mentioned in your letters.

Please note that the monuments (enclosures 4 and 5) are of "Third Order" control. Please refer to enclosure [illegible] for the Territorial Plane Co-Ordinates to be used for this work.

Please be guided by the following if Autotape fixing from control is used:

.../2

b) Where check (preferably) and all control must be provided either by direct measurement between the control points used or by full observations from [illegible] between them.

c) Full [illegible] observations to at least three surrounding control points are preferable to the double check from a single control base.

Survey posts are available from either Mr. [illegible], District Engineer, Department of Transport, 703 Federal Building, Edmonton, Alberta or our depot in Hay River through Mr. R. [illegible], Regional Administrator, Government of the Northwest Territories. After the work has been completed, please fill in one of the enclosed post report forms (enclosure [illegible]) and send it in with your field returns so that we can bill you for the cost of posts used at the rate of approximately $4.00 for each standard post and $2.00 for each new or old pattern iron post. Please return all unused posts to Hay River and obtained there.

Enclosures: 6 (list of the following)

1. [illegible] Index to Grid Areas, Northern Sheet, Oil and Gas Permit Areas, Yukon and Northwest Territories.

2. Manual of Instructions for the Survey of Canada Lands, Part II, Territorial Oil and Gas Land Surveys (Provisional).

3. [illegible] Part [illegible] Topographic Map, Scale 1:250,000.

4. Permanent Record Cards for [illegible], A-3, A-4, A-5 and A-6.

5. Aerial Photographs [illegible], 17437-81, [illegible], 17441-19, 17442-37, 17443-3 and 17441-111 (to be sent later).

6. List showing geographic locations of comments on B.C. - N.W.T. boundary.

7. [illegible] 5314 - Sheets 5, 6 and 7 Provisional - B.C. - N.W.T. Boundary.

8. Computer sheet listing Territorial Plane Co-ordinates for monuments Hay Gap, A-2, A-3, A-4, A-5 and A-6 (enclosure 4) and monuments Nos. 17, 18, 19, D.L.S. post 28, 30, 31 and 32 (enclosure 5).

9. Survey post report forms.

10. Sec. 21 and 22A.

11. Monument Record card and description for Mahanni.

12. Account No. [illegible] to cover the cost of material supplied.

[illegible]

J. H. Thistlethwaite,
Surveyor General,
Legal Surveys Division.

c.c. Dr. H.W. Woodward,
Chief, Oil and Mineral Division.

Permit Authority No. 449

File No.

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

Application for a Drilling Authority

This notice of intention to begin drilling operations, in triplicate, and where required a plan (to be 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 AMOCO MURPHY OCEANIC M-33

Location: Unit M Section 33 Grid 61° 00'; 122° 30'

Latitude 60° 52' 47.1" N Longitude 122° 34' 43.6" W

Surface Location 300N136100122300

Universal well location reference Lat. 60.87230° N., Long. 118.85199° W.

Elevation: Ground K B feet above sea level

Well is expected to produce from HOSS formation at a depth of about 7300' feet Expected total final depth 7300'

Area assigned to well

(for Oil Conservation Engineer's use only)

Permit No. Lease No. 136-05 Acreage 4677

Permittee, licensee, or lessee MURPHY OIL CO. LTD.

Exploratory Licence No. 136

Surface owned by Crown

Petroleum and natural gas rights owned by CROWN (Indicate whether name and address of owner and assignees)

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

	Casing Size O.D. (Inches)	Weight (lbs. Per)	Grade	New or Used	Estimated Depth	Number of Centres
1	9 5/8	40	K-55	NEW	0-700	To Surface
2	7"	23	N-80	"	0-7300	As Req'd
3						
4						
5						

Expected water, gas, and oil horizons and type of control equipment

Drilling mud and blowout preventers

1 Hydril & 1 Double Gate Schaeffer Hydril with remote control

Well will be drilled with Rotary Rig No. 2 by KEEN DRILLING LTD. (Drilling Contractor or company)

8015 Coronet Rd., Edmonton 62, Alberta

Responsible agent(s) of applicant

At well J.W. Savage

Address 9916A Richmond Avenue, Grande Prairie, Alberta

Contractor's business Licence No. 0594

At registered office SAME

Address

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

Dated at Grande Prairie, this 12th day of January 19 70

Signed by J.W. Savage Company Amoco Canada Petroleum Co. Ltd.

Title Drilling Foreman Operator's Licence No. 1335

(For Oil and Mineral Division use only)

APPROVED

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

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

Dated 22nd January 19 70 Please see over page

Oil Conservation Engineer

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

(AND 5-2400) (3-69)

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

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

B.E.J. Thome, Oil Conservation Engineer

PLAN

SHOWING WELL LOCATION

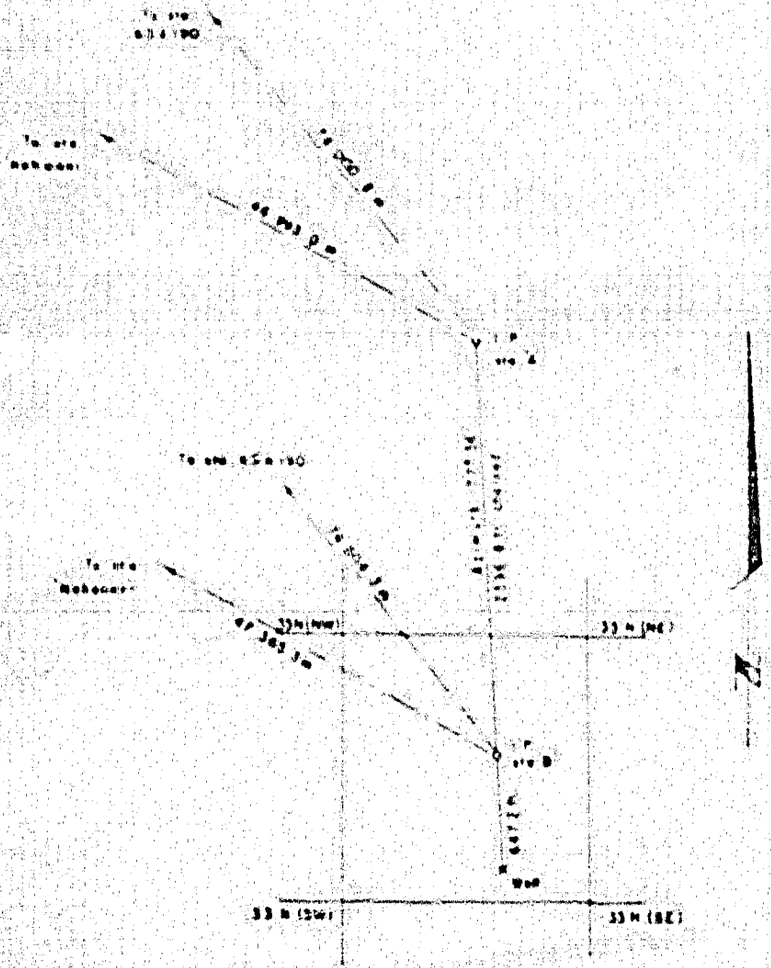
IN

UNIT K SEC 33, GRID AREA 61°00', 122°

NORTHWEST TERRITORIES

FOR

AMOCO CANADA PETROLEUM COMPANY LTD.



TITLE

AMOCO MURPHY A1 CORMACK
61° 00', 122° 30°

WELL LOCATION
60° 52' 42"1 North Lat
122° 36' 45"6 West Long

AMOCO ... PET ... D

LEGEND

Alberta Iron Posts planted shown thus ○
Distance measured by Autotape — — — —
Distances are reduced to Sea-Level.
Scale factor is not applied to measured distances
Bearing is referred to Central Meridian 123° W

TABLE OF CO-ORDINATES

Station		feet		feet	
Well		22 1[illegible]		69 112 [illegible]	
A		22 152 [illegible]		68 985	3
		22 150 504	4	69 085	7
33	(E)	22 151 192	17	69 592	67
33	(C)	22 14[illegible]	08	69 [illegible]	74
33	(W)	22 15[illegible]	21	[illegible]	82
33	(W)	22 149	12	[illegible]	9 71

Certified correct
Jan 11/[illegible]
D.L.S.
CANADIAN ENGINEERING SURVEYS LTD.

This survey was executed between [illegible] 10, 1969 and [illegible] 5, 1970

C-6206
No. 6206

Department of Energy, Mines and Resources
Ministère de l'Énergie, des Mines et des Ressources

Surveys and Mapping Branch
Direction des levés et de la cartographie

Our file / Notre référence 25/362 [illegible] 19
COMMENT

Ottawa 4, JUN 10 1970

Dr H W Westoward
Chief Oil & Minerals Division
Northern Development Development Branch
Dept Indian Affairs & Northern Development
Centennial Tower
Ottawa 4, Ontario

Dear Sir

Re: Your file
SURVEY OF [illegible] APPLY MURPHY [illegible]
GRID AREA 5 [illegible], UNIT N [illegible]

We enclose 2 print(s) of this plan, which we are about to examine. Survey instructions were dated 4 / 5 / 70 We have not recognized any feature of the plan requiring special comment.

Please tell us what transaction is to be based on this plan, how it is to be effected, and whether the plan appears to be suitable for this purpose.

You may find it convenient to use the attached copy of this letter for your reply.

Yours truly,

R. Thistlethwaite,
Surveyor General.

To Surveyor General:

Particulars of Transaction

Grant (fee simple or equivalent)	☐	N/A	
Transfer (administration, etc.)	☐		
Lease (long Term)	☐	Letters Patent	☐
License of Occupation	☐	Order-in-Council	☐
Certification of Possession	☐	Departmental Letter	☐
Easement	☐		
Reservation (Territorial Lands)	☐	Plan seems suitable	☒
Lease (10 Years or less)	☐	Description required	☐

Date: File:

L.S. 53
Jan. 68

WELL HISTORY REPORT

AMOCO MURPHY CORMACK N-33

UNIT N SECTION 33 GRID 61°00', 122°30'

NORTHWEST TERRITORIES

by:
N. Greer
Professional Assistant
Approved by:

A.F. Nolan
Area Foreman

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

AMOCO CANADA PETROLEUM COMPANY LIMITED
444 - 7th Ave. S.W.
Calgary 2, Alberta

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VI	Completion Summary	5

ATTACHMENTS

Water Analysis

Core Analysis

Sample Descriptions

Core Descriptions

WELL HISTORY

REPORT

Section 1 - Summary of Well Data

(a) Well Name and Number

Amoco Murphy Cornack N-33

(b) Permittee, Licensee or Lessee

Murphy Oil Company Ltd.

(c) Name of Operator

Amoco Canada Petroleum Company Limited
444 - 7th Avenue S.W.
Calgary, Alberta

(d) Location

Unit N Section 33 Grid 61°00', 122°30'
Lat. 60°52'47.1"N Long. 122°36'41.6"W
Unique Well Identifier: 300N336100122300
Universal Well Location Reference; Lat. 60.87975°N Long. 122.61211°W

(e) Coordinates

Not available (see survey plat)

(f) Permit or Lease Number

Lease Number - 138-65

(g) Drilling Contractor

Keen Drilling Ltd.
Rotary Rig, Number - 2

(h) Drilling Authority

#409 issued on the 22nd of January, 1970

(i) Classification

New-field wildcat

(j) Elevations

Ground: 1860
K.B. : 1877.95

(k) Spudded

February 1, 1970

(l) Completed Drilling
March 9, 1970

(m) Total Depth
T.D. 6253'
Logger shows T.D. @ 6258'

(n) Well Status
Abandoned

(o) Rig Released Date
March 14, 1970

(p) Hole Sizes to Total Depth
0' - 720' 13 3/4"
720' - 6253' 8 1/2"

(q) Casing
Casing Size: 9 5/8"
Grade: J-55
Weight: 40#
Amount: 700' (Includes float collar & shoe & thread adjustment)
Set At: 720'

Section II - Geological Summary

(a) Formation Tops

Formation	Depth	Sub-Sea
KB	0	+ 1878
Ground	18	1860
2nd Bay River	2137	- 259
Ft. Simpson Shale	2338	- 460
Black Shale	5230	-3352
Mid Devonian Carbonate	5301	-3423
Detrital	6062	-4184
Dolomite	6155	-4277
Pre-Devonian	6224	-4346

(b) Cored Intervals
Core #1 5310' - 5370' Rec. 60'
Core #2 5370' - 5430' Rec. 60'

(c) Core Descriptions (See Attachment)

(d) Sample Descriptions (See Attachment)

(e) Paleontological Determinations
Not performed

Section III - Engineering Summary

(a) Report of Drill Stem Tests
D.S.T. #1 5317' - 5430' Mid Devonian Carbonate March 3, 1970
T.O. - 60 mins.; IST - 60 mins.; FST - 120 mins.; ISIP - 1912; FSIP - 1854; IFP - 104; FFP - 235; IHP - 2595; FHP - 2542; Weak initial puff increasing slightly and dying in 50 minutes. Recovered 90' gas cut mud and 374' salt water.

(b) Casing Record
Surface Casing

Hole Size:	13 3/4"
Casing Size:	9 5/8"
Weight:	40#
Grade:	J-55
Joints Run:	20 (pipe tally)
KB Setting Depth:	720'
Cement & Additives:	360 sx + 2% $CaCl_2$. Recemented with 40 Sacks + 2% $CaCl_2$.
Date Run:	February 4, 1970
Date Cemented:	February 4, 1970

(c) Bit Record

BIT	SIZE	TYPE	MAKE	IN	OUT	FT.	HOURS
1	12 1/4	YT3A	Reed	0	440	440	29 3/4
2	13 3/4	DSC-JJ	H.W.	440	720	280	14 1/2
3	8 1/2	STIA-G	Reed	720	2052	1332	59
4	8 1/2	SCM	Reed	2052	2384	332	19 3/4
5	8 1/2	STIA-G	Reed	2384	3345	961	40
6	8 1/2	STIA-G	Reed	3345	4130	785	34 1/2
7	8 1/2	STIA-G	Reed	4130	4489	359	16 3/4
8	8 1/2	STIA-G	Reed	4489	4738	249	14 1/2
9	8 1/2	STIA-G	Reed	4738	4916	1	8 3/4
10	8 1/2	XI-G	H.W.	4916	5247	331	21 1/4
4RR	8 1/2	SCM	Reed	5247	5310	63	91 1/4
11	8 1/2	SHC	Reed	5310	Condition Hole		

BIT	SIZE	TYPE	MAKE	IN	OUT	FT.	HOURS
12 (CB#1)	8 7/16	Diamond	Christensen	5310	5370	60	8
13 (CB#2)	8 7/16	Diamond	Christensen	5370	5430	60	9 1/4
14	8 1/2	SDH	Reed	5430	5696	266	30
15	8 1/2	RX55-R	H.W.	5696	5927	231	24
16	8 1/2	RX55-R	H.W.	5927	6211	284	37 1/2
17	8 1/2	RX55-R	H.W.	6211	6253	42	14
12RR	8 1/2	SHC	Reed	6253	Condition Hole		
						6253	452.75

(d) Mud Report

96,500# Gel

3020 Benex

(e) Deviation Record

DEPTH	DEGREES	DEPTH	DEGREES
90	1/2	2384	¾
195	1/4	2498	2
288	1/4	2618	1 1/2
380	1/4	2705	2
468	1/4	2800	1 5/8
680	1/4	2890	1 5/8
720	1/2	3105	1 3/4
964	3/8	3315	2
1389	3/4	3525	2
1508	1/2	3740	4
1693	1/2	3799	2
1782	3/4	4102	3
1900	1	4343	2 1/2
1990	1 1/2	4489	1/2
2203	2 3/4	4916	1 1/4
2234	2 1/2	5189	1 1/2
2320	2	5696	2 1/2
		6196	1/4

(f) Abandonment Plugs

Plug #1 5650 - 5250 230 sx + 2% $CaCl_2$

Felt @ 5235'

Plug #2 670 - 770 60 sx + 2% $CaCl_2$
Felt @ 660'
3 sx of cement in casing.

(g) Lost Circulation Zones
February 4, 1970 720' add lost circulation material

(h) Report of Blowouts
Nil

Section IV - Logs

RUN	DATE	TYPE	INTERVAL
1	3/11/70	Borehole Compensated Sonic	6256 - 721 '
1	3/11/70	Porosity - Lithology	6256 - 5000'
1	3/11/70	Dual Induction Laterolog	6254 - 721 '
1	3/11/70	Sidewall Neutron Porosity	6257 - 5000'
1	Mar.11 70	Continuous Dipmeter	6256 - 5000'
1	3/12/70	Formation Density	6257 - 5000'

Section V - Analysis
(a) Core Analysis - See Attachment
(b) Water Analysis - See Attachment
(c) Gas Analysis - Nil
(d) Oil Analysis - Nil

Section VI - Completion Summary

(a) Tubing Record
Nil

(b) Perforation Record
Nil

(c) Cementation Record
Nil

(d) Acidization Fracturing Record
Nil

(e) Back Pressure & Production Tests
Nil

CORE LABORATORIES - CANADA LTD

CALGARY ALBERTA

COMPANY AMOCO CANADA PETROLEUM COMPANY LTD.
WELL AMOCO MURPHY A-1 CHIMACK N-11
FIELD WILDCAT, (NORTHWEST TERRITORY)
LOCATION N LAT 60° 52' 47.10"
W LONG 122° 36' 43.60"

FORMATION
DRILLING FLUID WATER BASE MUD
ELEVATION
ANALYSIS FULL DIAMETER AND PLUG
RESIDUAL SATURATION
REMARKS ALL ANALYSIS PERFORMED ON HORIZONTAL PLUGS

PAGE
FILE
DATE REPORT
ANALYSTS

CORED INTERVAL 5310' - 5430'

CORE NO 1 5310' - 5370' REC. 60' (16 BOXES)

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MAXIMUM	PERMEABILITY 90°	POROSITY %	RESIDUAL SATURATION OIL	RESIDUAL SATURATION WATER	GRAIN DENSITY	DESCRIPTION
1	5310.0-11.3	1.3	0.04	5.02	-0.01	2.68		
2	5311.3-12.6	1.3	1.72	1.72	-0.01	2.68		
3	5312.6-13.6	1.0	1.04	0.61	2.68			
4	5313.6-14.6	1.0	7.31	4.13	2.68			
5	5314.6-15.9	1.3	8.86	6.35	0.34	10.54	2.68	
6	5315.9-17.2	1.3	3.41	2.71	1.03	4.40	2.68	
7	5317.2-18.3	1.1	0.06	0.04	-0.01	2.68		
8	5318.3-20.2	1.9	1.92	1.43	2.68			
-	5320.6-34.1	13.5	-	-	-	-	-	
9	5334.1-35.4	1.3	6.16	4.13	0.15	15.43	2.68	
10	5335.4-37.0	1.6	2.08	1.47	-0.01	2.68		
11	5337.0-38.2	1.2	35.41	1.80	0.48	66.48	2.68	
12	5338.2-39.4	1.2	30.00	0.90	1.02	152.00	2.68	
13	5339.4-40.7	1.3	23.00	0.88	1.08	299.20	2.68	
14	5340.7-42.1	1.4	1.61	0.89	0.88	2.68		
-	5342.5-48.1	5.6	-	-	-	-	-	
15	5348.1-54.3	6.2	1.39	0.32	-0.01	2.68		
16	5354.3-55.8	1.5	2.32	1.28	-0.01	2.68		
17	5355.8-57.1	1.3	0.04	0.03	-0.01	2.68		
18	5357.1-58.5	1.4	0.04	0.03	-0.01	2.68		
19	5358.5-59.8	1.3	0.03	-0.01	-0.01	2.68		
20	5359.8-61.2	1.4	0.03	-0.01	-0.01	2.68		
21	5361.2-62.6	1.4	0.03	-0.01	-0.01	2.68		
22	5362.6-64.0	1.4	4.17	1.91	-0.01	2.68		
23	5364.0-65.3	1.3	0.06	0.04	-0.01	2.68		
24	5365.3-66.2	1.9	3.41	2.45	0.44	5.48	2.68	
25	5366.2-68.1	1.9	0.02	-0.01	-0.01	0.04	2.68	

Form No. 50

CORE LABORATORIES - CANADA LTD
CALGARY ALBERTA

COMPANY AMOCO CANADA PETROLEUM COMPANY LTD. **FORMATION** **PAGE**
WELL AMOCO ELKTON A-1 CORMACK K-33 (C) **DRILLING FLUID** WATER BASE MUD **FILE**

SAMPLE NUMBER	DEPTH FEET	FOOT	PERMEABILITY MILLIDARCYS MAXIMUM	PERMEABILITY MILLIDARCYS 90°	POROSITY PERCENT	RESIDUAL FLUID SATURATION PERCENT PORE SPACE OIL	RESIDUAL FLUID SATURATION PERCENT PORE SPACE WATER	GRAIN DENSITY	BULK DENSITY	ANALYSIS OIL	ANALYSIS WATER	DESCRIPTION
CORE NO. 1 Cont'd												
26	5368.1-72.0	1.9	0.25	0.02	+0.00	0.46	0.6	2.74	2.66	0.0	0.0	ARGILLACEOUS SILTSTONE
CORE NO. 2	5370' - 5430' (FEET 60') (57 RECOVERED)											
27	5370.0-72.9	2.9	0.05	0.02	+0.01	0.19	0.5	2.75	2.69	-	-	SILTSTONE
-	5372.9-73.5	0.6	-	-	-	-	-	-	-	-	-	SHALE
28	5373.5-75.3	1.8	**	0.79	-0.01	0.27	1.0	2.74	2.64	0.0	0.0	SILTSTONE FINE GRAINED
29	5375.3-77.1	1.8	0.32	0.08	+0.01	0.18	0.6	2.68	2.61	2.66	-	SILTSTONE
30	5377.1-78.8	1.7	0.10	0.05	+0.01	0.17	0.4	2.68	2.63	2.66	0.0	ARGILLACEOUS SILTSTONE
31	5378.8-80.4	1.6	1.23	0.11	+0.01	1.02	1.1	2.70	2.64	2.68	-	SILTSTONE FINE GRAINED
32	5380.4-82.2	1.8	4.60	0.83	+0.01	4.55	0.7	2.67	2.64	2.68	0.0	ARGILLACEOUS SILTSTONE
33	5382.2-84.0	1.8	0.69	0.07	+0.02	1.43	1.0	2.70	2.65	2.68	-	ARGILLACEOUS SILTSTONE
-	5384.0-85.2	1.2	-	-	-	-	-	-	-	-	-	SHALE
34	5385.2-87.8	2.6	4.14	0.88	+0.01	10.76	2.1	2.75	2.69	2.73	14.2	SILTSTONE FINE GRAINED
35	5387.8-89.8	2.0	1.53	0.84	+0.01	3.06	1.4	2.80	2.64	2.68	-	SILTSTONE FINE GRAINED
36	5389.8-91.4	1.6	0.42	0.07	+0.01	0.67	0.9	2.74	2.66	2.68	0.0	SILTSTONE FINE GRAINED
37	5391.4-93.2	1.8	0.11	0.07	+0.01	0.40	0.5	2.80	2.65	2.68	-	SILTSTONE FINE GRAINED
38	5393.2-94.2	1.0	0.14	0.12	+0.01	0.24	0.5	0.53	2.67	2.68	0.0	ARGILLACEOUS SILTSTONE
39	5394.2-96.0	1.8	0.20	0.13	+0.01	0.34	0.5	2.80	2.68	2.68	-	ARGILLACEOUS SILTSTONE
40	5396.0-97.0	1.0	71.20	0.14	+0.41	71.27	0.6	0.63	2.70	2.72	0.0	SILTSTONE FINE GRAINED
41	5397.0-99.5	2.5	4.03	2.91	+0.01	4.09	1.3	2.77	2.64	2.68	-	SILTSTONE FINE GRAINED
42	5398.5-99.5	1.0	0.26	0.20	+0.01	0.38	0.6	0.62	2.66	2.69	0.0	SILTSTONE FINE GRAINED
43	5399.5-00.0	0.5	0.13	-0.01	+0.01	0.27	1.0	2.95	2.65	2.69	-	SILTSTONE
44	5400.0-01.5	1.5	0.37	0.13	+0.01	1.05	0.8	0.61	2.66	2.68	0.0	ARGILLACEOUS SILTSTONE
45	5401.5-02.6	1.1	0.02	-0.01	+0.01	0.03	0.1	0.43	2.68	2.68	-	SILTSTONE ARGILLACEOUS
46	5402.6-03.8	1.2	1.90	-0.01	+0.01	2.06	1.5	2.74	2.64	2.68	0.0	SILTSTONE FINE GRAINED
47	5403.8-05.0	1.2	0.09	0.03	+0.01	0.25	0.5	2.82	2.64	2.68	-	SILTSTONE
48	5405.0-07.5	2.5	24.51	1.03	+0.01	4.00	0.3	4.63	2.64	2.69	0.0	SILTSTONE FINE GRAINED
49	5407.5-09.1	1.6	0.65	0.45	0.40	0.81	1.7	5.05	2.59	2.68	-	SILTSTONE FINE GRAINED
50	5409.1-10.7	1.6	2.99	1.01	0.01	3.08	0.6	4.42	2.61	2.67	0.0	SILTSTONE
51	5410.7-12.4	1.7	0.07	0.06	+0.00	1.12	0.2	2.74	2.63	2.68	-	SILTSTONE
52	5412.4-13.5	1.1	0.45	0.03	+0.01	0.50	1.0	1.04	2.64	2.67	-	SILTSTONE
53	5413.5-14.4	0.9	34.60	5.72	+0.01	32.41	1.0	1.44	2.64	2.68	-	SILTSTONE FINE GRAINED
54	5414.4-16.4	2.0	4.56	0.53	+0.01	5.46	2.0	4.60	2.67	2.69	0.0	SILTSTONE FINE GRAINED
55	5416.4-18.3	1.9	152.00	0.14	+0.01	288.00	2.8	3.32	2.62	2.68	-	SILTSTONE
56	5418.3-20.3	1.9	6.01	0.12	+0.01	13.13	2.4	4.56	2.62	2.68	0.0	SILTSTONE FINE GRAINED

Form No. 502

CORE LABORATORIES - CANADA, LTD.

CALGARY ALBERTA

COMPANY AMOCO CANADA PETROLEUM COMPANY LTD. **FORMATION** **PAGE**

WELL AMOCO MURRAY A-1 CORMACK N-33 **DRILLING FLUID** WATER BASE MUD **FILE** CP-64-5010

SAMPLE NO.	DEPTH FEET	FEET	MAXIMUM PERMEABILITY MILLIDARCYS	90° PERMEABILITY MILLIDARCYS	VERTICAL PERMEABILITY MILLIDARCYS	POROSITY PERCENT	RESIDUAL FLUID SATURATION PERCENT PORE SPACE		GRAIN DENSITY GRAMS PER CC	BULK DENSITY GRAMS PER CC	CLAY PERCENT	SILT PERCENT	DESCRIPTION
							OIL	WATER					
CORE NO. 2 (Cont'd)													
57	5420.2-21.8	1.6	52.60	0.94	-0.01	84.16	2.4	3.54	2.62	2.68	-	-	1 SDY F
58	5421.8-23.6	1.8	0.15	0.07	-0.01	0.27	3.4	6.12	2.59	2.69	0.0	31.5	SH
59	5423.6-24.9	1.3	5.23	4.22	4.67	6.90	1.1	1.43	2.63	2.67	-	-	DTY F
60	5424.9-26.6	1.7	0.71	0.47	-0.01	1.21	1.3	2.21	2.64	2.68	0.0	27.1	DTY F
61	5426.6-28.0	1.4	0.41	0.25	-0.01	0.57	1.5	2.10	2.64	2.68	-	-	1 F
62	5428.0-30.0	2.0	0.02	0.02	-0.01	0.04	1.1	2.20	2.65	2.68	0.0	18.1	1

Form No. 5DA

CORE LABORATORIES - CANADA, LTD.

Petroleum Reservoir Engineering

FILE CMP-4-5030

WELL AMOCO MURPHY A-Y CORMACK N-33

FORMATION

SUMMARY INTERVAL 5310.0 - 5430.0

TOTAL FOOTAGE 120.0

FOOTAGE ANALYZED 98.1

FOOTAGE NOT ANALYZED TOTAL 21.9 DENSE 21.9 SHALE .0 DRILLED .0 LIMEST .0 PEBBLE .0

	FOOTAGE	% OF ANALYZED CORE	WEIGHTED AVERAGE POROSITY %	POROSITY FEET	WEIGHTED AVERAGE PERM MD	PERM FEET	WEIGHTED AVERAGE WATER SATURATION %	WEIGHTED AVERAGE OIL SATURATION %
SUMMARY OF ANALYZED CORE								
TOTAL	98.1	100.00	1.33	130.42	13.98	1371.37	.00	.00
BY PERM RANGES								
LESS THAN 0.10 Md	23.6	24.06	.62	14.59	.05	1.18	.00	.00
0.10 0.49 Md	19.9	20.29	1.07	21.28	.24	4.75	.00	.00
0.50 0.99 Md	3.5	3.57	1.15	4.01	.80	2.81	.00	.00
1.00 9.99 Md	40.0	40.77	1.61	64.42	3.38	135.40	.00	.00
GREATER THAN 9.99 Md	11.1	11.31	2.17	24.12	110.56	1227.25	.00	.00

*NOT ANALYZED BY REQUEST

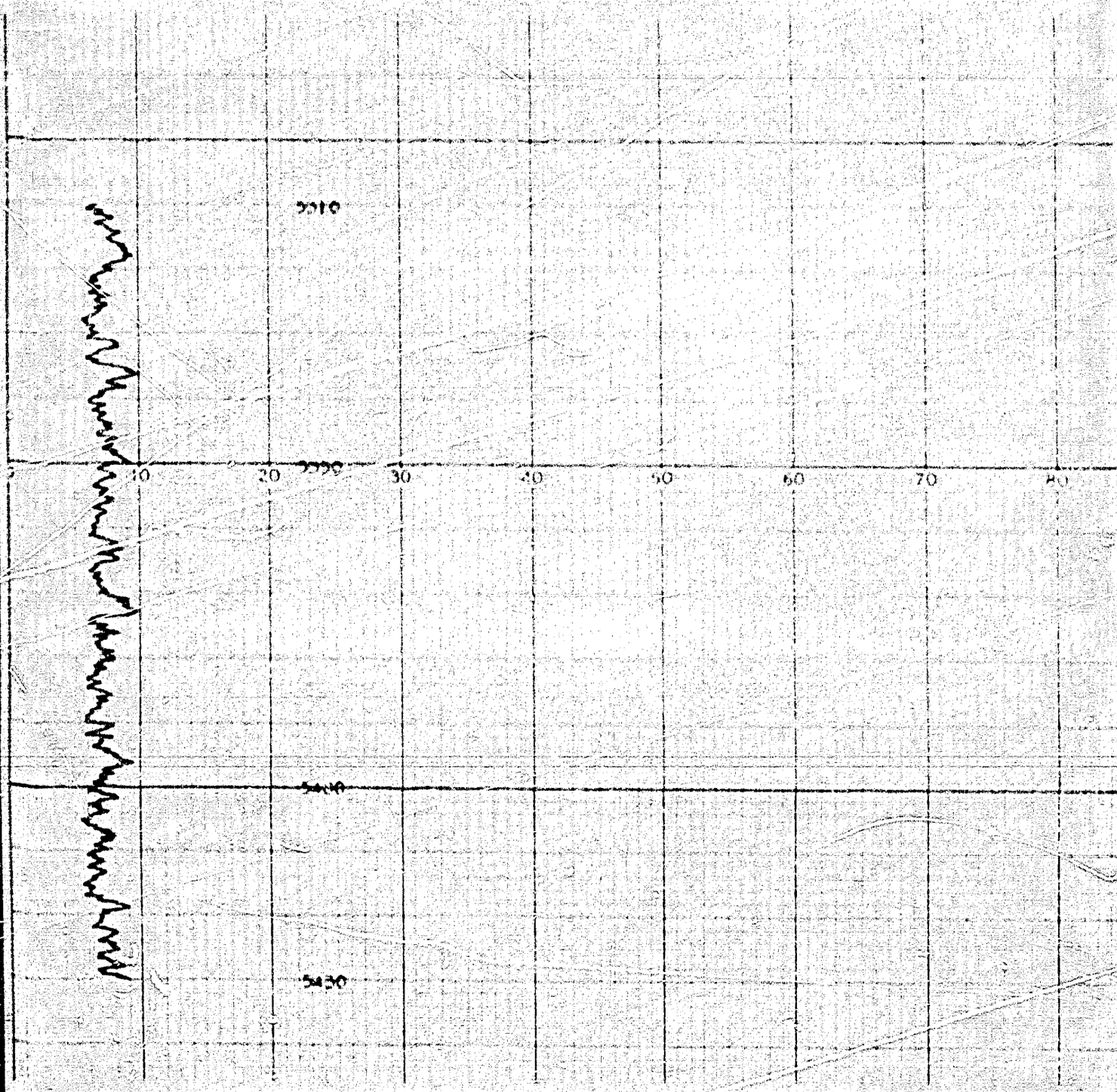
CORE LABORATORIES · CANADA LTD — *Petroleum Reservoir Engineering*

COMPANY AMOCO CANADA PETROLEUM COMPANY LTD. FIELD WILDCAT FILE CMP-4-2010

WELL AMOCO MURPHY A-1 CORMACK No. 1 DATE

LOCATION 126° 16' 43.10" W. Long. PROV ELEV

VERTICAL SCALE 1" = 100'



CHEMICAL & GEOLOGICAL LABORATORIES LTD.

WATER ANALYSIS

Lab No C70-5615-2

Received March 11, 1970 Reported March 17, 1970 Well Location Amoco Murphy Cormack No. 1 (Lot 92 [illegible] - 22nd [illegible]

Operator AMOCO CANADA PETROLEUM COMPANY LTD. Field or Area

Elev. K.B. Grd Zone/formation Bow Island Sand Sample Interval 5317' - 5[illegible]

Method of Production D.S.T. #1 Sampled by Cormack Sampled at [illegible] Date Rec'd Mar. 11, 1970

OTHER PERTINENT DATA

TIGHT HOLE

(Surface)

	Na	K	Ca	Mg				SO4	Cl		CO3	HCO3
Mg/L	24,800		1880	1800				214	45,000			
Meq/L	1079.09		243.71	147.94				4.50	1267.62			
Meq. %	73.36		16.56	10.04				0.35	99.65			

Total Solids Mg/L By Evaporation 83,110 Sp. Gravity at 20°C 1.050 pH at [illegible] Temperature 20°C

Calculated 77,396 After Ignition 77,330 Resistivity 0.545 Refractive Index 1.3446 @ 23°C Resistivity [illegible] ohm-meters @ [illegible]

Plot from Unit Meq/L

Na

Ca

Mg

Fe

Cl

HCO3

SO4

CO3

Remarks and Conclusions

The sample as received was [illegible]
[illegible] was then diluted with [illegible]

LABORATORY NUMBER	SAMPLE MARKED	RESISTIVITY OHM-METERS @ TEMPERATURE °C
C70-5615-2	Top (5317')	0.545

0 - 50'	Sand, [illegible] very fine grained.
50' - 60'	Very fine to medium grained quartz sand. Very few [illegible] and are [illegible] trace of [illegible]. Trace of [illegible] dolomite.
60' - 100'	Very fine to medium grained quartz sand. Very few [illegible] and, abundant [illegible]. Trace of [illegible] and [illegible]. Trace of pyrite and [illegible].
100' - 120'	Abundant [illegible] and [illegible], with [illegible] and [illegible]. Trace of [illegible], [illegible] and [illegible].
120' - 130'	Very [illegible].
130' - 200'	[illegible] and [illegible] with abundant very fine grained [illegible], [illegible] and [illegible]. Trace of [illegible] and [illegible].
200' - 250'	Very fine to [illegible] [illegible] and [illegible], [illegible], [illegible]. Trace of pyrite, [illegible] and trace of [illegible].
250' - 280'	Very [illegible] and [illegible] with trace of very fine grained [illegible] and [illegible].
280' - 320'	Very fine to [illegible] and [illegible] quartz sand. Abundant [illegible] and [illegible], trace of [illegible].
320' - 340'	Very [illegible] with trace of [illegible] quartz and [illegible]. Trace of pyrite.
340' - 360'	Very fine grained quartz sand ([illegible]) and very [illegible], [illegible] and trace of [illegible].
360' - 380'	Very fine grained quartz sand, [illegible] and very [illegible], [illegible] and trace of [illegible]. Trace of [illegible].
380' - 400'	[illegible] and [illegible], very fine grained quartz sand, [illegible] and [illegible]. Trace of [illegible].
400' - 420'	[illegible] and [illegible].

CORE LABORATORIES - CANADA, LTD.
CALGARY ALBERTA

APR 1970
RECEIVED

COMPANY AMOCO CANADA PETROLEUM COMPANY LTD.
WELL AMOCO KURSTY A-1 CORMACK M-23
FIELD WILDCAT, NORTHWEST TERRITORIES
LOCATION N LAT 60° 52' 47.10"
W LONG 122° 36' 43.60"

FORMATION
DRILLING FLUID WATER BASE MUD
ELEVATION
ANALYSIS FULL DIAMETER & CLEANED
RESIDUAL SATURATIONS
REMARKS ALL SAMPLES CONSOLIDATED PRIOR TO ANALYSIS

PAGE 1
FILE CN[illegible]-5[illegible]
DATE REPORT MAR[illegible]
ANALYSTS MS

SAMPLE NUMBER	DEPTH	FEET	PERMEABILITY MAXIMUM	PERMEABILITY 90°	POROSITY %	RESIDUAL SATURATION OIL %	RESIDUAL SATURATION WATER %	GRAIN DENSITY	BULK DENSITY	SATURATION METHOD	DESCRIPTION
	CORED INTERVAL 5310' - 5430'										
	CORE NO. 1 5310' - 5370' (REC. 60') (16 BOXES)										
1	5310.0-11.3	1.3	0.04	0.02	-0.01	0.05	0.3	2.39	2.68	2.68	-	-	DENSE
2	5311.3-12.6	1.3	1.77	1.72	-0.01	2.30	0.9	0.39	2.68	2.68	0.0	19.2	DENSE F
3	5312.6-13.6	1.0	1.04	0.63	0.07	1.04	2.9	2.90	2.63	2.69	-	-	DENSE F
4	5313.6-14.6	1.0	7.37	4.13	2.12	7.37	6.2	1.20	2.62	2.70	0.0	27.8	SW F
5	5314.6-15.9	1.3	8.88	6.38	0.74	11.54	2.7	3.01	2.64	2.71	-	-	SW SEM F
6	5315.9-17.2	1.3	3.41	2.71	1.00	4.43	2.1	2.73	2.67	2.73	0.0	26.8	FEW SW F
7	5317.2-18.9	1.7	0.06	0.04	-0.01	0.10	0.2	0.34	2.68	2.68	-	-	DENSE
8	5318.9-20.6	1.7	1.72	1.43	0.10	2.92	1.2	2.04	2.66	2.69	0.0	19.4	FEW FRAC F
-	5320.6-34.1	13.5	-	-	-	-	-	-	-	-	-	-	DENSE SHALE
9	5334.1-35.8	1.7	6.16	1.39	0.18	10.47	0.9	1.53	2.65	2.68	-	-	SCATTERED
10	5335.8-37.0	1.2	3.09	1.47	-0.01	3.70	1.1	2.04	2.65	2.70	0.0	67.2	FEW SW F
11	5337.0-38.2	1.2	55.40	1.00	0.46	66.48	2.3	2.16	2.63	2.69	-	-	1 FRAC F
12	5338.2-39.3	1.1	320.00	0.90	132.00	352.00	2.0	2.20	2.64	2.69	0.0	62.0	1 FRAC F
13	5339.3-40.7	1.4	203.00	0.88	1.08	284.20	2.4	3.16	2.63	2.69	-	-	1 FRAC F
14	5340.7-42.3	1.6	1.61	0.89	0.68	2.56	0.4	0.64	2.67	2.68	0.0	57.4	DENSE F
-	5342.3-48.9	6.6	-	-	-	-	-	-	-	-	-	-	DENSE
15	5348.9-50.3	1.4	1.19	0.32	-0.01	1.67	1.1	1.54	2.65	2.68	-	-	SCATTERED F
16	5350.3-51.9	1.6	1.32	0.18	-0.01	2.11	0.9	1.44	2.66	2.69	0.0	37.1	SCATTERED F
17	5351.9-53.7	1.8	0.04	0.02	-0.01	0.07	0.5	0.90	2.67	2.68	-	-	SCATTERED
18	5353.7-55.5	1.8	0.04	-0.01	-0.01	0.07	0.3	0.54	2.67	2.68	0.0	44.6	DENSE
19	5355.5-57.3	1.8	0.09	-0.01	-0.01	0.16	0.4	0.72	2.67	2.68	-	-	DENSE
20	5357.3-59.2	1.9	0.21	0.11	-0.01	0.40	0.8	1.52	2.66	2.68	0.0	39.4	SCATTERED FLK F
21	5359.2-60.8	1.6	0.05	0.03	-0.01	0.08	0.2	0.32	2.68	2.68	-	-	DENSE
22	5360.8-62.4	1.6	4.19	1.94	-0.01	6.67	0.8	1.28	2.65	2.68	0.0	26.9	SCATTERED FV F
23	5362.4-64.3	1.9	0.06	0.04	-0.01	0.11	0.5	0.95	2.66	2.67	-	-	SCATTERED FV
24	5364.3-66.2	1.9	3.41	0.45	-0.01	6.48	0.8	1.52	2.66	2.68	0.0	42.3	DENSE F
25	5366.2-68.1	1.9	0.02	-0.01	-0.01	0.04	0.2	0.38	2.67	2.68	-	-	DENSE

CORE LABORATORIES - CANADA LTD
CALGARY ALBERTA

COMPANY AMOCO CANADA PETROLEUM COMPANY LTD. FORMATION PAGE
WELL AMOCO SUPPLY A-1 CORMACK N-33 DRILLING FLUID WATER BASE MUD FILE

SAMPLE NUMBER	DEPTH FEET	INCH	PERMEABILITY MILLIDARCYS MAX	90°	0°	POROSITY %	FLUID SATURATIONS % PORE SPACE OIL	WATER	GRAIN DENSITY	BULK DENSITY	SHOWS	DESCRIPTION
CORE NO. 1 (Cont'd)												
26	5368.1-72.0	1.9	0.25	0.05	-0.01	0.48	0.4	1.14	2.64	2.68	0.0	47.2	SCATTERED FFV F
CORE NO. 2 5370' - 5430' (REC. 60') (12 BOXES)												
27	5370.0-72.9	2.9	0.05	0.02	-0.01	0.25	0.5	1.45	2.60	2.68	-	-	DENSE
-	5372.9-73.5	0.6	-	-	-	-	-	-	-	-	-	-	SHALE
28	5373.5-75.3	1.8	**	1.79	-0.01	3.22	1.0	3.24	2.64	2.68	0.0	36.4	FFV SCATTERED F
29	5375.3-77.1	1.8	0.32	0.08	-0.01	0.58	0.6	1.08	2.67	2.68	-	-	FEW SV
30	5377.1-78.8	1.7	0.10	0.06	-0.01	0.17	0.4	0.68	2.67	2.68	0.0	43.8	SCATTERED FFV F
31	5378.8-80.4	1.6	1.23	0.11	-0.01	1.97	1.1	1.76	2.66	2.68	-	-	FFV SV FEW F
32	5380.4-82.2	1.8	2.60	0.87	-0.01	4.68	0.9	1.62	2.66	2.69	0.0	38.7	SCATTERED SV F
33	5382.2-84.0	1.8	0.89	0.07	-0.01	1.60	1.0	1.80	2.65	2.68	-	-	SCATTERED FFV F
-	5384.0-85.2	1.2	-	-	-	-	-	-	-	-	-	-	DENSE
34	5385.2-87.8	2.6	4.14	0.88	-0.01	10.76	2.1	5.46	2.63	2.69	0.0	34.2	SV FFV F
35	5387.8-89.8	2.0	1.53	0.84	-0.01	1.66	1.4	2.80	2.64	2.68	-	-	FEW SV F
36	5389.8-91.4	1.6	0.42	0.07	-0.01	0.67	0.9	1.44	2.66	2.68	0.0	20.0	FEW SV F
37	5391.4-93.2	1.8	0.11	0.07	-0.01	0.20	1.0	1.80	2.65	2.68	-	-	FFV
38	5393.2-94.3	1.7	0.14	0.12	-0.01	0.24	0.5	0.85	2.67	2.68	0.0	37.6	SCATTERED FFV
39	5394.9-96.6	1.7	0.20	0.13	-0.01	0.34	0.6	1.02	2.67	2.68	-	-	SCATTERED FFV
40	5395.6-97.6	1.0	71.20	0.11	10.40	71.20	0.6	0.60	2.70	2.72	0.0	27.5	DENSE F
41	5397.6-98.5	0.9	5.03	2.91	-0.01	4.53	1.3	1.17	2.64	2.68	-	-	FFV SV F
42	5398.5-99.5	1.0	0.26	0.20	-0.01	0.26	0.6	0.60	2.66	2.68	0.0	42.0	DENSE SFV
43	5399.5-00.0	0.5	0.13	-0.01	-0.01	0.07	1.9	0.95	2.65	2.69	-	-	I
44	5400.0-00.9	0.9	1.37	0.17	-0.01	1.23	0.9	0.81	2.66	2.68	0.0	33.3	SCATTERED FFV F
45	5400.9-02.4	1.5	0.02	-0.01	-0.01	0.03	0.3	0.45	2.67	2.68	-	-	FEW SCATTERED FFV
46	5402.4-03.9	1.4	1.90	-0.01	-0.01	2.66	1.6	2.24	2.64	2.68	0.0	34.9	FFV F
47	5403.8-05.5	1.7	0.09	0.03	-0.01	0.15	1.3	2.21	2.64	2.68	-	-	SCATTERED FFV SFV
48	5405.5-07.5	2.0	24.50	1.03	1.09	49.00	2.3	4.60	2.62	2.69	0.0	38.2	SV F
49	5407.5-09.0	1.5	6.55	3.15	0.20	9.83	3.7	5.55	2.59	2.68	-	-	I FEW FFV F
50	5409.0-10.7	1.7	2.99	1.01	0.57	5.08	2.6	4.42	2.61	2.68	0.0	13.8	I F
51	5410.7-12.4	1.7	0.07	0.06	-0.01	0.12	2.2	3.74	2.62	2.68	-	-	I
52	5412.4-13.5	1.1	0.45	0.09	-0.01	0.50	1.8	1.98	2.64	2.69	0.0	19.3	FFV
53	5413.5-14.4	0.9	34.90	5.72	7.06	31.41	1.6	1.44	2.64	2.68	-	-	I FEW SV F
54	5414.4-16.4	2.0	2.58	0.53	-0.01	5.16	2.3	4.60	2.62	2.68	0.0	14.6	I FEW FFV F
55	5416.4-18.3	1.9	152.00	0.14	-0.01	288.80	2.8	5.32	2.61	2.68	-	-	SV F
56	5418.3-20.2	1.9	6.91	0.12	-0.01	13.13	2.4	4.56	2.62	2.68	0.0	15.9	FFV FEW SV

Form No. 504

CORE LABORATORIES - CANADA, LTD

CALGARY ALBERTA

COMPANY AMOCO CANADA PETROLEUM COMPANY LTD. FORMATION PAGE 3 of 4

WELL AMOCO MURPHY A-1 CORMACK N-33 DRILLING FLUID WATER BASE MUD FILE CAL-4-5018

SAMPLE NUMBER	DEPTH	INCHES	PERMEABILITY MAX	PERMEABILITY 90°	POROSITY %	RESIDUAL OIL SATURATION % PORE VOL.	RESIDUAL WATER SATURATION % PORE VOL.	GRAIN DENSITY	BULK DENSITY	OIL	WATER	DESCRIPTION
CORE NO. 2 (Cont'd)												
57	5420.2-21.8	1.6	52.60	0.94	-0.01	84.16	2.4	3.84	2.62	2.68	-	-	1 SLTY F
58	5421.8-23.6	1.8	0.15	0.07	-0.01	0.27	3.4	6.12	2.59	2.69	0.0	31.5	SY
59	5423.6-24.9	1.3	5.23	4.22	4.67	6.80	1.1	1.43	2.67	2.67	-	-	FRY F
60	5424.9-26.6	1.7	0.71	0.47	-0.01	1.21	1.3	2.21	2.64	2.68	0.0	37.1	FRY SLTY
61	5426.6-28.0	1.4	0.41	0.25	-0.01	0.57	1.5	2.30	2.64	2.68	-	-	1 F
62	5428.0-30.0	2.0	0.02	0.02	-0.01	0.04	1.1	2.20	2.65	2.68	0.0	18.3	1

Form No. 5DA

CORE LABORATORIES – CANADA, LTD.

Petroleum Reservoir Engineering

WELL AMOCO MURPHY A-1 CORMACK W-33

FORMATION

FILE CNF-4-5330

SUMMARY INTERVAL 5310.0 - 5430.0

TOTAL FOOTAGE 120.0

FOOTAGE ANALYZED 98.1

FOOTAGE NOT ANALYZED TOTAL 21.9 DENSE .9 LOST .0 DRILLED .0 *NABR .0 RUBBLE .0

SUMMARY OF ANALYZED CORE

	FOOTAGE	% OF ANALYZED CORE	WEIGHTED AVERAGE POROSITY %	POROSITY FEET	WEIGHTED AVERAGE PERMEABILITY MD	PERM FEET	WEIGHTED AVERAGE PERM GT 1	WEIGHTED AVERAGE PERM BETWEEN
TOTAL	98.1	100.00	1.31	128.42	13.98	1371.37	.00	.00
BY PERM RANGES:								
LESS THAN 0.10 Md	23.6	24.06	.62	14.59	.05	1.18	.00	.00
0.10 0.49 Md	19.9	20.29	1.07	21.28	.24	4.73	.00	.0
0.50 0.99 Md	3.5	3.57	1.15	4.01	.80	2.81	.00	.00
1.00 9.99 Md	40.0	40.77	1.61	64.42	3.38	135.40	.00	.00
GREATER THAN 9.99 Md	11.1	11.31	2.17	24.12	110.56	1227.25	.00	.00

*NOT ANALYZED BY REQUEST

CORE LABORATORIES - CANADA LTD. CORE *Petroleum Reservoir Engineering*

COMPANY [redacted] FIELD BILLEAU FILE [redacted]

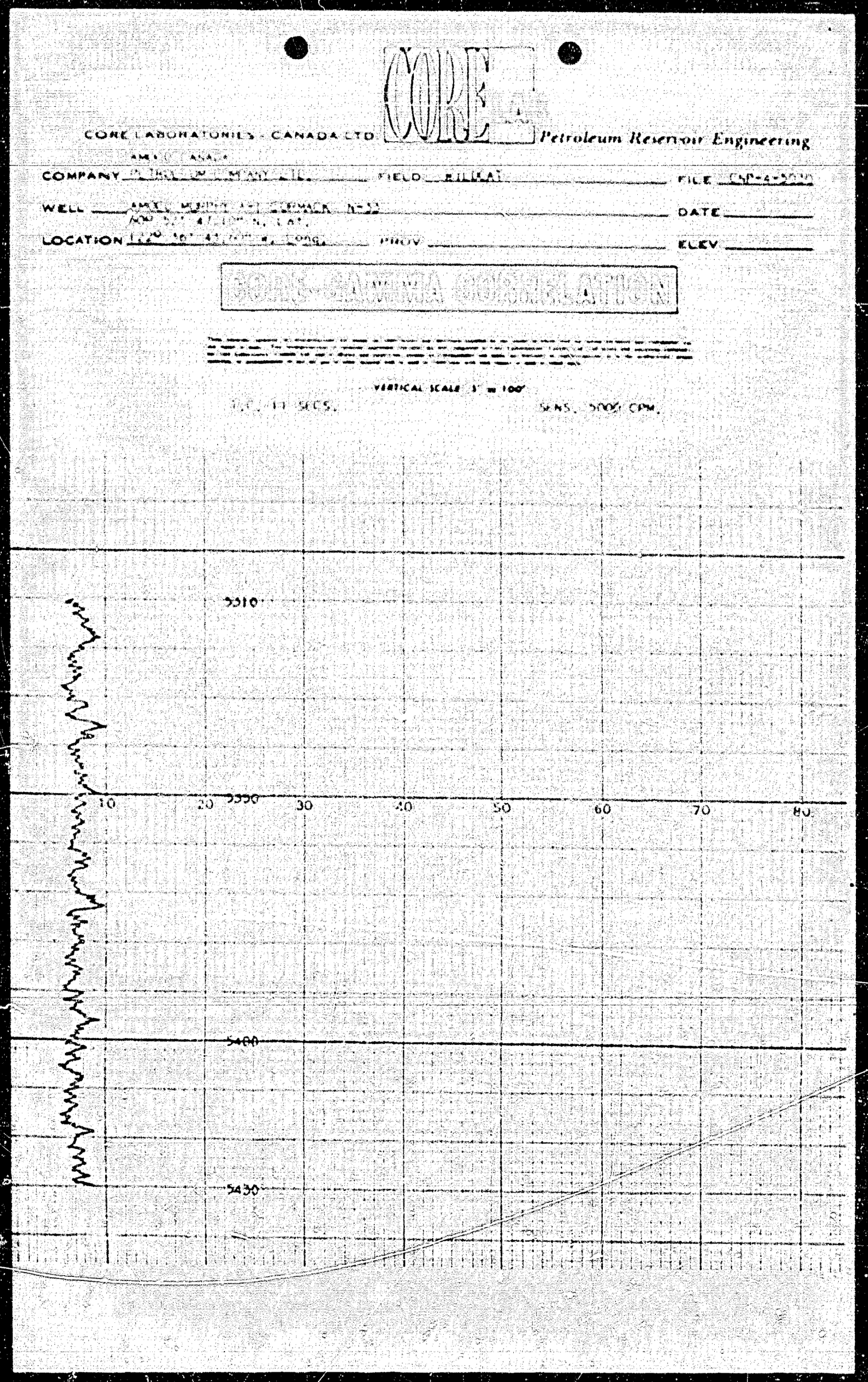
WELL [redacted] DATE [redacted]

LOCATION [redacted] PROV [redacted] ELEV [redacted]

GAMMA CORRELATION

VERTICAL SCALE 1" = 100'

T.C. 11 SECS. SENS. 500 CPM.



CHEMICAL & GEOLOGICAL LABORATORIES LTD.

WATER ANALYSIS

Received March 11, 1970 Reported March 17, 1970

Company: ARCTIC GAS PIPELINE COMPANY LTD. Field or Area:

Well No. Grid Zone/Range Plan Plot Ref. Block

Method of Production: D.S.T. #1 Sampled from: Sampled by:

Other Supplementary Data:

TIGHT HOLE

Sample

	Na	K	Ca	Mg					SO_4	Cl			HCO_3	
Mg/L	24,880		2880	1690					315	43,000			610	
Meq/L	1077.00		143.71	138.96					6.56	1206.42			9.99	
Meq. %	39.36		5.24	5.40					0.26	43.45			0.39	

Total Solids Mg/L: B/ Evaporation 83,310 Fe Dissolved Specific Gravity 1.031 pH@°F Chlorinity 24

Calculated 78,390 After Ignition 75,570 Hardness 9,520 Reference Ca Mg Na

Pattern Units Meq/L

Na

Ca

Mg

Fe

Cl

HCO_3

SO_4

CO_3

Remarks and Conclusions

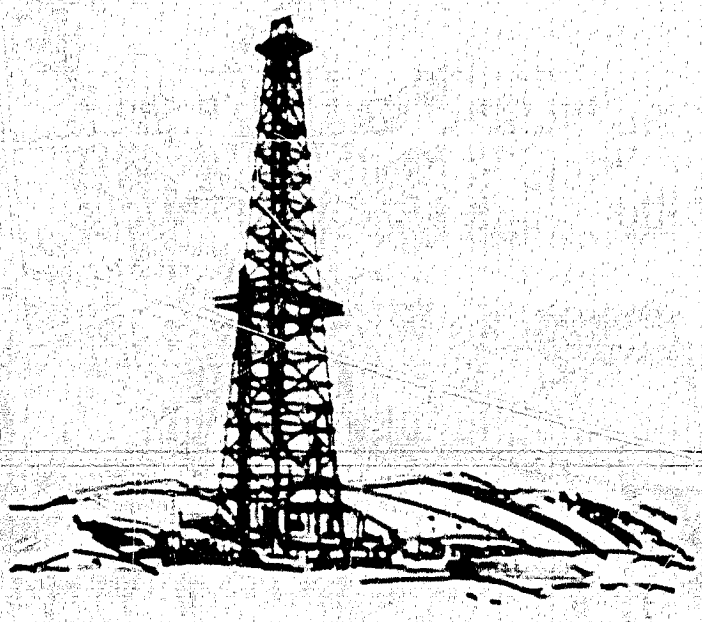
Use caution as analysis from a Wellsite Lab.
The following may prove helpful for caution.

LABORATORY NUMBER	SAMPLED AT	REMARKS
C70-5535-1	Top (DST)	

LYNES

BRIGHT NAME IN THE OIL PATCH

Inflatable and Conventional Packer Tools



DRILL STEM TEST

TECHNICAL SERVICE REPORT

NOMENCLATURE (Definition of Symbols)

P_i = [illegible]

μ_g = [illegible]

γ = [illegible]

h = [illegible]

μ = [illegible]

Z = [illegible]

T_r = reservoir temperature, [illegible]

m = [illegible]

b = [illegible]

r_e = [illegible]

t_s = [illegible]

P_r = [illegible]

P_s = [illegible]

PI = [illegible]

PI_d = [illegible]

D.R. = damage ratio

E.D.R. = estimated damage ratio

AOF = absolute open flow potential, MCF/D

AOF_d = theoretical absolute open flow if damage were removed

$\bar{Z}$ = subsea depth

W = water gradient based on salinity

H_e = potentiometric surface

In making any interpretation our employees will give Customer the benefit of their best judgment as to the correct interpretation. Nevertheless, since all interpretations are opinions based on inferences from electrical mechanical or other measurements, we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not be liable or responsible, except in the case of gross or wilful negligence on our part, for any loss, costs, damages or expenses incurred or sustained by Customer resulting from any interpretation made by any of our agents or employees.

DEFINITION OF SYMBOLS

Recorder Depth 5332 ft. Subsea depth ft. Ticket No. Hour Recorder No. 2816

t_1 Time	Mins. Initial Shut-in Pressure			Second Flow Pressure		t_2 Time	Mins. Final Shut-in Pressure		
Time, Min.	$t_1 + \emptyset$	PSIG	PSIG/ $\emptyset$ (Gauge)	Time Dwt. .000"	PSIG	Time, Min.	$t_2 + \emptyset$	PSIG	PSIG/ $\emptyset$ (Gauge)
0						0			
5	3,340	1815				10	3,350	1824	
10	3,350	1834				20	3,360	1844	
15	3,355	1840				30	3,365	1849	
20	3,360	1841				40	3,370	1850	
25	3,365	1843				50	3,375	1854	
30	3,370	1849				60	3,380	1860	
35	3,375	1850				70	3,385	1862	
40	3,380	1849				80	3,390	1864	
45	3,381	1852				90	3,392	1867	
50	3,390	1856				100	3,400	1865	
55	3,391	1861				110	3,401	1872	
60	3,393	1862				120	3,403	1882	

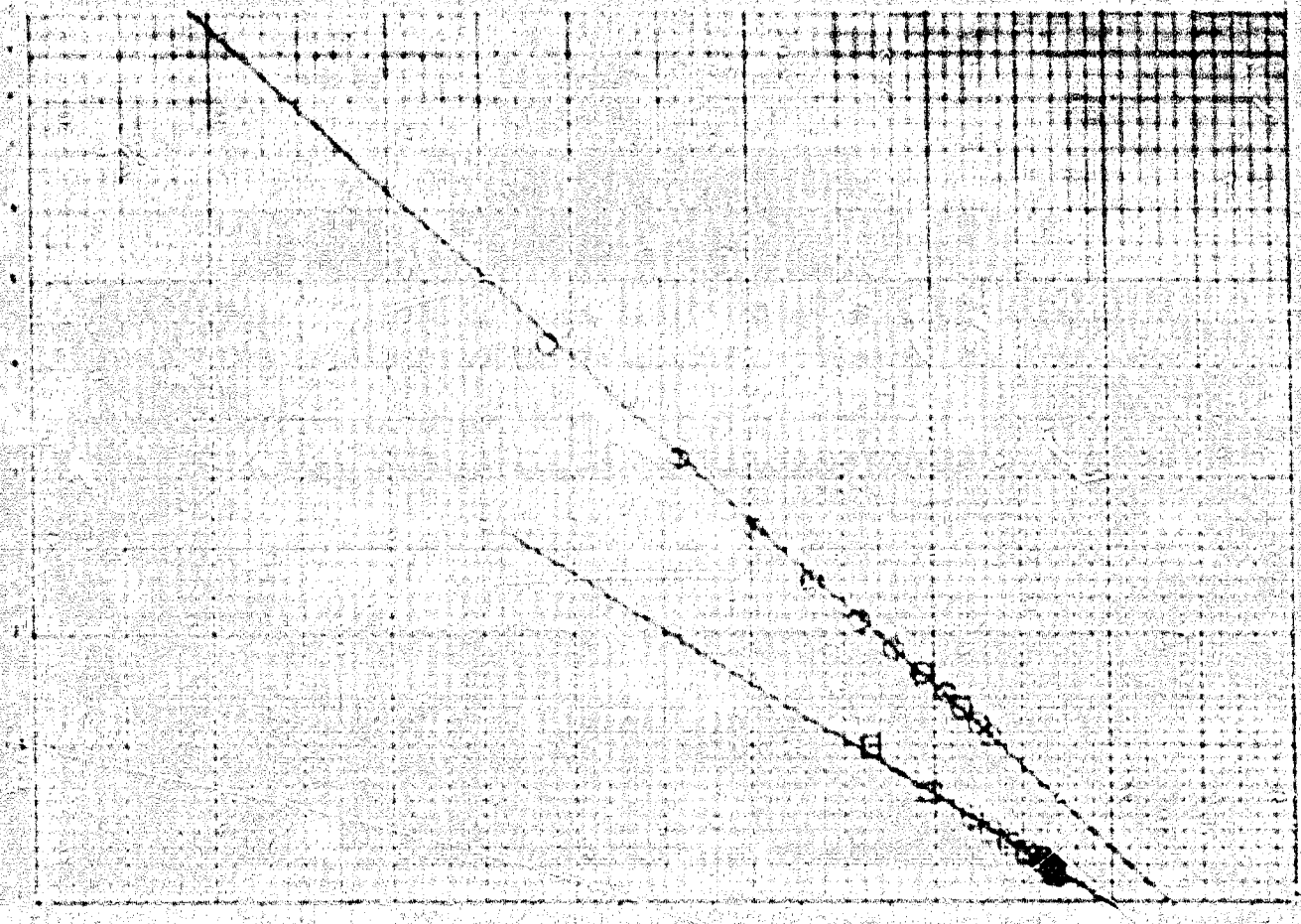
Recorder Depth ft. Subsea depth ft. Ticket No. Hour Recorder No.

t_1 Time	Mins. Initial Shut-in Pressure			Second Flow Pressure		t_2 Time	Mins. Final Shut-in Pressure		
Time, Min.	$t_1 + \emptyset$	PSIG	PSIG/ $\emptyset$	Time Dwt. .000"	PSIG	Time, Min.	$t_2 + \emptyset$	PSIG	PSIG/ $\emptyset$ (Gauge)
0						0			

Interval of Pressure Readings (Mins.) ISIP 5 2nd Flow Press. FSIP 10

Remarks: DST # 1

PRESSURE DATA



PRESSURE EXTRAPOLATION PLOT

LYNES UNITED SERVICES LTD

NUMBER KEY

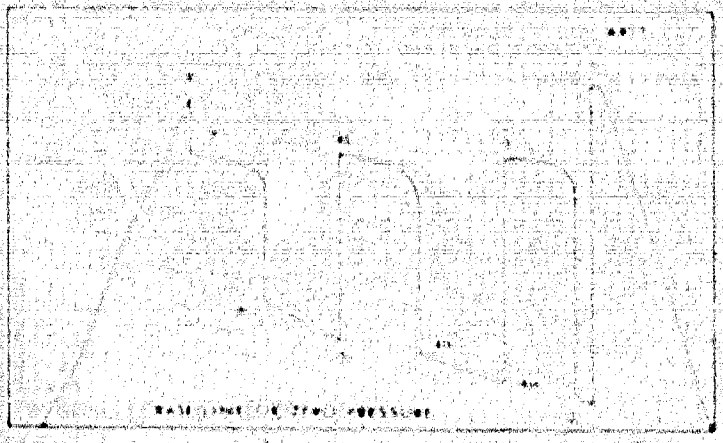
1	INITIAL HYDROSTATIC		2092		2102				
2	PBR FLOW		24		22				
3	INITIAL SHUT-IN		1912		1911				
4a	2nd INITIAL FLOW								
4b	2nd FINAL FLOW								
4c	2nd SHUT-IN								
5	3rd INITIAL FLOW		104		108				
6	FINAL FLOW		235		235				
7	FINAL SHUT-IN		1954		1952				
8	FINAL HYDROSTATIC		2092		2092				

LYNES

GUIDE TO INTERPRETATION AND IDENTIFICATION OF

LYNES DRILL STEM TEST PRESSURE CHARTS

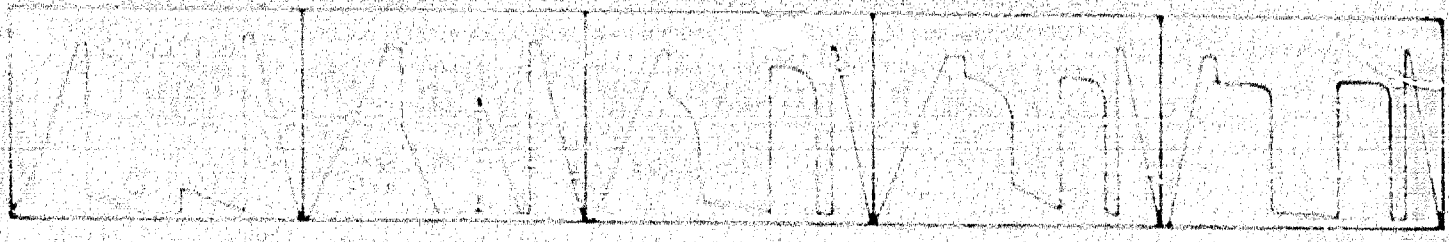
All recorders Read from left to right



All recorders Read from left to right

N.B. When only two shut-in and flow periods are run, all chart are identical

Typical charts for various field conditions ranging from very low to high permeability



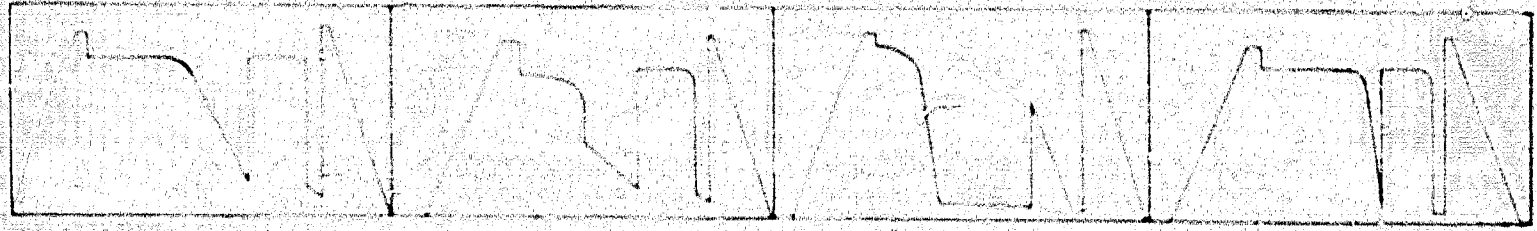
Very low permeability. Shut-in pressures usually not obtained. Flow pressures usually low.

Slightly higher pressures obtained. Again flow pressures low.

Higher shut-in pressures usually obtained. Recovery and flow pressures low.

Average permeability. Flow and initial shut-in pressures build to full formation pressure.

Average permeability. Strong flow pressures. High shut-in pressure. Low flow pressure.

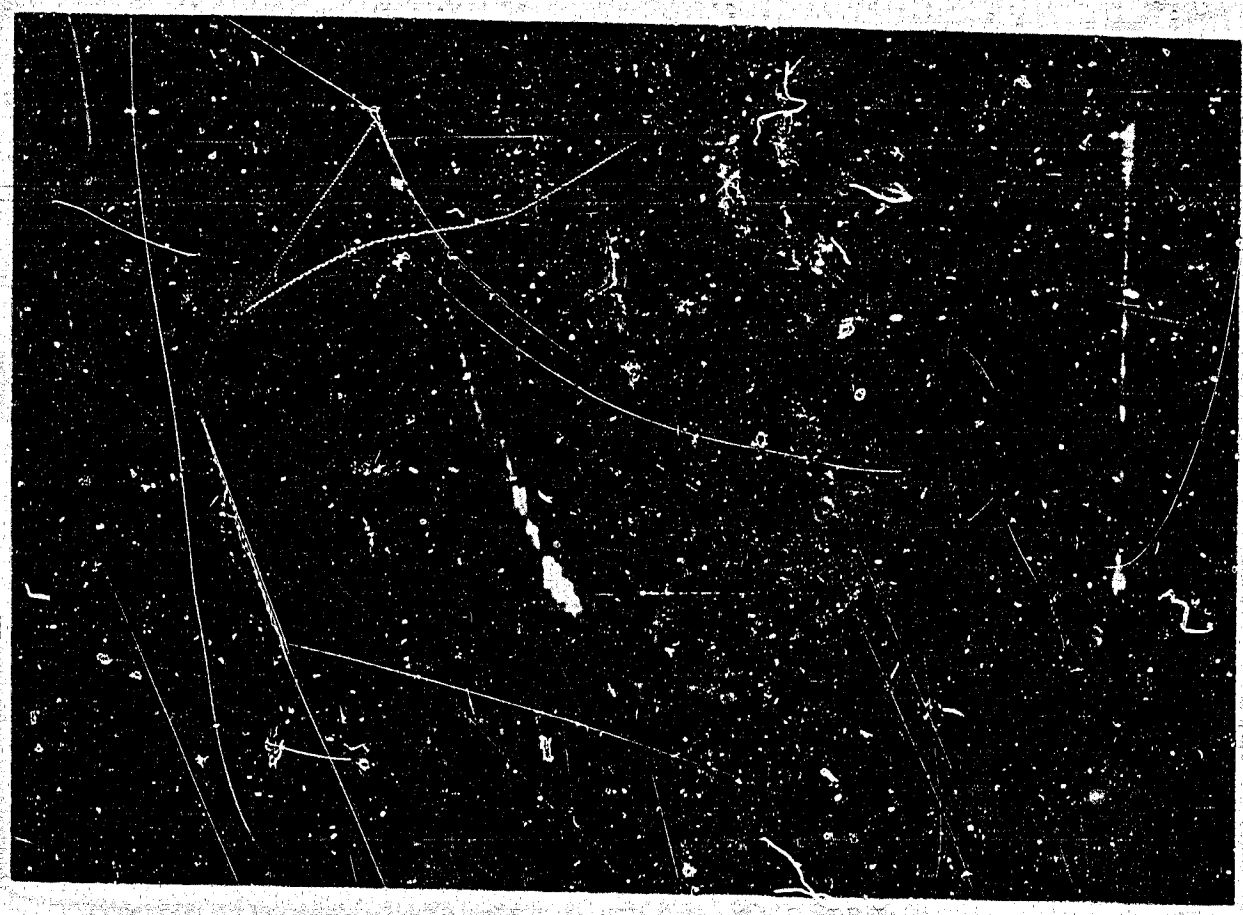


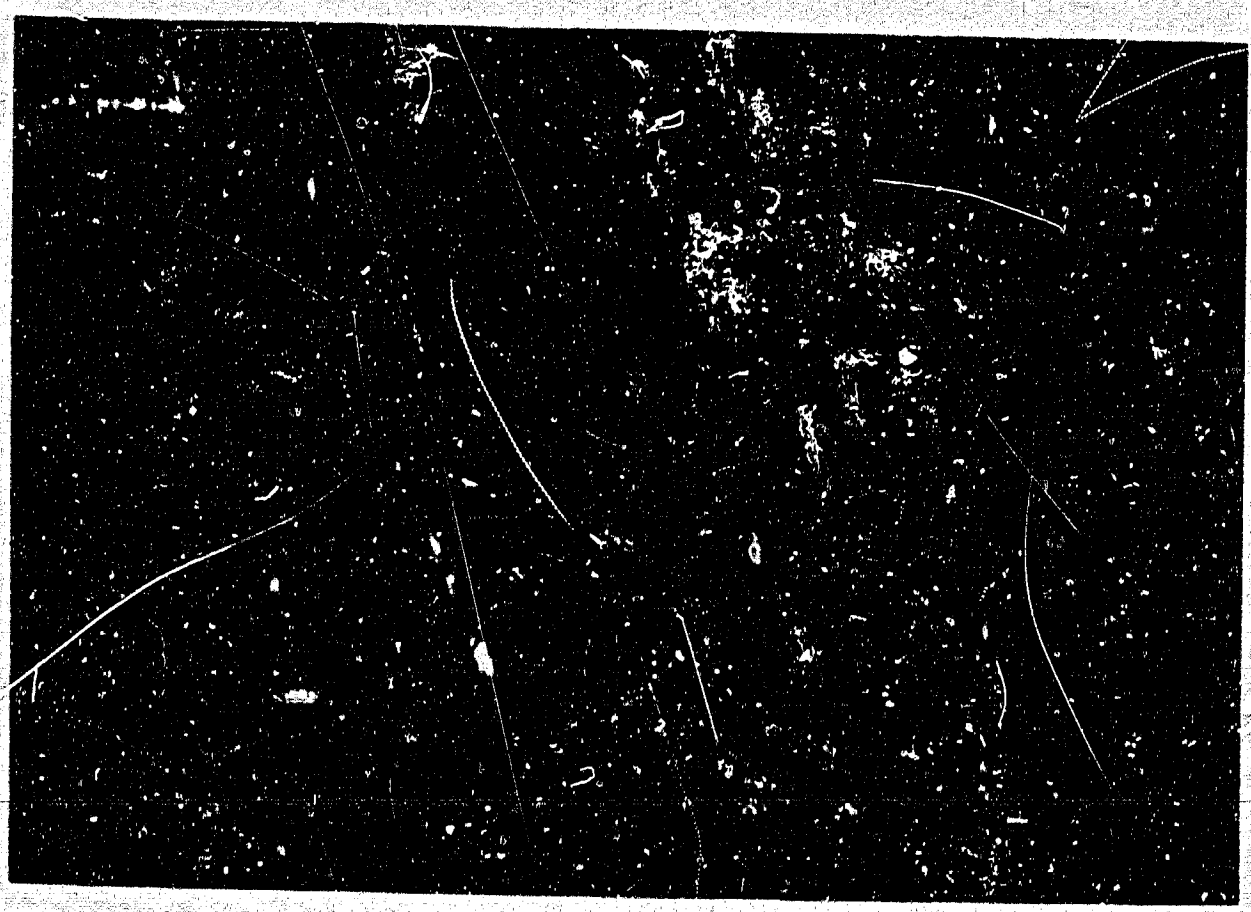
Formation permeability where final flow and shut-in pressures build to full formation pressure.

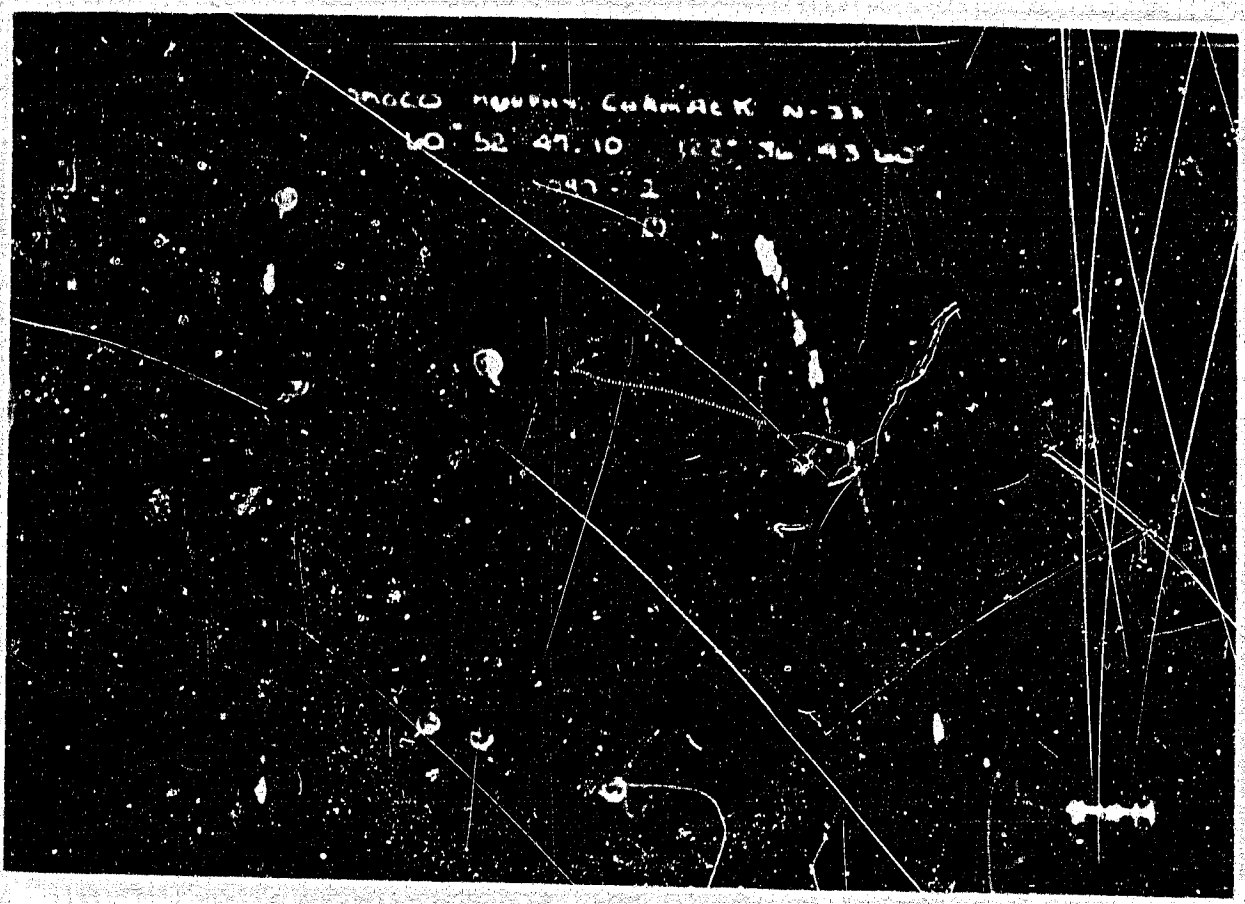
High permeability where ISIP and FSIP are within 10 psi.

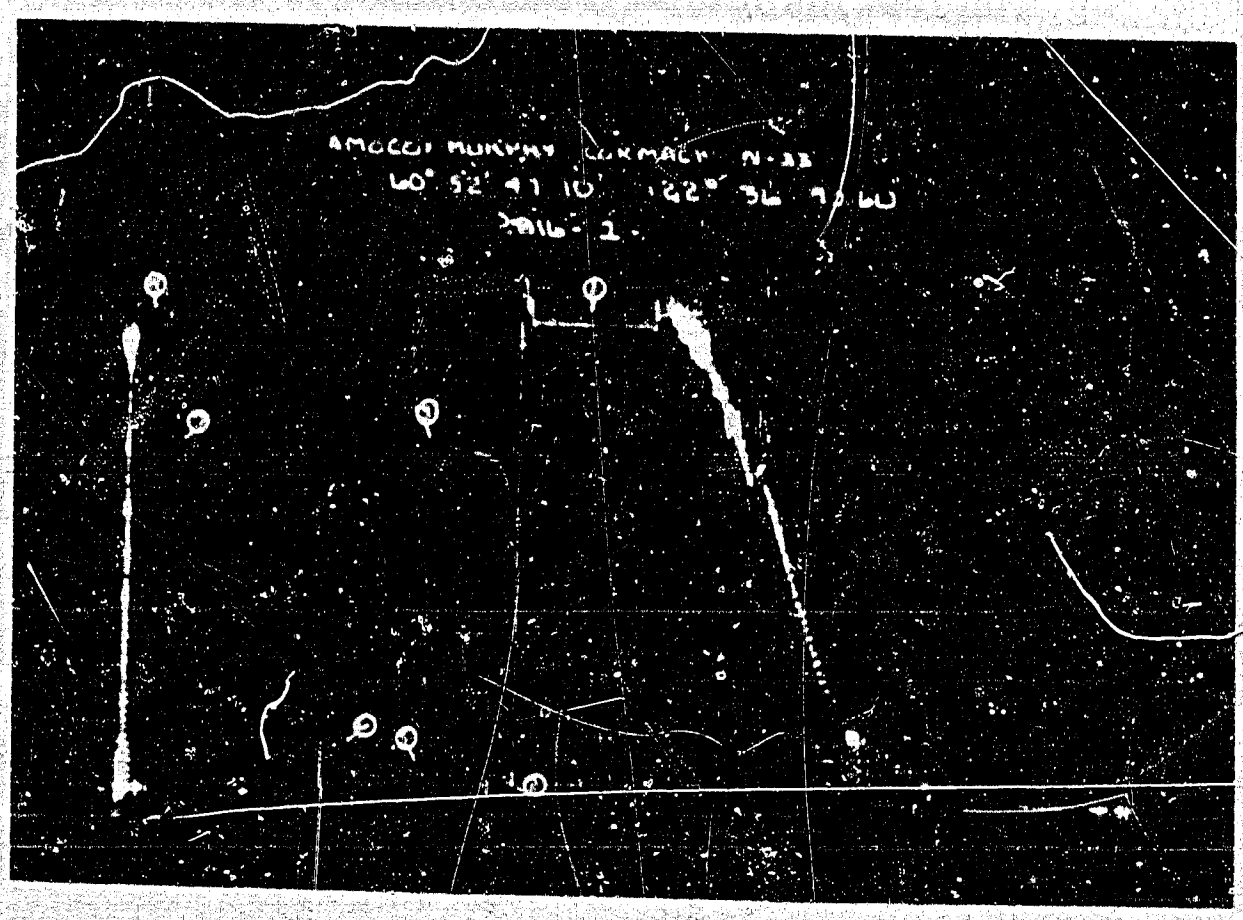
Deep well bore. Pressure on surface. Final shut-in higher than the initial shut-in.

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






AMOCO MURPHY CORMACK N-33
60° 52 47.10
2916-2


AMOCO MURPHY CORMACK N-33
60° 52' 47 10'
2916-2

Amoco Norbeck Cormack

1" = 33

Annie Murphy Comack N. 33

DAILY DRILLING REPORT — REPORT NO.

LEASE: Amoco Murphy Co. Mack — WELL NO.: A-1 — API WELL NUMBER: 61° 00'N 122° 30'W. — DATE: 3-15-70

OPERATOR: Amoco Can — CONTRACTOR: Kerr Drlg LTD. — RIG NO.: 2.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature] — SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Fred Hodgkin.

LOCATION: Mack A-1 N.W.T.

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

LAST CASING RUNNING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	BKB TO CSG. HD.	WT AT

WIRE LINE RECORD — REEL NO.

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. ON TRIPS SINCE LAST CUT

CUMULATIVE TON MI. ON TRIPS

TIME DISTRIBUTION — HOURS

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

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W CONTR. D.P.

HRS. W OPR. D.P.

HRS. WO D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

DRILLING ASSEMBLY (At end of hole)

NO.

BIT — FT.

STB RMR OD — FT.

D.C. ID OD — FT.

STB RMR OD — FT.

D.C. ID OD — FT.

STB RMR OD — FT.

STANDS DP — FT.

SINGLES DP — FT.

KELLY DOWN — FT.

TOTAL — FT.

WT. OF STRING — LBS.

BIT RECORD

BIT NO. | SIZE | MFG. | TYPE | JETS 1 32nds | SER. NO. | DEPTH OUT | DEPTH IN | TOTAL FTG. | TOTAL HRS. RUN | COND. 1 8's T. B. GAGE | DPM PD-PM

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

MORNING TOUR

FOOTAGE

FROM	TO	DR. D RM. R CORE. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN PARTIAL OR COMPLETE

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8.00	8.00			TEAR OUT.

DRILLER

DAY TOUR

FOOTAGE

FROM	TO	DR. D RM. R CORE. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN PARTIAL OR COMPLETE

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8.00	8.00.			TEAR OUT LAY DOWN DERRICK. LOAD OUT TRUCKS.
				Bottle SHUT DOWN 6.00PM MAR 15-70.

DRILLER

EVENING TOUR

FOOTAGE

FROM	TO	DR. D RM. R CORE. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN PARTIAL OR COMPLETE

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8.00	8.00			TEAR OUT.

DRILLER

FORM 3T5 — APPROVED — APPROVED

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

DAILY DRILLING REPORT REPORT NO.

LEASE: Mobil Murphy Cormack | WELL NO. A-1 | API WELL NUMBER 61° 00'N 122° 30' W | DATE 3-14-70

OPERATOR: Amoco | CONTRACTOR: Keen Drlg. LTD | RIG NO. 2.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: D. [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Fred Radolkin

LOCATION: Cormack Lake NWT

D.P. SIZE	WT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-850	18"
2	"	D-700	16"

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

WIRE LINE RECORD REEL NO.
SIZE | NO. LINES | FT. SLIPPED
FT. CUT OFF | PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL			
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT	8	8	8
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'N'TN			
	B. TRG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'NL			
	G.			
TOTALS				

DAY WORK TIME SUMMARY (OFFICE USE) 8 8 8

HRS. W CONTR. D.P.	
HRS. W OPR. D.P.	
HRS. NO D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMUL. TIME ROTATING HRS.	
TOTAL MUD COST	

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1 32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1 B's T B GAGE	
GPM PD-PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE / FORMATION

FROM	TO	DR'D RM'R CORE'C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. SPM	PUMP NO. LINER SIZE	PUMP NO. SPM	METHOD USED

DEVIATION RECORD

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

DAY TOUR

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	5:30	5½		Circ. & W.O.C.
5:30	6:00	½		Run in & Fill Plug No. 1 @ 5235 with non-fer 5 Min.
6:00	8:00	2		Hoist D.P.
				Used Keen's Welder 4 Hrs. F/Cutting off & Welding Csg.

DRILLER

DAY TOUR (continued)

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	5:30			Hoist To 770.
8:30	9:00			Circ. & R.R. UP Dowell
9:00	9:15			Run Plug #2.
9:15	3:15			Pull 2 Stds. & Lay Down D.P. (W.O.C.)
3:15	4:00			W.O.C. & Start Tearing Out
				Plug #2 670'-770
				60 sx + 3% CaCl2

DRILLER

EVENING TOUR

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
11:00	5:15			W.O.C. - Tear Out
5:15	5:30			Fill Plug #2 @ 660 Ft. Wt. for 5 Mins.
5:30	6:00			Lay Down D.P.
6:00	10:00			Tear Out B.O.P.'s
10:00	12:00			Cut Off Csg. Bowl. Weld ¼" Plate & Install Sign. (3' Below Gr. L. Tacked Size With 5 Sx. Cmt.
				R.R. Released 12 Midnight 3-14-70 DJQ WATER TRUCK 13 hrs.

DRILLER

FORM 3T5 APPROVED APPROVED

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

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Amoco Murphy Cormack A-1	N-33	61° 00' N 122° 30' W	3-13-70

OPERATOR: Amoco Can Petē — CONTRACTOR: KEEN Drlg LTD — RIG NO.: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: D[illegible] — SIGNATURE OF CONTRACTOR'S TOOL PUSHER: C. O'Connell

LOCATION: Cormack Lk NWT

O.D. SIZE	WT. PT.	GRADE	TOOL JT I.D.	TYPE THREAD	STRING NO.
5	19.50	E	6 3/8	4 1/2 IF	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	DB50	18
2		DA 700	16

LAST CASING TUBING OR LINER: SIZE 9 5/8 — MAKE — WT. & GR. 40 55.5 — NO. JOINTS — FEET — REEL NO. — SET AT 720

WIRE LINE RECORD — REEL NO. — SIZE 1/4 — NO. LINES 8 — FT. STRETCHED — FT. CUT OFF — REMAINING LENGTH — TON MI. OR TRIPS SINCE LAST CUT — CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL			
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS		2½	3¼
7	LUBRICATE RIG		½	
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			3¼
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21	W.O.O	8	7½	
22	Lay Down D.C		2½	1
23				
COMPLETION	A. PERF'N'G			
	B. TRIPS TBG			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'NL			
	G.			
TOTALS		8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

MRL W. CONTR. D.P. — MRL @ DPM. D.P. — MRL WO D. P. — MRL STANDBY — TOTAL DAY WORK — NO. OF DAYS FROM SPUD — CUMULATIVE ROTATING HRS. — TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

BIT NO.	HR 18
SIZE	Sha 8½
MFG.	Eccd.
TYPE	SHC
JETS 1 32nds	18 18 16
SER. NO.	956756
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. T.B. GAGE	
GPM PD-PSI	

MUD RECORD

TIME	12 M	3 PM	6 PM
WEIGHT	9.5	9.5	9.5
PRESSURE GRADIENT			
VISC.-SEC.	300	225	125
PV YP	/	/	/
GELS	/	/	/
WL-CC'S			6.0
pH			9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	15 sks		
Bonex	3 sks		

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1 32nds	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. T.B. GAGE	
GPM PD-PSI	

MUD RECORD

TIME		10:00	
WEIGHT		9.3	
PRESSURE GRADIENT			
VISC.-SEC.		180	
PV YP	/	/	/
GELS			
WL-CC'S			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	2100#		
Barite	8 sks		

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1 32nds	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. T.B. GAGE	
GPM PD-PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DRLD RUN OR CORED	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD OF MUD CONTROL

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 M	4 PM	8		Circ. WO Orders

Driller: [signature]

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DRLD RUN OR CORED	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD OF MUD CONTROL
6253												

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	10:30	2½		MIX MUD & CIRC. & W.O.O
10:30	11:00	½		SERVICE RIG. & BOP's
11:00	1:30	2½		HOIST DRILL PIPE
1:30	4:00	2½		LAY DOWN D.C.

Driller: [signature]

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DRLD RUN OR CORED	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD OF MUD CONTROL

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	5:00	1		Lay Down D.C.'s
5:00	8:45	3 3/4		Run in Open End D.P. To 5650
8:45	9:30	¾		Rig up Dowell & Circ.
9:30	10:00	½		Run Plug #1 & Displace -
10:00	12:00	2		W.O.C. Plug #1 5650-5350
				230 sx 2% CaCl6

WATER TRUCK 19 hrs

Driller: [signature]

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

Form 3TD — APPROVED — APPROVED

DAILY DRILLING REPORT — REPORT NO.

LEASE — WELL NO. — API WELL NUMBER — DATE

OPERATOR — CONTRACTOR — RIG NO.

SIGNATURE OF OPERATOR'S REPRESENTATIVE — SIGNATURE OF CONTRACTOR'S TOOL PUSHER

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

LOCATION

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

WIRE LINE RECORD — REEL NO. — SIZE — NO. LINES — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH — TON MI. OR TRIPS SINCE LAST CUT — CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION - HOURS

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

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1 32nds	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS RUN	
COND. 1 8's T. B. GAGE	
GPM PD-PSI	

MUD RECORD

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

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

WORKING TOUR

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

BIT NO.	RR
SIZE	8 1/2
MFG.	REED
TYPE	SHG
JETS 1 32nds	18 18 18
SER. NO.	803456
DEPTH OUT	
DEPTH IN	6253
TOTAL FTG.	
TOTAL HRS RUN	
COND. 1 8's T. B. GAGE	
GPM PD-PSI	

MUD RECORD

TIME	7 PM
WEIGHT	9.5
PRESSURE GRADIENT	
VISC.-SEC.	300
PV YP	
GELS	
WL-CC'S	6.0
pH	9.5
SOLIDS %	

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

DAY TOUR — EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1 32nds	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS RUN	
COND. 1 8's T. B. GAGE	
GPM PD-PSI	

MUD RECORD

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

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

FOOTAGE / FORMATION

FROM	TO	DR., D, Rm., R CORE, C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN SURVEY

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12				W.O. Orders

DRILLER

FOOTAGE / FORMATION

FROM	TO	DR., D, Rm., R CORE, C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN SURVEY
6253												

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
2:00	12:00			36 Joints 5 1/2" 15.5# J-55 Casing
12:00	1:00	1		Cement Casing
1:00	1:30	1/2		Set Slips & Cut Casing
1:30	2:00	1/2		Clean Mud Tanks & Lines
2:00	4:00	2		Rig Down Rotary Tools

DRILLER

FOOTAGE / FORMATION

FROM	TO	DR., D, Rm., R CORE, C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN SURVEY
6253												

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:30	1/2		Finish Running in W/ DST
4:30	5:30	1		Thaw out Manifold & Blooie Line, Pickup 11 D.P.
5:30				Circ. Cond. Hole, W.O. Orders

WATER TRUCK 1 hr.

DRILLER

FORM 375 — APPROVED — APPROVED

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

DAILY DRILLING REPORT — REPORT NO.

LEASE: Amoco Marsky Cormack A-1 | WELL NO.: N-33 | API WELL NUMBER: 61° 00'N 132° 30'W | DATE: 3-11-70

OPERATOR: Amoco CAN PETE | CONTRACTOR: KEEN DRLG LTD | RIG NO.:

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature] | SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [signature]

LOCATION: CORMACK LK NWT

D.P. SIZE	WT. PT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5"	19.50	E	6 3/8	4 1/2 IF	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	B 50	18
2		D B 700	16

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	MEAS. TO CSG. HD.	SET AT
	9 5/8		40 J55				720

WIRE LINE RECORD — REEL NO. — SIZE — NO. LINES — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH — TON MI. OR TRIPS SINCE LAST CUT — CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION - HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL			
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE	1		
6	TRIPS	2 1/4		
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS	4 1/4	8	6 1/2
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21	W.O. TOOL	1 1/2		
22				
23				

COMPLETION: A. PERF'R'T'N; B. TRG TRIPS; C. TREATING; D. SWABBING; E. TESTING; F. ADDIT'NL; G.

TOTALS: 8 8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
	BIT	FT.	BIT NO.		TIME	12.00
	STB RMR OD	FT.	SIZE		WEIGHT	9.5
	D.C. ID OD	FT.	MFG.		PRESSURE GRADIENT	
	STB RMR OD	FT.	TYPE		VISC.-SEC.	300#
	D.C. ID OD	FT.	JETS 1 32nds		PV YP	
	STB RMR OD	FT.	SER. NO.		GELS	
			DEPTH OUT		WL-CC'S	5.0
			DEPTH IN		pH	9.5
			TOTAL FTG.		SOLIDS %	
			TOTAL HRS. RUN			
	STANDS DP	FT.	COND. 1 8's T. B. GAGE			
	SINGLES DP	FT.	GPM PD-PSI			
	KELLY DOWN	FT.				
	TOTAL	FT.				
	WT. OF STRING	LBS.				

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

DAY TOUR

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

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

EVENING TOUR

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

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

MORNING TOUR

FOOTAGE: FROM | TO | DR'L'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. L.P.M. | PUMP NO. LINER SIZE | PUMP NO. L.P.M. | METHOD RUN

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12m	1m	1		C&C
1m	3m	2 3/4		HOIST
3m	8m	4 1/4		LOGGING w/ SCHLUM 3 RUN GR
				RAN DUAL INDUCTION LATEROLOG
				W/ MC SONIC-GR CALIPER
				SURFACE CSG TO T.D

DRILLER: [signature]

DAY TOUR

FOOTAGE: FROM 6253 | TO | DR'L'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. L.P.M. | PUMP NO. LINER SIZE | PUMP NO. L.P.M. | METHOD RUN

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8m	4m	8		LOG. w/ SCHLUMBERGER
				RAN SNRC 5000 TO T.D.

DRILLER: [signature]

EVENING TOUR

FOOTAGE: FROM 6253 | TO | DR'L'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. L.P.M. | PUMP NO. LINER SIZE | PUMP NO. L.P.M. | METHOD RUN

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	10:30	6 1/2		LOG w/ Schlumberger
10:30	12:00	1 1/2		W. O. Schlumberger TOOL
				RAN P.LL 5000 TO T.D.
				WATER TRUCK 132 cu

DRILLER: [signature]

FORM 3TB — APPROVED — APPROVED

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

DAILY DRILLING REPORT

REPORT NO.

LEASE: Amoco Murphy Cormack A-1 | WELL NO: N-33 | API WELL NUMBER: 61° 00N 122° 30'W | DATE: 3-10-70

OPERATOR: Amoco Can Pete | CONTRACTOR: Keen Drlg LTD | RIG NO: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature] | SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [signature]

LOCATION: Cormack Lk A-1 N'WT

D.P. SIZE	WT. PT.	GRADE	TOOL JT. O.D.	TYPE THREAD	STRING NO.
5	19.50	E	6 3/8	4 1/2 IF	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D850	18
2	Emsco	DA700	16

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	BRK. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	9 5/8		40 J55				720

WIRE LINE RECORD — REEL NO. — SIZE 1/4 — NO. LINES 8 — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION - HOURS

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

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W CONTR. D.P.

HRS. W OPR. D.P.

HRS. NO D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD

CUMULATIVE DAYS THIS CONT.

TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

BIT NO.	17	
SIZE	8 1/2	
MFG.	Reed	
TYPE	SH6	
JETS 1 32nds	16 16 16	
SER. NO.	856956	
DEPTH OUT		
DEPTH IN	6253.	
TOTAL FTG.		
TOTAL HRS. RUN		
COND. 1 B. GAGE		
GPM PD-PSI		

MUD RECORD

TIME	6AM
WEIGHT	9.5
PRESSURE GRADIENT	
VISC.-SEC.	220
PV YP	
GELS	
WL-CC'S	5.6
pH	7.5
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Bd	15 cks		
Barac	3 cks		

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
BIT			FT.
STB. NEAR	17	OD	FT.
D.C. ID	6 3/4	OD	FT.
STB. NEAR		OD	FT.
D.C. ID		OD	FT.
STB. NEAR		OD	FT.
STANDS DP			FT.
SINGLES		DP	FT.
KELLY DOWN			FT.
TOTAL	1 Orsub.		1.32
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	RR	RR
SIZE	8 1/2	8 1/2
MFG.	Reed	Reed
TYPE	SH6	SH6
JETS 1 32nds	13 13 13	18 18 18
SER. NO.	856956	856926
DEPTH OUT		
DEPTH IN	6253	
TOTAL FTG.		
TOTAL HRS. RUN		
COND. 1 B. GAGE		
GPM PD-PSI		

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

BIT NO.	RR	
SIZE	8 1/2	
MFG.	Reed	
TYPE	SH6	
JETS 1 32nds	16 16 16	
SER. NO.	856956	
DEPTH OUT		
DEPTH IN	6253.	
TOTAL FTG.		
TOTAL HRS. RUN		
COND. 1 B. GAGE		
GPM PD-PSI		

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR., D RM., R CORE, C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN WIRE LINE / DRILL PIPE / CORE BBL

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	2:00	2		Logging w/ Schlum Berger Rig
2:00	4:30	2 1/2		Rig In
4:30	8:00	3 1/2		Circ Minimum Cond Hole

Fuel 4'6"

DRILLER [signature]

FOOTAGE / FORMATION

FROM	TO	DR., D RM., R CORE, C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN WIRE LINE / DRILL PIPE / CORE BBL
6253												

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	9:15	1 1/4		Circ Condition Mud
9:15	12:30	3 1/4		Hoist to Log.
12:30	3:15	2 3/4		Try to Log. Unable to get past 5330'
3:15	4:00	3/4		Start in w/ Bit

DRILLER [signature]

FOOTAGE / FORMATION

FROM	TO	DR., D RM., R CORE, C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN WIRE LINE / DRILL PIPE / CORE BBL
6253												

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	11:30	7 1/2		Run in w/ Bit and work Tight Spots 5330 to T.D. No Fill
11:30	12:00	1/2		Circ Hole

Water Truck 10 hrs

DRILLER [signature]

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

APPROVED APPROVED

DAILY DRILLING REPORT — REPORT NO.

LEASE: CORMACK A-1 | WELL NO: N-33 | API WELL NUMBER: 61° 00'N 122° 30'W | DATE: 2-9-70

OPERATOR: AMOCO CAN PET | CONTRACTOR: KEEN DRLG LTD | RIG NO: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature] | SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Bublick

D.P. SIZE	WT. P.F.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5	19.50	E	6 7/8	4 1/2 IF	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D250	18
2		D4700	12

LOCATION: CORMACK LKA-1 NWT

WIRE LINE RECORD — REEL NO. — SIZE 1 1/4 — NO. LINES 8 — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH — TON MI. OR TRIPS SINCE LAST CUT — CUMULATIVE TON MI. OR TRIPS

LAST CASING RUNNING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	BRD. TO CSG. NO.	SET AT
	9 5/8		40 J55				720

TIME DISTRIBUTION — HOURS

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

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

DRILLING ASSEMBLY (At end of hour)

NO.			FT.
	BIT		
	STB NEAR	OD	FT.
17	D.C. ID 6 3/4	OD 524.44	FT.
	STB MEAN	OD	FT.
	D.C. ID	OD	FT.
	STB REAR	OD	FT.
1	10 Sub	1.32	
62	STANDS OF	5821.41	FT.
2	SINGLES DP	54.90	FT.
	KELLY DOWN	33	FT.
	TOTAL	6243	FT.
	WT. OF STRING	178 M	LBS.

BIT RECORD

BIT NO.	17
SIZE	6 3/4
MFG.	HW
TYPE	R-55R
JETS 1 32nds	11 11 11
SER. NO.	J2280
DEPTH OUT	
DEPTH IN	6211
TOTAL FTG.	32
TOTAL HRS. RUN	7 1/4
COND. T.B.'S GAGE	
GPM PD PSI	

MUD RECORD

TIME	2 PM	4 PM	6 PM
WEIGHT	12	12	
PRESSURE GRADIENT			
VISC.-SEC	170	180	
PV YP	/	/	/
GELS			
W.L.-CC'S	60	60	
pH	9.5	9.5	
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	200#		
Barite	7 sx		
Caus	100#		

MORNING TOUR

FOOTAGE / FORMATION

FROM	TO	DR'D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
6211	6243	D			50	45	800	5 1/2	43			

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	12 30	1/2		Clean Out Circ on Bottom
12 30	12 45	1/4		R.g Srvy Blo's
12 45	8 00	7 1/4		Drill

DRILLER: [illegible]

DRILLING ASSEMBLY (At end of hour)

NO.			FT.
	BIT		
	STB NEAR	OD	FT.
17	D.C. ID 6 3/4	OD 524.44	FT.
	STB MEAN	OD	FT.
	D.C. ID	OD	FT.
	STB REAR	OD	FT.
1	10 Sub	1.32	
63	STANDS OF	5716.07	FT.
	SINGLES DP		FT.
	KELLY DOWN	11.17	FT.
	TOTAL	6253 M	FT.
	WT. OF STRING	170 M.	LBS.

BIT RECORD

BIT NO.	17
SIZE	8 1/2
MFG.	HW.
TYPE	RX55R
JETS 1 32nds	11 11 11
SER. NO.	J2280
DEPTH OUT	6243
DEPTH IN	6211
TOTAL FTG.	32
TOTAL HRS. RUN	14
COND. T.B.'S GAGE	
GPM PD PSI	

MUD RECORD

TIME	8:30	11:00	3:00
WEIGHT	9.4	9.4	9.3
PRESSURE GRADIENT			
VISC.-SEC	300	210	225
PV YP	/	/	/
GELS			
W.L.-CC'S	5.6	5.6	5.6
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Soda Ash	300#		
Caus	100#		

DAY TOUR

FOOTAGE / FORMATION

FROM	TO	DR'D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
6243		D			50	45	800	5 1/2	43			

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	1 30	5 1/2		DRLG.
1 30	1 45	1/4		SERVICE RIG. & BOP'S
1 45	3 00	1 1/4		DRLG.
3 00	4 00	1		CIRC. HOLE CLEAN TO LOG.

DRILLER: M Porter

DRILLING ASSEMBLY (At end of hour)

NO.			FT.
	BIT		
	STB NEAR	OD	FT.
17	D.C. ID 6 3/4	OD 524.44	FT.
	STB MEAN	OD	FT.
	D.C. ID	OD	FT.
	STB REAR	OD	FT.
1	10 Sub	1.32	
63	STANDS OF	6253	FT.
	SINGLES DP		FT.
	KELLY DOWN	11.17	FT.
	TOTAL	6253	FT.
	WT. OF STRING	170 M	LBS.

BIT RECORD

BIT NO.	17
SIZE	8 1/2
MFG	HW
TYPE	RX55R
JETS 1 32nds	N N N
SER. NO.	J2280
DEPTH OUT	6253
DEPTH IN	6211
TOTAL FTG.	32
TOTAL HRS. RUN	14
COND. T.B.'S GAGE	
GPM PD PSI	

MUD RECORD

TIME	4:00
WEIGHT	9.4
PRESSURE GRADIENT	
VISC.-SEC	215
PV YP	/
GELS	
W.L.-CC'S	5.6
pH	9.5
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR'D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
6223				TALLY MEASURED 6256.87 BOARD TALLY 6253.85 DIFF 3.04								

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:30	1/2		CIRC. HOLE CLEAN TO LOG
4:30	8:15	3 3/4		STRAP OUT OF HOLE TO LOG
8:15	8:30	1/4		Pickup Logging Equipment
8:30	12:00	3 1/2		LOG

WATER TRUCK 13 hrs.

DRILLER: R.W. Johnston

APPROVED APPROVED

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

DAILY DRILLING REPORT — REPORT NO.

LEASE: Amoco Murphy Cormack A-1 | WELL NO.: N-33 | API WELL NUMBER: 61° 00'N 122° 30'W | DATE: 2-8-70

OPERATOR: Amoco Can Pac | CONTRACTOR: KEEN Drlg LTD | RIG NO.: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: D.F. [illegible] | SIGNATURE OF CONTRACTOR'S TOOL PUSHER: C. Penlick.

LOCATION: Cormack I.K A-1 Nwst

D.P. SIZE	WT. P.F.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5	19.50	E	6 3/4	NC 50 IF	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D 850	17
2		DA 700	16

LAST CASING TUBING OR LINER	SIZE	WGT. & GR.	NO. JOINTS	FEET	RKB TO CSG. HD.	SET AT
	9 5/8	40 [illegible]				720

WIRE LINE RECORD — REEL NO. — SIZE 1/4 — NO. LINES 0 — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH — TON MI. OR TRIPS SINCE LAST CUT — CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION - HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	7 3/4	7 1/2	3/4
3	REAMING CRANOUT			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			6 3/4
7	LUBRICATE RIG	1/4	1/4	1/4
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY		1/4	
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			1/4
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'N'G			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDT'NL			
	G.			
TOTALS				8 8 8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W CONTR. D.P. | HRS. W OPN. D.P. | HRS. NO D.P. | HRS. STANDBY | TOTAL DAY WORK | NO. OF DAYS FROM SPUD | CUMULATIVE ROTATING HRS. | TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour)

NO.				
	BIT			FT.
	STB	RIMM	OD	FT.
17	D.C.	ID 6 3/4	OD 524.44	FT.
	STB	RIMM	OD	FT.
	D.C.	ID	OD	FT.
	STB	RIMM	OD	FT.
1	XO SUB		1.32	FT.
61	STANDS DP		5534.66	FT.
2	SINGLES	DP	61.00	FT.
	KELLY DOWN		38	FT.
	TOTAL		6159	FT.
WT. OF STRING			169	LBS.

BIT RECORD

BIT NO.	16
SIZE	8 1/2
MFG.	HW
TYPE	RX55R
JETS 1 32nds	11 11 11
SER. NO.	HW047
DEPTH OUT	
DEPTH IN	5927
TOTAL FTG.	232
TOTAL HRS. RUN	30
COND. I-B-G T-B GAGE	RIW
GPM PD PSI	

MUD RECORD

TIME	1[illegible]	4[illegible]	[illegible]
WEIGHT	93	93	
PRESSURE GRADIENT			
VISC.-SEC.	190	200	
PV YP	/	/	
GELS			
WL-CC'S	60	56	
pH	10	9.5	
SOLIDS %			

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

WORKING TOUR

FOOTAGE / FORMATION

FROM	TO	DR. D RM. R CORE. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. SPM	PUMP NO. LINER SIZE	PUMP NO. SPM	METHOD MUD
6109	6159	D			51	43	800	5 1/2	43			

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1200	3[illegible]	3		D.2.11 8 1/2 Hole
3[illegible]	3[illegible]	1/4		R.T. Surv. Rpts
3[illegible]	8[illegible]	4 3/4		Drill

DRILLER [signature]

DRILLING ASSEMBLY (At end of tour)

NO.				
	BIT			FT.
	STB	RIMM	OD	FT.
17	D.C.	ID 6 3/4	OD 524.44	FT.
	STB	RIMM	OD	FT.
	D.C.	ID	OD	FT.
	STB	RIMM	OD	FT.
1	XO SUB		1.32	FT.
62	STANDS DP		5625.91	FT.
1	SINGLES	DP	30.18	FT.
	KELLY DOWN		29.05	FT.
	TOTAL		6211.00	FT.
WT. OF STRING			169,000	LBS.

BIT RECORD

BIT NO.	16
SIZE	8 1/2
MFG.	HW
TYPE	RX55R
JETS 1 32nds	11 11 11
SER. NO.	HW047
DEPTH OUT	6211
DEPTH IN	5927
TOTAL FTG.	284
TOTAL HRS. RUN	37 1/2
COND. I-B-G T-B GAGE	8 1
GPM PD PSI	

Bit Locked & Shutdown

MUD RECORD

TIME	8:00	11:00	3:00
WEIGHT	9.3	9.3	9.3
PRESSURE GRADIENT			
VISC.-SEC.	194	190	180
PV YP	/	/	
GELS			
WL-CC'S	5.6	5.6	6.0
pH	9.5	9.5	9.5
SOLIDS %			

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

Soda Ash 500#

DAY TOUR

FOOTAGE / FORMATION

FROM	TO	DR. D RM. R CORE. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. SPM	PUMP NO. LINER SIZE	PUMP NO. SPM	METHOD MUD
6159	6211	D			51	43	800	5 1/2	43			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
6296	1 1/4°							

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8[illegible]	8 30	1/2		DRLG.
8 30	8[illegible]	1/4		SERVICE RIG & BOPs
8[illegible]	3[illegible]	7		DRLG.
3[illegible]	4[illegible]	1/4		DROP SURVEY.

DRILLER [signature]

DRILLING ASSEMBLY (At end of tour)

NO.				
	BIT			FT.
	STB	RIMM	OD	FT.
17	D.C.	ID 6 3/4	OD 524.44	FT.
	STB	RIMM	OD	FT.
	D.C.	ID	OD	FT.
	STB	RIMM	OD	FT.
1	XO SUB		1.32	FT.
61	STANDS DP		5625.91	FT.
1	SINGLES	DP	30.18	FT.
	KELLY DOWN		29	FT.
	TOTAL		6211	FT.
WT. OF STRING			170	LBS.

BIT RECORD

BIT NO.	17
SIZE	8 1/2
MFG.	HW
TYPE	RX55R
JETS 1 32nds	11 11 11
SER. NO.	JZ200
DEPTH OUT	
DEPTH IN	6211
TOTAL FTG.	
TOTAL HRS. RUN	
COND. I-B-G T-B GAGE	
GPM PD PSI	

MUD RECORD

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

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

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR. D RM. R CORE. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. SPM	PUMP NO. LINER SIZE	PUMP NO. SPM	METHOD MUD
6211												

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4[illegible]	7 45	3 3/4		Hoist slow
7 45	8:00	1/4		R/U BOPs
8[illegible]	8:[illegible]	1/4		R/U SERV
8:[illegible]	11[illegible]	3		RUNIN slow
11[illegible]	12[illegible]	3/4		BREAK CIRC CLEAN OUT

WATER TRUCK 19 hrs.

DRILLER

FORM 3TB — APPROVED — APPROVED

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

DAILY DRILLING REPORT — REPORT NO.

LEASE: Amoco Murphy Cormack A1 — WELL NO.: W-33 — API WELL NUMBER: 61° 00' 122° 30' — DATE: 3-7-70

OPERATOR: Amoco Can Pete — CONTRACTOR: Keen Drlg LTD — RIG NO.: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature] — SIGNATURE OF CONTRACTOR'S TOOL PUSHER: G. Conklin

LOCATION: Cormack Lake NWT

D.P. SIZE	WT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5	19.50	E	6 3/4	NC 50 IF	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D800	16
2	Emsco	DA750	16

	SIZE	WEIGHT & GR.	NO. JOINTS	FEET	RKB TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	9 5/8	40 J55				720

WIRE LINE RECORD — REEL NO. — SIZE 1/4 — NO. LINES 8 — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH

TON MI. OD TRIPS SINCE LAST CUT: 529.23

CUMULATIVE TON MI. OD TRIPS: 529.23

TIME DISTRIBUTION - HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	MIG UP AND TEAR DOWN			
2	DRILL ACTUAL	6 3/4	7 1/2	8
3	REAMING	1/4		
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS	3/4		
7	LUBRICATE RIG	1/4	1/2	
8	REPAIR RIG			
9	SLIP DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	OTHER WORK			
21				
22				
23				

COMPLETION: A. PERF'ATING; B. TBG. TRIPS; C. TREATING; D. SWABBING; E. TESTING; F. ADD'T'NL; G.

TOTALS: 8 7 1/2 8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

DRILLING ASSEMBLY (At end of run)

NO.			
	BIT		FT.
	STB NMR OD		FT.
17	D.C. ID 6 3/4 OD	524.44	FT.
	STB NMR OD		FT.
	D.C. ID OD		FT.
	STB NMR OD		FT.
1	Yo Sub	1.32	FT.
60	STANDS DP	5443.30	FT.
	SINGLES DP		FT.
	KELLY DOWN	20	FT.
	TOTAL	5987	FT.
	WT. OF STRING	162	LBS.

BIT RECORD

BIT NO.	16
SIZE	8 1/2
MFG.	HW
TYPE	X65R
JETS 1 32nds	11 11 11
SER. NO.	HW047
DEPTH OUT	
DEPTH IN	5927
TOTAL FTG.	60
TOTAL HRS. RUN	6 3/4
COND. T. B. GAGE	
GPM PD-PM	

MUD RECORD

TIME	2	4	6
WEIGHT	9.3	9.3	9.3
PRESSURE GRADIENT			
VISC-SEC	250	200	200
PV YP	/	/	/
GELS	/	/	/
WL-CC'S	5.4	5.8	6.0
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Caus.	100#		
Water			

MORNING TOUR

DRILLING ASSEMBLY (At end of run)

NO.			
	BIT		FT.
	STB NMR OD		FT.
17	D.C. ID 6 3/4 OD	524.44	FT.
	STB NMR OD		FT.
	D.P. ID OD		FT.
	STB NMR OD		FT.
1	XO SUB	1.32	FT.
61	STANDS DP	5534.66	FT.
	SINGLES DP		FT.
	KELLY DOWN	11.58	FT.
	TOTAL	6072.56	FT.
	WT. OF STRING	168,000	LBS.

BIT RECORD

BIT NO.	16
SIZE	8 1/2
MFG.	HW
TYPE	RX55R
JETS 1 32nds	11 11 11
SER. NO.	HW 047
DEPTH OUT	
DEPTH IN	5927
TOTAL FTG.	~~115~~ 119
TOTAL HRS. RUN	~~8 1/2~~ 14 1/4
COND. T. B. GAGE	
GPM PD-PM	

MUD RECORD

TIME	9.00	1600	2:00
WEIGHT	9.2	9.2	9.3
PRESSURE GRADIENT			
VISC-SEC	192	168	295
PV YP	/	/	/
GELS	/	/	/
WL-CC'S	5.6	5.6	5.8
pH	9.0	9.0	9.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1300		
Water			

DAY TOUR

DRILLING ASSEMBLY (At end of run)

NO.			
	BIT		FT.
	STB NMR OD		FT.
17	D.C. ID 6 3/4 OD	524.44	FT.
	STB NMR OD		FT.
	D.C. ID OD		FT.
	STB NMR OD		FT.
1	XO SUB	1.32	FT.
		5534.66	
61	STANDS DP	~~5534.66~~	FT.
1	SINGLES DP	30.50	FT.
	KELLY DOWN	19	FT.
	TOTAL	6109	FT.
	WT. OF STRING	168	LBS.

BIT RECORD

BIT NO.	16
SIZE	8 1/2
MFG.	HW
TYPE	X55R
JETS 1 32nds	11 11 11
SER. NO.	HW 047
DEPTH OUT	
DEPTH IN	5927
TOTAL FTG.	182
TOTAL HRS. RUN	22 1/4
COND. T. B. GAGE	
GPM PD-PM	

MUD RECORD

TIME	5:00	8:00	11:00
WEIGHT	9.2	9.3	9.3
PRESSURE GRADIENT			
VISC-SEC	210	190	190
PV YP	/	/	/
GELS	/	/	/
WL-CC'S	5.8	5.8	6.0
pH	9.0	9.0	9.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR'D WASH'R CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. SPM	PUMP NO. LINER SIZE	PUMP NO. SPM	METHOD RUN
5927	5987	D			51	45	400	5 1/2	43			

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	12 15	3/4		Finish In
12 15	1 00	1/4		C/Trip To Bottom
1 00	1 15	1/4		R/T Sect BOPs
1 15	8 00	6 3/4		Drill 8 1/2 Hole

Driller: [signature]

FOOTAGE / FORMATION

FROM	TO	DR'D WASH'R CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. SPM	PUMP NO. LINER SIZE	PUMP NO. SPM	METHOD RUN
5987	~~6002~~ 6046	D			51	42	800	5 1/2	43			

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	11 00	3		DRLG.
11 00	11 30	1/2		SERVICE RIG & BOP's
11 30	8 00	~~8 1/2~~		DRLG.

Driller: [signature]

FOOTAGE / FORMATION

FROM	TO	DR'D WASH'R CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. SPM	PUMP NO. LINER SIZE	PUMP NO. SPM	METHOD RUN
6046	6109	D			51	42	800	5 1/2	43			

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 00	12 00	8		Drill 8 1/2 Hole

WATER TRUCK 12 hrs

Driller: [signature]

FORM 375

APPROVED — APPROVED

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

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
AMOCO MURPHY CORMACK	A1	CORMACK A-1	MARCH 6/10

OPERATOR: AMOCO — CONTRACTOR: KEEN DRLG — RIG NO. 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: K [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A [illegible]

O.D. SIZE	WT. PER FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4 1/2	16.60		6 1/4	F.H		1		DA 700	
						2		D-850	

LOCATION: AMOCO MURPHY CORMACK A-1

WIRE LINE RECORD — REEL NO. — SIZE — NO. LINES 8 — FT. STRIPPED — FT. CUT OFF — PRESENT LENGTH — TON MI. OR TRIPS SINCE LAST CUT — CUMULATIVE TON MI. OR TRIPS

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

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	7 3/4	7 3/4	
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS		1/4	
7	LUBRICATE RIG	1/4	1/4	
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERFORATING			
	B. TRC. TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDITIONAL			
	G.			
TOTALS		8	8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W. CONTR. D.P.

HRS. W. OPR. D.P.

HRS. NO D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

DRILLING ASSEMBLY (At end of run)

			FT.
	BIT		
	STB NMM OD		FT.
17	D.C. ID 6 3/4 OD	524.44	FT.
	STB NMM OD		FT.
	D.C. ID OD		FT.
	STB NMM OD		FT.
1	X0648	1.32	
58	STANDS OF	530402	FT.
1	SINGLES DP	3056	FT.
	KELLY DOWN	31	FT.
	TOTAL	5849	FT.
WT. OF STRING		160000	LBS

BIT RECORD

BIT NO.	15
SIZE	8 1/2
MFG.	HW
TYPE	XSSR
JETS 1 32nds	11 11 11
SER. NO.	ET198
DEPTH OUT	
DEPTH IN	5696
TOTAL FTG.	157
TOTAL HRS. RUN	16 1/2
COND. 1 8's 1 16 GAGE	
GPM PD-PSI	

MUD RECORD

TIME	2	4	6
WEIGHT	9.2	9.2	9.2
PRESSURE GRADIENT			
VISC.-SEC.	200	225	200
PV YP			
GELS			
WL-CC'S		6	
pH		9	
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	2000		
BENEX	8		
SMOOTH M	200		
CALUX	100		

MORNING TOUR

FOOTAGE / FORMATION

FROM	TO	DR., D, RM., R CORE, C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT (M)	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN (SURVEY COMPANY)
5763	5849	D			48	40	800	5 1/2	43			

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1300	300	3	2	DRILL 8 1/2 HOLE
300	315	1/4	7	RIG SERV / BOPS
315	800	4 3/4	2	DRILL 8 1/2 HOLE

DRILLER

DRILLING ASSEMBLY (At end of run)

			FT.
	BIT		
	STB NMM OD		FT.
17	D.C. ID 6 3/4 OD	524.44	FT.
	STB NMM OD		FT.
	D.C. ID OD		FT.
	STB NMM OD		FT.
1	X0 SUB	1.32	
59	STANDS OF	535.51	FT.
1	SINGLES DP	30.50	FT.
	KELLY DOWN	20	FT.
	TOTAL	5927	FT.
WT. OF STRING		162	LBS

BIT RECORD

BIT NO.	15
SIZE	8 1/2
MFG.	HW
TYPE	XSSR
JETS 1 32nds	11 11 11
SER. NO.	ET198
DEPTH OUT	5927
DEPTH IN	5696
TOTAL FTG.	231
TOTAL HRS. RUN	24
COND. 1 8's 1 16 GAGE	6 1
GPM PD-PSI	

3.1 Lobed + stabilized

MUD RECORD

TIME	7	12	2
WEIGHT	9.3	9.3	9.3
PRESSURE GRADIENT			
VISC.-SEC.	190	165	165
PV YP	/	/	/
GELS			
WL-CC'S	5.8	6.0	6.0
pH	9.0	9.0	9.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	2000		
BENEX	8	WATER	
SMOOTH M	200		
CALUX	100		

DAY TOUR

FOOTAGE / FORMATION

FROM	TO	DR., D, RM., R CORE, C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT (M)	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN (SURVEY COMPANY)
5849	5927	78			48	42	800	5 1/2 x 18	42			

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
800	1100	3	2	DRILL 8 1/2 HOLE
1100	1115	1/4	7	RIG SERV. / BOPS
1115	345	4 1/2	2	DRILL 8 1/2 HOLE
345	400	1/4	6	HOIST

Paul Webb

DRILLING ASSEMBLY (At end of run)

			FT.
	BIT		
	STB NMM OD		FT.
	D.C. ID OD		FT.
	STB NMM OD		FT.
	D.C. ID OD		FT.
	STB NMM OD		FT.
	STANDS OF		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS

BIT RECORD

BIT NO.	16
SIZE	8 1/2
MFG.	HW
TYPE	RXSSR
JETS 1 32nds	11 11 11
SER. NO.	HW047
DEPTH OUT	
DEPTH IN	5927
TOTAL FTG.	
TOTAL HRS. RUN	Run in
COND. 1 8's 1 16 GAGE	
GPM PD-PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR., D, RM., R CORE, C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT (M)	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN (SURVEY COMPANY)
5927												

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
400	700	3	6	HOIST
700	845	1 3/4	4	LAY DOWN CORE BBLS.
845	900	1/4	7	SERVICE RIG / BOPS
900	1200	3	2	RUN IN

WATER TRUCK 12 hrs.

DRILLER

FORM 3TB — APPROVED — APPROVED

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

DAILY DRILLING REPORT — REPORT NO.

LEASE: Amoco, Murphy Cormack #1 — WELL NO.: N-33 — API WELL NUMBER: 61°-00'-122°-30' — DATE: 3/5/70

OPERATOR: Amoco Can. Pete. — CONTRACTOR: KEEN DRLG LTD — RIG NO.: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature] — SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Fred Hedgpeth

D.P. SIZE	WT. PER FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
5"	19.50	E	6 3/8	4 1/2 IF	1	1/2	EMSCO	DA-800 / DA-700	18 / 16

LOCATION

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FREE	REEL TO CSG. NO.	SET AT
LAST CASING TUBING OR LINER	9 5/8		40 J55		720		720

WIRE LINE RECORD — REEL NO.

SIZE 1 1/4 — NO. LINES 8 — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MIDNT.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	7 3/4	14	8
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS		5 1/4	
7	LUBRICATE RIG	4	1/4	
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY		1/4	
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
	CLEAN OUT		1	
22				
23				
	A. PERF'N'TN			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'NL			
	G.			
	TOTALS	8	8	8

COMPLETION

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		FT.
	STB NAM	OD	FT.
17	D.C. ID 6 3/4	OD	524.44 FT.
	STB NAM	OD	FT.
	D.C. ID	OD	FT.
	STB NAM	OD	FT.
1	OR SUB		1.32
56	STANDS DP		5121.18 FT.
2	SINGLES DP		62.00 FT.
	KELLY DOWN		34.00 FT.
	TOTAL		5694 FT.
	WT. OF STRING		165,000 LBS.

BIT RECORD

BIT NO.	14
SIZE	8 1/2
MFG.	REED
TYPE	SCM
JETS 1-32"	11 11 11
SER. NO.	TR5764
DEPTH OUT	
DEPTH IN	5430
TOTAL FTG.	36
TOTAL HRS. RUN	2 1/2
COND. 1-8 T-B GAGE	
GPM PD-PSI	

MUD RECORD

TIME	12:00	4:00	6:00
WEIGHT	9.4	9.3	9.3
PRESSURE GRADIENT			
VISC.-SEC.	250	200	200
PV YP	/	/	/
GELS			
WL-CC'S	5.2	5.2	5.2
pH	9.0	9.0	9.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	36 Bags		
BENCH	7 Bags		

RUN WATER

HOLEKING TOUR

FROM	TO	DRLG. HRS. CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT (000)	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 USED TO CONTROL DEVIATION
5658	5694	D		51	40	900	5 1/2	44			

DEVIATION RECORD: DEPTH — DEV. — DIRECTION — DEPTH — DEV. — DIRECTION — DEPTH — DEV. — DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	1/4		RIG SERVICE & BOPS
12:15	8:00	7 3/4		DRILL 8 1/2" HOLE
		8		

DRILLER: T.D. Hodgson

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		FT.
	STB NAM	OD	FT.
17	D.C. ID 6 3/4	OD	524.44 FT.
	STB NAM	OD	FT.
	D.C. ID	OD	FT.
	STB NAM	OD	FT.
1	OR SUB		
54	STANDS DP		5121.18 FT.
2	SINGLES DP		62.00 FT.
	KELLY DOWN		34.00 FT.
	TOTAL		5700 FT.
	WT. OF STRING		162 LBS.

BIT RECORD

BIT NO.	14	15
SIZE	8 1/2	8 1/2
MFG.	HARD	HW
TYPE	SCM	XSSR
JETS 1-32"	11 11 11	11 11 11
SER. NO.	576180	ET198
DEPTH OUT	5696	
DEPTH IN	5430	5696
TOTAL FTG.	266	4
TOTAL HRS. RUN	30	3/4
COND. 1-8 T-B GAGE	8 8 I	
GPM PD-PSI		

Bit locked & unlocked

MUD RECORD

TIME	8:00	7 R	1 D
WEIGHT	9.3		
PRESSURE GRADIENT			
VISC.-SEC.	205	/	/
PV YP	/	/	/
GELS			
WL-CC'S	5.8		
pH	9.0		
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

FROM	TO	DRLG. HRS. CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT (000)	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 USED TO CONTROL DEVIATION
5694	5696	D		51	45	900	5 1/8	44			
5696	5700	D		45	35/50	1100	"	40			

DEVIATION RECORD: DEPTH 5696 — DEV. 2 1/2° — DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:30	1/2		DRILL 9 1/2 HOLE
8:30	8:45	1/4		SURVEY
8:45	9:00	1/4		R. & SERV. BOPS
9:00	2:15	5 1/4		TRIP FOR BIT
2:15	3:15	1		BRK. CIRC. CLEAN TO BOTTOM
3:15	4:00	3/4		DRILL 8 1/2 HOLE

DRILLER: T.D. Hodgson

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		FT.
	STB NAM	OD	FT.
17	D.C. ID 6 3/4	OD	524.44 FT.
	STB NAM	OD	FT.
	D.C. ID	OD	FT.
	STB NAM	OD	FT.
1	OR SUB		1.32
57	STANDS DP		5221.1 FT.
1	SINGLES DP		30.41 FT.
	KELLY DOWN		41.00 FT.
	TOTAL		5767 FT.
	WT. OF STRING		LBS.

BIT RECORD

BIT NO.	15
SIZE	8 1/2
MFG.	HW
TYPE	XSSR
JETS 1-32"	11 11 11
SER. NO.	ET198
DEPTH OUT	
DEPTH IN	5696
TOTAL FTG.	71
TOTAL HRS. RUN	8 3/4
COND. 1-8 T-B GAGE	
GPM PD-PSI	

MUD RECORD

TIME	4:00	6:00
WEIGHT	9.3	9.3
PRESSURE GRADIENT		
VISC.-SEC.	175	155
PV YP	/	/
GELS	/	/
WL-CC'S	5.8	6.0
pH	9.0	9.0
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FROM	TO	DRLG. HRS. CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT (000)	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 USED TO CONTROL DEVIATION
5700	5767	D		48	40	900	5 1/2	43			

DEVIATION RECORD: DEPTH — DEV. — DIRECTION — DEPTH — DEV. — DIRECTION — DEPTH — DEV. — DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	12:00	8		DRILL 8 1/2 HOLE

WATER TRUCK 18 hrs

DRILLER: T.D. Hodgson

FORM 3T5 — APPROVED — APPROVED

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

DAILY DRILLING REPORT — REPORT NO.

LEASE: Amoco, Murphy, Cormack #41 — WELL NO.: N-33 — API WELL NUMBER: 61°-00'-122°-30' — DATE: 3/4/70

OPERATOR: Amoco. Can. Pet. — CONTRACTOR: Kren Drlg Ltd. — RIG NO.: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature] — SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Fred Hodgins

LOCATION

O.D. SIZE	WT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
5"	19.50	E	6 7/8	4 1/2 IF	1	1	EMSCO	DA 650	18
						2		DA-700	16

LAST CASING TUBING OR LINER	SIZE	WAT	WT. & GR.	NO. JOINTS	FEET	THD. TO CSG. MFR.	SET AT
	9 5/8		40 I 55		720		720

WIRE LINE RECORD — REEL NO. — SIZE 1/4 — NO. LINES 8 — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH — TON MI. OR TRIPS SINCE LAST CUT — CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL		7 1/4	8
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS		7	
7	LUBRICATE RIG	1/2	1/4	
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21	CLEAN TO BOTTOM			4
22	THAW OUT LINES			1/2
23				

COMPLETION: A. PERF'N'TN; B. TRIP TANKS; C. TREATING; D. SWABBING; E. TESTING; F. ADDIT'NL; G.

TOTALS	8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

MUD & CONTR. D.P.; MUD & OPER. D.P.; MUD NO. OF; MUD STANDPIPE; TOTAL CIRCULATING; NO. OF DAYS FROM SPUD; CUMULATIVE ROTATING HRS.; TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RNR OD		FT.
	D.C. ID OD		FT.
	STB RNR OD		FT.
17	D.C. ID 6 3/4 OD	524.44	FT.
	STB RNR OD		FT.
1	OR 546	1.32	
54	STANDS DP	4940.27	FT.
2	SINGLES DP	30.80	FT.
	KELLY DOWN	41.00	FT.
	TOTAL	5495	FT.

WT. OF STRING 153,000 LBS.

BIT RECORD

BIT NO.	14
SIZE	8 1/2
MFG.	REED
TYPE	SCM
JETS 1-32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	5430
TOTAL FTG.	65
TOTAL HRS. RUN	6
COND. I-B-G T-B GAGE	
GPM PD-PSI	

MUD RECORD

TIME	200
WEIGHT	9.5
PRESSURE GRADIENT	
VISC.-SEC.	250
PV YP	/ /
GELL	
WL-CC'S	5.6
pH	9.5
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	30 BAGS		
BENEX	6 BAGS		
RUN WATER			

MORNING TOUR

FOOTAGE / FORMATION

FROM	TO	DR'L'D RUN OR CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000 LBS.	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 L.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 L.P.M.	METHOD RUN (CIRC. PUMP, ROTARY, CONVEN.)
5430	5495	D			52	45	900	5 1/2	42			

DEVIATION RECORD

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

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS
12:00	12:15	1/4		R.I.G. SERVICE & B.O.P.S
12:15	12:30	1/4		CLEAN TO BOTTOM
12:30	4:30	4		DRILL 8 1/2" HOLE
4:30	6:00	1 1/2		THAW OUT FUEL LINES
6:00	8:00	2		DRILL 8 1/2" HOLE

DRILLER R.D. Johnston

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RNR OD		FT.
	D.C. ID OD		FT.
	STB RNR OD		FT.
17	D.C. ID 6 3/4 OD	524.44	FT.
	STB RNR OD		FT.
1	YO S43	1.32	
55	STANDS DP	4989.67	FT.
2	SINGLES DP	61.06	FT.
	KELLY DOWN	17	FT.
	TOTAL	5592	FT.

WT. OF STRING 155M LBS.

BIT RECORD

BIT NO.	14
SIZE	8 1/2
MFG.	REED
TYPE	SCM
JETS 1-32"	11 11 11
SER. NO.	56190
DEPTH OUT	
DEPTH IN	5430
TOTAL FTG.	162
TOTAL HRS. RUN	13 3/4
COND. I-B-G T-B GAGE	R4N
GPM PD-PSI	

MUD RECORD

TIME	9:00	11:00	2:00
WEIGHT	9.4	9.4	9.4
PRESSURE GRADIENT	490	490	490
VISC.-SEC.	300	240	140
PV YP	/	/	/
GELL	/	/	/
WL-CC'S	5.6		
pH	9.0		
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	10 sk		
Sodaash	4 sk		
Celex	2 sk		
H2O	1" above		

DAY TOUR

FOOTAGE / FORMATION

FROM	TO	DR'L'D RUN OR CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000 LBS.	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 L.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 L.P.M.	METHOD RUN (CIRC. PUMP, ROTARY, CONVEN.)
5495	5592	D			48	45	900	5 1/2	41			

DEVIATION RECORD

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

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS
8:00	10:00	2		DR. 11 8 1/2 Hole
10:00	10:15	1/4		SERV. R.I.G. - B.O.P.S
10:15	4:00	5 3/4		Drlg

Rudy Bell

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RNR OD		FT.
	D.C. ID OD		FT.
	STB RNR OD		FT.
17	D.C. ID 6 3/4 OD	524.44	FT.
	STB RNR OD		FT.
1	YO S43	1.32.	
56	STANDS DP	5121.18	FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL	5658	FT.

WT. OF STRING LBS.

BIT RECORD

BIT NO.	14
SIZE	8 1/2
MFG.	REED
TYPE	SCM
JETS 1-32"	11 11 11
SER. NO.	
DEPTH OUT	
DEPTH IN	5430
TOTAL FTG.	228
TOTAL HRS. RUN	23 3/4
COND. I-B-G T-B GAGE	
GPM PD-PSI	

MUD RECORD

TIME	4:00	9:00	11
WEIGHT	9.5	9.4	9.4
PRESSURE GRADIENT	495		
VISC.-SEC.	155	2.30	250
PV YP	/	/	/
GELL	/	/	/
WL-CC'S	6.0	5.6	5.6
pH	9.5	9.5	9.2
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR'L'D RUN OR CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000 LBS.	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 L.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 L.P.M.	METHOD RUN (CIRC. PUMP, ROTARY, CONVEN.)
5592	5658	D			50	45	900	5 1/2	41			

DEVIATION RECORD

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

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS
4:00	12:00	8		DR. 11 8 1/2 Hole

WATER TRUCK 13 hrs

DRILLER R.D. Johnston

FORM 375 — APPROVED — APPROVED

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

DAILY DRILLING REPORT — REPORT NO.

LEASE: Amoco, Murphy, Cormack "A" — WELL NO.: N-33 — API WELL NUMBER: 61° - 00' - 122° - 30' — DATE: 3/3/70

OPERATOR: Amoco Can. Pete — CONTRACTOR: Keen Drlg Ltd — RIG NO.: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: D.L. [illegible] — SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Fred Hedgline

LOCATION

D.P. SIZE	WT. PT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5"	19.50	E	6 5/8	4 1/2	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	DA 850	18
2		DA 700	12

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	BRK. TO C.U. NO.	WT. PT.
LAST CASING TUBING OR LINER	9 5/8		40 J55		720		720

WIRE LINE RECORD — REEL NO. — SIZE 1 1/4 — NO. LINES 8 — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MIDNIGHT	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL			
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS	4 1/4	3 3/4	
7	LUBRICATE RIG	1/4		
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST		2	3
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21	Make up Tester	2 3/4		
22	W.O.O.	3/4		
23	[illegible]			
COMPLETION	A. PERF'TN			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADD'TNL			
	G.			
	TOTALS	8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

DRILLING ASSEMBLY (At end of hour)

NO.		FT.
	BIT	
	STB Near OD	FT.
	D.C. ID OD	FT.
	STB Near OD	FT.
17	D.C. ID 6 3/4 OD	374.44 FT.
	STB Near OD	FT.
1	Orsub	1.32
	STANDS DP	FT.
	SINGLES DP	FT.
	KELLY DOWN	FT.
	TOTAL	FT.
	WT. OF STRING	LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1 32nds	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1 B. GAGE	
GPM PD-PSI	

MUD RECORD

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

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

MORNING TOUR

DRILLING ASSEMBLY (At end of hour)

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

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JET 1 32nd	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1 B. GAGE	
GPM PD-PSI	

MUD RECORD

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

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

DAY TOUR

DRILLING ASSEMBLY (At end of hour)

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

BIT RECORD

BIT NO.	14
SIZE	8 1/2
MFG.	Reed
TYPE	SCM
JETS 1 32nds	11 11 11
SER. NO.	574190
DEPTH OUT	
DEPTH IN	5430
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1 B. GAGE	
GPM PD-PSI	

MUD RECORD

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

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

EVENING TOUR

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DRLD OR W CORE	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN BIT / SCHLUM. / CORE
5430												

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	1/4		Rig Service
12:15	1:00	3/4		W.O.O
1:00	2:00	1		Unload Testing Tool
2:00	3:45	1 3/4		Make up Packer
3:45	8:00	4 1/4		Run in with [illegible]

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DRLD OR W CORE	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN BIT / SCHLUM. / CORE

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
6:00	8:30	1/2		Finish In Head 4" Test — DST #1 5317-5430 Hour Packers Reset. Preflow 5 Mins. Initial Set in 60 Mins. Flow 60 mins. Final Shut in 120 Mins.
8:30	9:30	1		DST #1 Weak Initial Puff Increasing Slightly During 1st Min. Rec 90' gas cut dirty mud 374. Watery 65000 ppm
9:30	2:00	2 1/2		DST #1
2:00	4:00	2		Hoist DST #1

I.H.P. 2595 — A.F.P. 230
P. flow 57 — A.S.I.P. 1875
I.S.I.P. 1875 — A.H.P. 2538
I.F.P. 115

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DRLD OR W CORE	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN BIT / SCHLUM. / CORE
5430												

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	5:00	1		Finish Out
5:00	7:00	2		Break Down Test Tools
7:00	10:15	3 1/4		Run in w/ BT
10:15	11:00	3/4		Draw out Kelly — Blow
11:00	12:00	1		Clean to Bottom (55' fill).

WATER TRUCK 10 hrs.

DRILLER [signature]

FORM 3TB — APPROVED — APPROVED

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

DAILY DRILLING REPORT REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
AMOCO MURPHY CORMACK A-1	N33	61° 00' 122° 30'	MARCH 2/70

OPERATOR: AMOCO CANADA PETE CONTRACTOR: KERR DRLG. LTD RIG NO. 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: R Hunter

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Fred Hardy Jr

D.P. SIZE	WT. P.F.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
5"	19.5	E	6 3/8	H.S.I.F.	1	1/2	EMSCO	D850 / DA700	18 / 16

LOCATION

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	BKR. TO CSG. NO.	SET AT
LAST CASING TUBING OR LINER	9 5/8		40.1/55				220

WIRE LINE RECORD REEL NO.

SIZE | NO. LINES | FT. SLIPPED | FT. CUT OFF | PRESENT LENGTH | TON MI. ON TRIPS SINCE LAST CUT | CUMULATIVE TON MI. ON TRIPS

TIME DISTRIBUTION - HOURS

COST NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL			
3	REAMING			
4	CORING	3/4	2 1/4	
5	CONDITION MUD & CIRCULATE			
6	TRIPS	2	3 1/4	
7	LUBRICATE RIG			
8	REPAIR RIG	4		
9	SLIP DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	ORH. HOWK			
21	CIRC. BBL.	1 1/2		
22	CLEAN OUT	3/4		
23	WO ORDERS		2 1/2	
COMPLETION	A. PERF'G'TH			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDT'NL			
	G.			
TOTALS		8	8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

DRILLING ASSEMBLY (At end of hour)

NO.			FT.
	BIT		FT.
	STB NMR OD		FT.
17	D.C. ID 6 3/4 OD	524.44	FT.
	STB NMR OD		FT.
	D.C. ID OD		FT.
	STB NMR OD		FT.
1	X O SUB	1.32	
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING		154,000	LBS.

BIT RECORD

BIT NO.	2
SIZE	8 3/16
MFG.	CHRS.
TYPE	D
JETS 1 32nds	
SER. NO.	
DEPTH OUT	
DEPTH IN	5370
TOTAL FTG.	4
TOTAL HRS RUN	3/4
COND. T B GAGE	
GPM PD-PM	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

MORNING TOUR

DRILLING ASSEMBLY (At end of hour)

NO.			FT.
	BIT		FT.
	STB NMR OD		FT.
17	D.C. ID 6 3/4 OD	524.44	FT.
	STB NMR OD		FT.
	D.C. ID OD		FT.
	STB NMR OD		FT.
1	O.X SUB	1.32	
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	2
SIZE	8 3/16
MFG.	CHRS
TYPE	D
JETS 1 32nds	
SER. NO.	
DEPTH OUT	
DEPTH IN	5370
TOTAL FTG.	51
TOTAL HRS RUN	8 3/4
COND. T B GAGE	
GPM PD-PM	

MUD RECORD

TIME	800	1200	300
WEIGHT	9.4	9.5	9.5
PRESSURE GRADIENT			
VISC.-SEC.	450	400	350
PV YP			
GELS			
WL-CC'S	6.8	6.8	6.8
pH	9.0	9.0	9.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
CELLEX	3 SX		
Sea Kleen	4 SX		

DAY TOUR

DRILLING ASSEMBLY (At end of hour)

NO.			FT.
	BIT		FT.
	STB NMR OD		FT.
17	D.C. ID 6 3/4 OD	524.44	FT.
	STB NMR OD		FT.
	D.C. ID OD		FT.
	STB NMR OD		FT.
1	X O SUB	1.32	
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	2
SIZE	8 3/16
MFG.	CHRIS
TYPE	D
JETS 1 32nds	
SER. NO.	FC 6745
DEPTH OUT	
DEPTH IN	5370
TOTAL FTG.	
TOTAL HRS RUN	9 1/4
COND. T B GAGE	
GPM MD-PM	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR'D BRK'N CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. SPM	PUMP NO. LINER SIZE	PUMP NO. SPM	METHOD RUN
5370	5374	C	2		75	20	600	5½	50			

DEVIATION RECORD

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

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	1:00	1		RUN IN.
1:00	4:00	3		THAW FUEL LINES & STEAM LINES
4:00	5:00	1		FINISH IN
5:00	6:00	1		WORK ON PUMP
6:00	6:45	3/4		BREAK CIRC. & CLEAN TO BOTTOM
6:45	7:15	1/2		CIRC. & DROP BALL
7:15	8:00	3/4		CUT CORE # 2

DRILLER: M Curtis

FOOTAGE / FORMATION

FROM	TO	DR'D BRK'N CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. SPM	PUMP NO. LINER SIZE	PUMP NO. SPM	METHOD RUN
5374	5425	C	2		75	20	600	5½	50			

DEVIATION RECORD

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

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	4:00	8		CUT CORE # 2

DRILLER: R Johnston

FOOTAGE / FORMATION

FROM	TO	DR'D BRK'N CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. SPM	PUMP NO. LINER SIZE	PUMP NO. SPM	METHOD RUN
5425	5430	C	2	CUT + 5', P 50' DRILLING								

DEVIATION RECORD

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

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:30	1/2		CUT CORE #2
4:30	7:45	3 1/4		HOIST CORE #2 Rec. 60'
7:45	9:30	1 3/4		RECOVER CORE
9:30	12:00	2 1/2		WO ORDERS

WATER TRUCK 10 hrs

DRILLER: Ray Oates

FORM ST5 APPROVED APPROVED

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

Core #2 (5370-5490)

(1) 60', 60' thick TYPE LIMESTONE, scattered occasional vugs, ½-½% porosity. 5397-99 large vugs with secondary calcite lining with 3-4% ~~porosity~~ porosity. No staining, fluorescence, or show of hydrocarbons

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Amoco Murphy Cormack A-1	N-33	61°-00 122°-30'	3-1-70

OPERATOR	CONTRACTOR	RIG NO.
Amoco Canada Pet.	Keen Drlg Ltd	2

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Fred Hodgkin

LOCATION

D.P. SIZE	WT. PER FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5"	19.5	E	6 3/8	4 1/2 IF	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	D 850	18
2		D 700	16

	SIZE	WARE	WT. & GR.	NO. JOINTS	FEET	MAN. TO CSG. NO.	SET AT
LAST CASING TUBING OR LINER	9 5/8		40 J55				720

WIRE LINE RECORD — REEL NO.

SIZE 1/4 — NO. LINES 8 — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL			
3	REAMING	3 1/2		
4	CORING		7 1/2	1/2
5	CONDITION MUD & CIRCULATE	1/2	1/2	
6	TRIPS	3 1/2		4 1/2
7	LUBRICATE RIG	1/4		1/2
8	REPAIR RIG			
9	SLIP DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	OTH. WORK			
21	Hard Coal	3/4	3	2 1/2
22				
23				

COMPLETION: A. PERF'R'TN; B. TAG TRIPS; C. TREATING; D. SWABBING; E. TESTING; F. ADDIT'N'L; G.

TOTALS 8 8 8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR	OD	FT.
17	D.C. ID 6 3/4	OD 544.24	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	10 x Sub	1.32	
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	1
SIZE	8 7/16
MFG.	CHRIS
TYPE	D
JETS 1 32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS RUN	
COND. 1 8's 1 R. GAGE	
GPM PD-PSI	

MUD RECORD

TIME	Trip 7.00
WEIGHT	9.2
PRESSURE GRADIENT	
VISC.-SEC.	37.8
PV YP	/ /
GELS	/ /
WL -CC'S	6.8
pH	9.0
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR	OD	FT.
17	D.C. ID 6 3/4	OD 524.44	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	10 x Sub	1.32	
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	1
SIZE	8 7/16
MFG.	Chris
TYPE	D
JETS 1 32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS RUN	
COND. 1 8's 1 R. GAGE	
GPM PD-PSI	

MUD RECORD

TIME	8:00
WEIGHT	9.4
PRESSURE GRADIENT	
VISC.-SEC.	340
PV YP	/ /
GELS	/ /
WL -CC'S	6.4
pH	9.0
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR	OD	FT.
17	D.C. ID 6 3/4	OD 524.44	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	10 x Sub	1.32	
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	1
SIZE	8 7/16
MFG.	CHRIS
TYPE	D
JETS 1 32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS RUN	
COND. 1 8's 1 R. GAGE	
GPM PD-PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	10		
Bevgum	25		
Cellex	3		
Soda Ash	4		

EVENING TOUR

FOOTAGE FROM	TO	DR'L'D RUN OR CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN SURV. CORE
5310												

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	2:15	2 1/4		HANDLE CORE BBL.
2:15	2:30	1/4		SERVICE RIG & BOP'S
2:30	5:00	2 1/2		RUN IN TO 4690
5:00	7:30	2 1/2		CLEAN OUT BRIDGE @ 4690 + CLEAN 110' OF F
7:30	8:00	1/2		CIRCULATE CORE BBL.

DRILLER

FOOTAGE FROM	TO	DR'L'D RUN OR CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN SURV. CORE
5310			1									

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:30	1/2		CIR. CORE BBL.
8:30	4:00	7 1/2		CUT CORE #1

DRILLER

FOOTAGE FROM	TO	DR'L'D RUN OR CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN SURV. CORE
			1									

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:30	1/2		CUT CORE #1 Rec. 60'
4:30	8:00	3 1/2		HOIST CORE BBL.
8:00	10:30	2 1/2		RECOVER CORE & HANDLE BBL.
10:30	11:00	1/2		SERVICE RIG & BOP'S
11:00	12:00	1		RUN IN W/ CORE BBL.

WATER TRUCK 10 hrs

DRILLER

Form 3T5 — APPROVED — APPROVED

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

Core #1 (5310 - 5370)

Cut 60', Rec'd 60' - DENSE LIMESTONE, NO POROSITY, PART TO LIGHT BROWN, NO VUGS, NO STAINS, NO CUTS OR FLUORESCENCE. UNIFORM THROUGHOUT

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
AMOCO NORTHWAY CORMACK A-1	N-33	61-00' 122° 30'	2-28-70

OPERATOR: AMOCO CANADA PETE — SIGNATURE OF OPERATOR'S REPRESENTATIVE:

CONTRACTOR: KEEN DRLG. LTD — SIGNATURE OF CONTRACTOR'S TOOL PUSHER:

RIG NO. 2

LOCATION

D.P. SIZE	WT. P.Y.	GRADE	TOOL JT. O.D.	TYPE THREAD	STRING NO.
5"	19.5	E	6⅝	4½ IF	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	D850	18
2	EMSCO	DA 200	16

WIRE LINE RECORD — REEL NO.

	SIZE	MAKE	WT. & GR.	NO. JOINTS	PREV. BRK. TO CSG. NO.	SET AT
LAST CASING TUBING OR LINER	9⅝		40 J55			720

SIZE 1¼ — NO. LINES 8 — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH

TON MI. ON TRIPS SINCE LAST CUT

CUMULATIVE TON MI. ON TRIPS

TIME DISTRIBUTION - HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL			
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE	4½	1½	
6	TRIPS	1	7	
7	LUBRICATE RIG	1½	½	
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
	CLEAN OUT	2½	3	
22				
23				
COMPLETION	A. PERF'N'TN			
	B. TDC TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'NL			
	G.			
TOTALS		12		

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W CONTR. D.P.

HRS. W OPR. D.P.

HRS. NO D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STR NMM	OD	FT.
17	D.C. ID 6¼	OD	424.44 FT.
	STR NMM	OD	FT.
	D.C. ID	OD	FT.
	STR NMM	OD	FT.
1	K.O. SUB		1.32
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	11
SIZE	8½
MFG.	HW
TYPE	XJ
JETS 1 32nds	11 11 11
SER. NO.	BN 455
DEPTH OUT	
DEPTH IN	5247
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1 8's T. B. GAGE	
GPM PD. PSI	

MUD RECORD

TIME	2:00	6:00
WEIGHT	9.3	9.3
PRESSURE GRADIENT		
VISC. SEC.	500	500
PV YP	/ /	/ /
GELS		
ML-CC'S	5.6	5.6
pH	9.0	9.0
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	2000#		
Benex	8		

MORNING TOUR

FOOTAGE / FORMATION

FROM	TO	DR. D RM. R CORE C.	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN
5310												

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	¼		FINISH OUT 20 STD. DUMMY TRIP
12:15	1:15	1		CIRCULATE + WORK PIPE
1:15	1:30	¼		SERVICE RIG & BOP'S
1:30	2:15	¾		RUN IN TO 5085 - 1ST 4 STDS. TIGHT
2:15	4:45	2½		CLEANING OUT TO BOTTOM
4:45	8:00	3¼		CIRCULATE

DRILLER M Clarke

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STR NMM	OD	FT.
17	D.C. ID 6¼	OD	524.44 FT.
	STR NMM	OD	FT.
	D.C. ID	OD	FT.
	STR NMM	OD	FT.
1	O.I. Sub		1.32
52	STANDS DP		4786.10 FT.
1	SINGLES DP		30.36 FT.
	KELLY DOWN		41.40 FT.
	TOTAL		5310 FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	12	11
SIZE	8¼	8½
MFG.	REED	HW
TYPE	S146	XV
JETS 1 32nds		11 11 11
SER. NO.	856957	BN455
DEPTH OUT		5310
DEPTH IN	5310	5247
TOTAL FTG.	6	63
TOTAL HRS. RUN		
COND. 1 8's T. B. GAGE		
GPM PD. PSI		

MUD RECORD

TIME	6:00	
WEIGHT	9.2	
PRESSURE GRADIENT		
VISC. SEC.	400	
PV YP	/ /	/ /
GELS		
ML-CC'S	6.6	
pH	9.0	
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

FOOTAGE / FORMATION

FROM	TO	DR. D RM. R CORE C.	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN
5310							925	5½	44			

DESILTER 5 HRS

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:30	½		RIG SERVICE ✓ B.O.P.'S
8:30	12:30	4		HOIST FOR BIT.
12:30	3:30	3		RUN IN SLOWLY WITH BIT #12 (212' FILL 5098 & 5310 AND JUNK SUB
3:30	6:30	3		CLEAN TO BOTTOM 212'
6:30	8:00	1½		CIR. COND. HOLE
		12		

DRILLER R. Johnston

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

BIT NO.	12
SIZE	8¼
MFG.	REED
TYPE	SHG
JETS 1 32nds	11 11 11
SER. NO.	856956
DEPTH OUT	
DEPTH IN	5310
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1 8's T. B. GAGE	
GPM PD. PSI	

MUD RECORD

TIME	8:00	Trip
WEIGHT	9.2	
PRESSURE GRADIENT		
VISC. SEC.	400	
PV YP	/ /	/ /
GELS	/	
ML-CC'S	6.6	
pH	9.0	
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR. D RM. R CORE C.	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN
5310												

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:30	½		CIRCULATE
8:30	12:00	3½		HOIST TO CORE

WATER TRUCK 10 hrs

DRILLER M Clarke

FORM 3TB — APPROVED — APPROVED

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

DAILY DRILLING REPORT REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Amoco, Murphy, Cormack "A"	N-33	61°-00'-122°-30'	2/27/70

OPERATOR	CONTRACTOR	RIG NO.
Amoco Can. Pete.	KEEN DRLG LTD	2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Fred Kirby Pres.

D.P. SIZE	WT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5	19.50	E	6 3/8	4 1/2	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	DA-850	18
2		DA-700	16

LOCATION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	MEAS. TO CHK. NO.	SET AT
	9 5/8		40 J55		720		720

WIRE LINE RECORD WIRE NO.

SIZE 1 1/4 NO. LINES 8 FT. SLIPPED

FT. CUT OFF PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

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

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	
17	D.C. ID 6 3/4	OD 574.44	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	ox Sub	1.32	
52	STANDS DP	4786.10	FT.
1	SINGLES DP	30.36	FT.
	KELLY DOWN	41.00	FT.
	TOTAL	5310	FT.
WT. OF STRING	150M		LBS.

BIT RECORD

BIT NO.	11
SIZE	8 1/2
MFG.	HW
TYPE	XV
JETS 1 32nds	11 11 11
SER. NO.	BN455
DEPTH OUT	
DEPTH IN	5247
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1 8's 1 R GAGE	
GPM PD-PSI	

MUD RECORD

TIME	12:00	3:00
WEIGHT	9.5	9.5
PRESSURE GRADIENT		
VISC.-SEC.	300	400
PV YP	/	/
GELS	/	/
WL-CC'S	5.6	5.6
pH	9.0	9.0
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	100		
Benex	25K		

WORKING TOUR

FOOTAGE / FORMATION

FROM	TO	DR'L'D RUN OR CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT (000's)	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 L.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 L.P.M.	METHOD RUN KELLY OR POWER SWIVEL
5310					60		1050	5 1/2	46			

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	1/4		RIG SERVICE
12:15	3:15	3		Condi. Mud. Circ.
3:15	4:15	1		Dummy Trip Pull 20 STANDS
4:15	5:15	1		Run in to 4761 13 STANDS 1 Double
5:15	8:00	2 3/4		Clean to Bottom to 5068

DRILLER R.D. Johnson

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

BIT NO.	11
SIZE	8 1/2
MFG.	HW
TYPE	XV
JETS 1 32nds	11 11 11
SER. NO.	BN455
DEPTH OUT	
DEPTH IN	5247
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1 8's 1 R GAGE	
GPM PD-PSI	

MUD RECORD

TIME	9:00	300
WEIGHT	9.5	9.3
PRESSURE GRADIENT		
VISC.-SEC.	450	500
PV YP	/	/
GELS	/	/
WL-CC'S	5.6	5.6
pH	9.0	9.0
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Benex	4 ✓		
Gel	1000 ✓		
Benex	150 ✓		

DAY TOUR

FOOTAGE / FORMATION

FROM	TO	DR'L'D RUN OR CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT (000's)	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 L.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 L.P.M.	METHOD RUN KELLY OR POWER SWIVEL
5310							1200	5 1/2	47			

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	11:45	3 3/4		CLEANING OUT FROM 5068' TO BOTTOM
11:45	12:00	1/4		SERVICE RIG & B.O.P.'S
12:00	4:00	4		CIRCULATE & CONDITION MUD

DRILLER [signature]

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	
17	D.C. ID 6 3/4	OD 524.44	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	ox Sub	1.32	
52	STANDS DP	4786.10	FT.
1	SINGLES DP	30.36	FT.
	KELLY DOWN	41.00	FT.
	TOTAL	5310	FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	11
SIZE	8 1/2
MFG.	HW
TYPE	XV
JETS 1 32nds	11 11 11
SER. NO.	BN455
DEPTH OUT	
DEPTH IN	5247
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1 8's 1 R GAGE	
GPM PD-PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR'L'D RUN OR CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT (000's)	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 L.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 L.P.M.	METHOD RUN KELLY OR POWER SWIVEL
530												

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:15	1/4		RIG SERVICE - B.O.P.'S.
4:15	11:00	6 3/4		CIR. Cond Mud.
11:00	12:00	1		Hour 13 STANDS of 20 STAND Dummy TRIP.

WATER Truck 10 hrs

DRILLER [signature]

DAILY DRILLING REPORT — REPORT NO

LEASE: Amoco, Murphy, Cormack "A" — WELL NO: N-33 — API WELL NUMBER: 61°-00'-122°-30' — DATE: 2/26/70

OPERATOR: Amoco Can. Pete — CONTRACTOR: KEEN DRLG LTD. — RIG NO: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature] — SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Fred Hodgkin.

O.D. SIZE	WT. PER FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5	19.50	G	6 3/8	4½	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	DA-850	18
2	EMSCO	DA-700	16

LOCATION

LAST CASING TUBING OR LINER	SIZE	WEIGHT	WT. & GR.	NO. JOINTS	FEET	RAN TO CSG. NO.	SET AT
	9 5/8		40 J55		720		720

WIRE LINE RECORD — REEL NO. — SIZE 1/4 — NO. LINES 8 — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH — TON MI. OR TRIPS SINCE LAST CUT — CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION - HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	2		
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE	2		3¾
6	TRIPS	3		
7	LUBRICATE RIG		¼	
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21	Clean Out	1	7¾	4¼
22				
23				

COMPLETION: A. PERF'G'TH; B. TBG TRIPS; C. TREATING; D. SWABBING; E. TESTING; F. ADDIT'NL; G.

TOTALS: 8 | 8 | 8 — DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
	STB Num OD	FT.
17	D.C. ID 6¾ OD	524.44 FT.
	STB Num OD	FT.
	D.C. ID OD	FT.
	STB Num OD	FT.
1	0r546	1.32
51	STANDS DP	4713.92 FT.
1	SINGLES DP	30.36 FT.
	KELLY DOWN	41.00 FT.
	TOTAL	5310 FT.
	WT. OF STRING	150,000 LBS.

BIT RECORD

BIT NO.	11
SIZE	8½"
MFG.	HW
TYPE	XV
JETS 1 32nds	11 11 11
SER. NO.	BN455
DEPTH OUT	
DEPTH IN	5247
TOTAL FTG.	
TOTAL HRS. RUN	
COND. T. B. GAGE	
GPM PD-PSI	

MUD RECORD

TIME	200
WEIGHT	9.5
PRESSURE GRADIENT	
VISC. SEC.	320
PV YP	/ /
GELS	/ /
WL. CC'S	5.2
pH	9.5
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
LIME	50#		

TOUR: MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

BIT NO.	11
SIZE	8½
MFG.	HW
TYPE	XV
JETS 1 32nds	11 11 11
SER. NO.	BN455
DEPTH OUT	
DEPTH IN	5247
TOTAL FTG.	
TOTAL HRS. RUN	
COND. T. B. GAGE	
GPM PD-PSI	

MUD RECORD

TIME	10:00	1:00	3:00
WEIGHT	9.5	9.5	9.5
PRESSURE GRADIENT			
VISC. SEC.	270	310	285
PV YP	/	/	/
GELS	/	/	/
WL. CC'S	5.2	5.2	5.2
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

TOUR: DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
	STB Num OD	FT.
17	D.C. ID 6¾ OD	524.44 FT.
	STB Num OD	FT.
	D.C. ID OD	FT.
	STB Num OD	FT.
1	X0543	1.62
	STANDS DP	FT.
	SINGLES DP	FT.
	KELLY DOWN	FT.
	TOTAL	FT.
	WT. OF STRING	LBS.

BIT RECORD

BIT NO.	11
SIZE	8½
MFG.	HW
TYPE	XV
JETS 1 32nds	11 11 11
SER. NO.	BN455
DEPTH OUT	
DEPTH IN	5247
TOTAL FTG.	
TOTAL HRS. RUN	
COND. T. B. GAGE	
GPM PD-PSI	

MUD RECORD

TIME	6:00	4:00	
WEIGHT	9.5	9.5	
PRESSURE GRADIENT			
VISC. SEC.	260	360	
PV YP	/	/	/
GELS	/	/	/
WL. CC'S	5.6		
pH	9.5		
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	2500		
OB Rock	100		
Trash	300		
Bench	10		

TOUR: EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR'D RM'R CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	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
5303	5310				60	40	950	5½	44			

DESILTER 4 HRS

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	2:00	2		DRILL 8½" HOLE
2:00	3:00	1		CIRC. SAMPLE
3:00	4:00	1		MIX LIME COLD. HOLE
4:00	7:00	3		DUMMY TRIP 25 STANDS OUT RUN IN 34 STANDS
				RUN IN TO 4733
7:00	8:00	1		CLEAN TO BOTTOM. FROM 4733

DRILLER: R.D. Johnston

FOOTAGE / FORMATION

FROM	TO	DR'D RM'R CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	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
5310												

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	¼		SERVICE RIG & B.O.P.
8:15	4:00	7¾		CLEANING OUT FROM 4733 TO 5000'

DRILLER: M. Curtis

FOOTAGE / FORMATION

FROM	TO	DR'D RM'R CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	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
5310												

DESILTER

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0:00	8:15	4¼		Clean Out 5000 - 5310
8:15	12:00	3¾		CIRC COND. HOLE WORKING PIPE

DRILLER: [signature]

Form 3TB — APPROVED — APPROVED

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

DAILY DRILLING REPORT — REPORT NO.

LEASE: Amoco, Murphy, Cormack "A" — WELL NO. N-33 — API WELL NUMBER 61°-00'-122°-30' — DATE 2/25/70

OPERATOR: Amoco — CONTRACTOR: Keen Drlg Ltd. — RIG NO 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE — SIGNATURE OF CONTRACTOR'S TOOL PUSHER

LOCATION

D. P. SIZE	WT. PER FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
5	19.50	E	6 5/8	4½	1	1 & 2	EMSCO	D-850 / D-700	18 / 16

	SIZE	MAKE	WT & GR	NO. JOINTS	FEET	REEL TO CSG. NO.	SET AT
LAST CASING TUBING OR LINER	9 5/8		40 J55		720		720

WIRE LINE RECORD — REEL NO. — SIZE 1/4 — WIRE LINE 8 — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH — TON MI. OR TRIPS SINCE LAST CUT — CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN	DAY	EVE
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL		4½	8
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG	½	½	
8	REPAIR RIG			
9	SLIP AND CUT DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	OTHER WORK	CLEAN TO BOTTOM	7½	1
21				
22				
23				

COMPLETION: A. PERF'N'TH; B. TBG TRIPS; C. TREATING; D. SWABBING; E. TESTING; F. ACID'N'L; G.

TOTALS 8 8 8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

MRS. W. CONTN. D.P. — MRS. W. OPN. D.P. — MRS. NO D.P. — MRS. STANDBY — TOTAL DAY WORK

NO. OF DAYS FROM SPUD — CUMULATIVE ROTATING HRS. — TOTAL MUD COST

DRILLING ASSEMBLY (at end of tour)

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

BIT RECORD

BIT NO.	11
SIZE	8½
MFG.	HW
TYPE	XV
JETS 1 32nds	11 11 11
SER. NO.	BN455
DEPTH OUT	
DEPTH IN	5247
TOTAL FTG.	
TOTAL HRS. RUN	
COND. T. B. GAGE	
GPM PD-PR	

MUD RECORD

TIME	12:00	4:00	7:00
WEIGHT	9.2	9.3	9.3
PRESSURE GRADIENT			
VISC. SEC.	180	200	200
PV YP	/	/	/
GELS			
WL - CC's	5.6	5.6	5.6
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	18 BAGS		
BENEX	4 BAG		
SODA ASH	2 BAGS		

MORNING TOUR

FOOTAGE / FORMATION

FOOTAGE FROM	TO	DR'D W/L OR CONE	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT (000's)	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN
5247				DESILTER BHRS	62		1000	5½	46			3

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:30	½		RIG SERVICE / B.O.P.S.
12:30	8:00	7½		CLEAN TO BOTTOM FROM 4837 TO 5098
		8		

DRILLER R. Pulliam

DRILLING ASSEMBLY (at end of tour)

NO.				
	BIT			FT.
	STB PMP	OD		FT.
17	D.C. ID	6¾ OD	524.44	FT.
	STB NMR	OD		FT.
	D.C. ID	OD		FT.
	STB NMR	OD		FT.
1	X O SUB		1.32	
52	STANDS DP		4713.42	
	SINGLES DP			FT.
	KELLY DOWN		37.82	FT.
	TOTAL		5277.00	FT.
	WT. OF STRING		150 M.	LBS.

BIT RECORD

BIT NO.	8½
SIZE	HW
MFG.	XV
TYPE	11 11 11
JETS 32nds	BN455
SER. NO.	
DEPTH OUT	5247
DEPTH IN	30
TOTAL FTG.	6½
TOTAL HRS. RUN	
COND. T. B. GAGE	
GPM PD-PR	

MUD RECORD

TIME	10:00	1:00	3:00
WEIGHT	9.5	9.5	9.5
PRESSURE GRADIENT			
VISC. SEC.	180	221	240
PV YP	/	/	/
GELS			
WL - CC's	5.6	5.6	5.4
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	2000	Bronix	50
Benex	40		
Cellex	350		
Soda Ash	300		

DAY TOUR

FOOTAGE / FORMATION

FOOTAGE FROM	TO	DR'D W/L OR CONE	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT (000's)	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN
5247	5277	D			60	40	1200	5½	46			

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	9:00	1		CLEAN TO BOTTOM
9:00	9:30	½		SERVICE RIG & BOPS
9:30	4:00	6½		DRLG.

DRILLER M Curton

DRILLING ASSEMBLY (at end of tour)

NO.				
	BIT			FT.
	STB NMR	OD		FT.
17	D.C. ID	6¾ OD	524.44	FT.
	STB NMR	OD		FT.
	D.C. ID	OD		FT.
	STB NMR	OD		FT.
1	X O SUB		1.32	
52	STANDS UP		4715.74	FT.
1	SINGLES DP		30.26	FT.
	KELLY DOWN		34	FT.
	TOTAL		5303	FT.
	WT. OF STRING		150 m	LBS.

BIT RECORD

BIT NO.	11
SIZE	8½
MFG.	HW
TYPE	XV
JETS 32nds	11 11 11
SER. NO.	BN455
DEPTH OUT	
DEPTH IN	5247
TOTAL FTG.	56
TOTAL HRS. RUN	14½
COND. T. B. GAGE	2 4 W
GPM PD-PR	

MUD RECORD

TIME	600	900	1030
WEIGHT	9.4	9.4	9.4
PRESSURE GRADIENT			
VISC. SEC.	170	280	280
PV YP	/	/	/
GELS			
WL - CC's	5.6	5.6	
pH	9.5	9.5	
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	3000		
Benex	12		
Bronix	50		

EVENING TOUR

FOOTAGE / FORMATION

FOOTAGE FROM	TO	DR'D W/L OR CONE	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT (000's)	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN
5277	5303			DESILTER BHRS	60	45	1050	Swift	43			

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	12:00	8		DRLG 8½ HOLE

WATER TRIP IN [illegible]

DRILLER [signature]

FORM 3T9 — APPROVED — APPROVED

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

DAILY DRILLING REPORT

REPORT NO.

LEASE: Amoco, Murphy, Cormack #1 | WELL NO. N-33 | API WELL NUMBER 61°-00'-122°-30' | DATE 2/24/70

OPERATOR: Amoco | CONTRACTOR: KEEN DRLG LTD. | RIG NO. 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Fred Hardy Jr.

LOCATION

D.P. SIZE	WT. P.F.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
5	19.50	E	6 3/8	4½	1	1	EMSCO	D-850	18
						2		D-700	16

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	NEW TO USED NO.	SET AT
LAST CASING TUBING OR LINER	9 5/8		NO. 355		720.		720

WIRE LINE RECORD — REEL NO.: SIZE 1/4 | NO. LINES 8 | FT. STRIPPED | FT. CUT OFF | PRESENT LENGTH | TON MI. OR TRIPS SINCE LAST CUT | CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION - HOURS

CODE NO.	OPERATION	MONTH	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL			
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG		1/4	
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	OTH. WORK			
	Cleaning Out	7¾	8	8
22				
23				
COMPLETION	A. PERF'N'TN			
	B. TBG TRIPS			
	TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDT'NL			
	G.			
TOTALS		8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W CONTR. D.P.

HRS. W OPR. D.P.

HRS. NO D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

DRILLING ASSEMBLY (At end of run)

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

BIT RECORD

BIT NO.	11
SIZE	8½"
MFG.	HW
TYPE	XV
JETS 1 32nds	11 11 11
SER. NO.	BN455
DEPTH OUT	
DEPTH IN	5247
TOTAL FTG.	
TOTAL HRS. RUN	
COND. T. B. GAGE	
GPM PD-PSI	

MUD RECORD

TIME	4:00		
WEIGHT	9.5		
PRESSURE GRADIENT			
VISC.-SEC.	159		
PV YP	/	/	/
GELS			
WL-CC'S	5		
pH	9.5		
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

WORKING TOUR

FOOTAGE / FORMATION

FOOTAGE FROM	FOOTAGE TO	DR. D RM. N CORE. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL. ELEC. CORE
5247				DESILTER 8 HRS.								

DEVIATION RECORD

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

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	1:00	1		CLEAN TO BOTTOM FROM 3980
1:00	1:15	1/4		RIG SERVICE - B.O.P.'S
1:15	8:00	6¾		CLEAN TO BOTTOM TO 4283
		8		

DRILLER R.D. Johnston

DRILLING ASSEMBLY (At end of run)

NO.			FT.
	BIT		FT.
	STB NMR	OD	FT.
17	D.C. ID 6¾	OD 524.44	FT.
	STB NMR	OD	FT.
	D.C. ID	OD	FT.
	STB NMR	OD	FT.
1	X O Sub	1.32	
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
	WT. OF STRING		LBS.

BIT RECORD

BIT NO.	11
SIZE	8½
MFG.	HW
TYPE	XV
JETS 1 32nds	11 11 11
SER. NO.	BN455
DEPTH OUT	
DEPTH IN	5247
TOTAL FTG.	
TOTAL HRS. RUN	
COND. T. B. GAGE	
GPM PD-PSI	

MUD RECORD

TIME	10:00	1:00	3:00
WEIGHT	9.4	9.4	9.4
PRESSURE GRADIENT			
VISC.-SEC.	175	184	170
PV YP	/	/	/
GELS			
WL-CC'S	5.2	5.2	5.2
pH	9.0	9.0	9.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Oil	2000#	Cellex	100#
Bunex	10#		
Soda Ash	200#		
Water	1		

DAY TOUR

FOOTAGE / FORMATION

FOOTAGE FROM	FOOTAGE TO	DR. D RM. N CORE. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL. ELEC. CORE
5247												

DEVIATION RECORD

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

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	4:00			CLEANING OUT FROM 4283 TO 4590
				WATER TRUCK

DRILLER M. Lantz

DRILLING ASSEMBLY (At end of run)

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

BIT RECORD

BIT NO.	11
SIZE	8½
MFG.	HW
TYPE	XV
JETS 1 32nds	11 11 11
SER. NO.	BN465
DEPTH OUT	
DEPTH IN	5247
TOTAL FTG.	
TOTAL HRS. RUN	
COND. T. B. GAGE	
GPM PD-PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE / FORMATION

FOOTAGE FROM	FOOTAGE TO	DR. D RM. N CORE. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL. ELEC. CORE

DEVIATION RECORD

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

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	12:00	8		CLEAN OUT 4590 - 4737
				WATER TRUCK

DRILLER [illegible]

FORM 3T9

APPROVED

APPROVED

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

DAILY DRILLING REPORT — REPORT NO. 1

LEASE: Amoco, Murphy, Cormack #A1 — WELL NO. N-33 — API WELL NUMBER 61°00'-122°-30' — DATE 2-23-70

OPERATOR Amoco — CONTRACTOR KEEN DRLG LTD. — RIG NO 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE — SIGNATURE OF CONTRACTOR'S TOOL PUSHER

LOCATION

	D.P. SIZE	WT. PER FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
	5	19.50	E	6 3/8	5 1/2	1

	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
	1	EMSCO	D-850	18
	2		D-700	16

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	MEAS. TO CSG. NO.	SET AT
LAST CASING TUBING OR LINER	9 5/8		40 I-S		720		720

WIRE LINE RECORD — REEL NO. — SIZE 1 1/4 — NO. LINES 8 — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH — TON MI. OR TRIPS SINCE LAST CUT — CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION - HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	5 1/2		
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG			
8	REPAIR RIG			
9	SLIP OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	OTHER WORK	CLEAN TO BTM 2 1/2		8
21				
22				
23				

COMPLETION: A. PERFORATING; B. TBG. TRIPS; C. TREATING; D. SWABBING; E. TESTING; F. ADDITIONAL; G.

TOTALS 8 8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

MRS. = CONTR. D.P.
MRS. = OPR. D.P.
MRS. = D.P.
MRS. = STANDBY

TOTAL DAY WORK

NO. OF DAYS P.M. ON JOB
CUMULATIVE ROTATING HRS.

TOTAL MUD COST

DRILLING ASSEMBLY (All end of tool)

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

BIT RECORD

BIT NO.	11
SIZE	8 1/2"
MFG.	HW
TYPE	XV
JETS 1 32nds	11 11 11
SER. NO.	BN-455
DEPTH OUT	
DEPTH IN	5247
TOTAL FTG.	
TOTAL HRS. RUN	
COND. I B'S T B GAGE	
GPM PD-PSI	

MUD RECORD

TIME			7.00
WEIGHT			9.3
PRESSURE GRADIENT			
VISC.-SEC.			45
PV YP	/	/	/
GELS			
WL-CC'S			5.0
pH			9.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	6 Bags		
Benex	1 Bag		

WORKING TOUR

FOOTAGE FROM	TO	DR'D RUN OR CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT (1000's)	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 L.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 L.P.M.	METHOD MUD CONT. P.P.M. CL
5247					60		1000	5 1/2	43			
				DESILTER 2 1/2 Hrs								

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:30	1/2		RIG SERVICE & B.O.P.'S
12:30	3:00	2 1/2		HOIST R.R. BIT TO RUN #11 XV
3:00	5:30	2 1/2		RUN WITH BIT #11
5:30	8:00	2 1/2		CLEAN TO BOTTOM FROM 3709

DRILLER R.L. Roberts

DRILLING ASSEMBLY (All end of tool)

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

BIT RECORD

BIT NO.	11
SIZE	8 1/2
MFG.	HW
TYPE	XV
JETS 1 32nds	11 11 11
SER. NO.	BN455
DEPTH OUT	
DEPTH IN	5247
TOTAL FTG.	
TOTAL HRS. RUN	
COND. I B'S T B GAGE	
GPM PD-PSI	

MUD RECORD

TIME	10:00	1:00	3:00
WEIGHT	9.5	9.4	9.4
PRESSURE GRADIENT			
VISC.-SEC.	150	167	170
PV YP	/	/	/
GELS			
WL-CC'S	5.4	5.4	5.4
pH	9.0	9.0	9.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	3000#		
Benex	14 "		
Sodalish	20.0 "		
Water	1"		

DAY TOUR

FOOTAGE FROM	TO	DR'D RUN OR CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT (1000's)	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 L.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 L.P.M.	METHOD MUD CONT. P.P.M. CL
5247					60		1000	5 1/2	43			

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	4:00	8		CLEAN OUT FROM 3709 TO 3830

DRILLER M. Clark

DRILLING ASSEMBLY (All end of tool)

NO.				
	BIT			FT.
	STB NMM	OD		FT.
17	D.C. ID	6 3/4 OD	524.44	FT.
	STB NMM	OD		FT.
	D.C. ID	GL		FT.
	STB NMM	OD		FT.
1	XO SUB		1.32	
51	STANDS DP		4823.11	FT.
2	SINGLES DP		61.15	FT.
	KELLY DOWN		36.98	FT.
	TOTAL		5247	FT.
	WT. OF STRING			LBS.

BIT RECORD

BIT NO.	11
SIZE	8 1/2
MFG.	HW
TYPE	XV
JETS 1 32nds	11 11 11
SER. NO.	BU-155
DEPTH OUT	
DEPTH IN	5247
TOTAL FTG.	
TOTAL HRS. RUN	
COND. I B'S T B GAGE	
GPM PD-PSI	

MUD RECORD

TIME	6:00	8:00	10:00
WEIGHT	9.4		
PRESSURE GRADIENT			
VISC.-SEC.	200	180	165
PV YP	/	/	/
GELS			
WL-CC'S	15.5		5.5
pH	9.0		9.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1500#		
Benex	6 "		

EVENING TOUR

FOOTAGE FROM	TO	DR'D RUN OR CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT (1000's)	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 L.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 L.P.M.	METHOD MUD CONT. P.P.M. CL
5247					60		1000	5 1/2	44			
				WAITER ON HRS								

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 PM	12:00	8		Clean Out 3830 - 3980

DRILLER Robert Clark

FORM 3TS — APPROVED — APPROVED

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

DAILY DRILLING REPORT — REPORT NO.

LEASE: Amoco, Murphy, Cormack #1 — WELL NO.: N 33 — API WELL NUMBER: 61°-00'-122°-30' — DATE: Feb 22/70

OPERATOR: Amoco — CONTRACTOR: KEEN DRLG. LTD. — RIG NO.: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: Fred Barber

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Fred Hadyini

SIZE	WT. PT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
5	19.50	E	6 3/8	5 1/2	1	1	EMSCO	D-850	18
						2		D-700	16

LOCATION

WIRE LINE RECORD — RBPL NO.: SIZE 1 1/4 — NO. LINES 8 — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH — TON MI. ON TRIPS SINCE LAST CUT — CUMULATIVE TON MI. ON TRIPS

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	MAN. TO CMG. MO.	SET AT
	9 5/8		40 355		720		720

TIME DISTRIBUTION (HOURS)

CODE NO.	OPERATION	MORN	DAY	EVE.
1	NIP UP AND TEAR DOWN			
2	DRILL ACTUAL	7 1/4	5 3/4	
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE		1/4	
6	TRIPS		1 1/4	3 1/4
7	LUBRICATE RIG	1/4		1/4
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY		1/4	
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21	Flwd Out			4 1/2
22				
23				
	TOTALS			8

COMPLETION: A. PERF'N'G; B. TBG. TRIPS; C. TREATING; D. SWABBING; E. TESTING; F. ADDITN'L; G.

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

MHS W. CONTR. D.P.
MHS W. OPR. D.P.
MHS NO D.P.
MHS STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MHS PMW

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR OD		FT.
17	D.C. ID 6 3/4 OD	524.44	FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1	OR SUB	1.32	
51	STANDS DP	4665.43	FT.
	SINGLES DP		FT.
	KELLY DOWN	29	FT.
	TOTAL	5177	FT.
	WT. OF STRING	151,000	LBS.

BIT RECORD

BIT NO.	10
SIZE	8 1/2
MFG.	HW
TYPE	X16
JETS 1 32nds	11 11 11
SER. NO.	55179
DEPTH OUT	
DEPTH IN	4916
TOTAL FTG.	
TOTAL HRS RUN	
COND. T.B.'s T.B. GAGE	
GPM PD-PM	

MUD RECORD

TIME	12:00	4:00	7:00
WEIGHT	9.4	9.3	9.3
PRESSURE GRADIENT			
VISC.-SEC.	45	45	45
PV-YP	/	/	/
GELS			
WL-CC'S	9.6	9.6	9.6
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1800 #		
Barex	424		
Caller	200#		
Soda Ash	200 #		

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR OD		FT.
17	D.C. ID 6 3/4 OD	524.44	FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1	XO SUB	1.32	
51	STANDS DP	4623.11	FT.
2	SINGLES DP	61.15	FT.
	KELLY DOWN	36.98	FT.
	TOTAL	5247.04	FT.
	WT. OF STRING	152,000	LBS.

BIT RECORD

BIT NO.	10
SIZE	8 1/2
MFG.	H.W.
TYPE	X16
JETS 1 32nds	11 11 11
SER. NO.	55199
DEPTH OUT	
DEPTH IN	4916
TOTAL FTG.	331
TOTAL HRS RUN	21 1/4
COND. T.B.'s T.B. GAGE	8 3 I
GPM PD-PM	

MUD RECORD

TIME	8:30	10.00	
WEIGHT	9.3	9.3	
PRESSURE GRADIENT			
VISC.-SEC.	46	45	
PV-YP	/	/	
GELS			
WL-CC'S	5.0	5.0	
pH	9	9	
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Water	1 "		

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR OD		FT.
17	D.C. ID 6 3/4 OD	524.44	FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1	XO SUB	1.32	
51	STANDS DP	4623.11	FT.
2	SINGLES DP	11.15	FT.
	KELLY DOWN	36.98	FT.
	TOTAL	5247	FT.
	WT. OF STRING	152	LBS.

BIT RECORD

BIT NO.	4RR
SIZE	8 1/2
MFG.	REED
TYPE	SCM
JETS 1 32nds	11 11 11
SER. NO.	376490
DEPTH OUT	
DEPTH IN	5247
TOTAL FTG.	
TOTAL HRS RUN	
COND. T.B.'s T.B. GAGE	
GPM PD-PM	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1000		
Barex	4 #		

DAY TOUR

FOOTAGE / FORMATION

FROM	TO	DR'D RUN OR CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 L.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 L.P.M.	METHOD MUD CONTROL
5044	5177	D		DESILTER 8 HRS	61	40	800	5 1/2	43			

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	1:00	1		DRILL 8 1/2" HOLE
1:00	1:15	1/4		RIG SERVICE - B.O.P.'s
1:15	8:00	6 3/4		DRILL 8 1/2" HOLE
		8		

DRILLER: R. Dalgleish

FOOTAGE / FORMATION

FROM	TO	DR'D RUN OR CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 L.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 L.P.M.	METHOD MUD CONTROL
5177	5247	D			60	40	850	5 1/2	43			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
5189	1 1/2°							

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	9:00	1		DRLG.
9:00	9:15	1/4		~~CIRC.~~ CIR.
9:15	10:00	3/4		WIRE LINE SURVEY
10:00	2:15	4 1/4		DRLG.
2:15	4:00	1 1/4		HOIST FOR BIT

DRILLER: Tom Cox

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR'D RUN OR CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD MUD CONTROL
5247				DESILTER 8 HRS								

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	5:15	1 1/4		FINISH OUT
5:15	5:30	1/4		R.S. SERV. BOPS
5:30	7:30	2		RUN IN W/ BIT #10
7:30	12:00	4 1/2		CLEAN OUT BRIDGES 3717-

DRILLER: R. Dalgleish

FORM 375 — APPROVED — APPROVED

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

DAILY DRILLING REPORT — REPORT NO.

LEASE: Amoco Murray Cormack A-1 | WELL NO.: N-33 | API WELL NUMBER: 60° 00' 122° 30' | DATE: 2-21-70

OPERATOR: Amoco Can Pete | CONTRACTOR: Keen Drlg LTD | RIG NO.: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: Fred J Bondar | SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Fred Keeglin

O.D. SIZE	WT. PT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
5	19.50	E	6 3/4	4 1/2 IF	1	1	EMSCO	D 800	18
						2		DA 750	16

LOCATION: Cormack A-1 NWST

	SIZE	WEIGHT	WT. & GR.	NO. JOINTS	FEET	RNG. TO CSG. NO.	SET AT
LAST CASING TUBING OR LINER	9 5/8		40 J55				720

WIRE LINE RECORD — REEL NO.: SIZE 1/4 | NO. LINES 6 | FT. SLIPPED | FT. CUT OFF | PRESENT LENGTH | TON MI. ON TRIPS SINCE LAST CUT | CUMULATIVE TON MI. ON TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	1 1/4		7 1/4
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS	1 1/4	4 3/4	
7	LUBRICATE RIG	1/4	1/4	1/2
8	REPAIR RIG			
9	SLIP & CUT DRILLING LINE			
10	DEVIATION SURVEY	1/4		
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21	Clean to Bottom	3	1/4	
22				
23				

COMPLETION: A. PERF'G/TR — B. TBG. TRIPS — C. TREATING — D. SWABBING — E. TESTING — F. ADDITN'L — G.

TOTAL: 8 8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. P. CONTR. D.P. — HRS. H. OPR. D.P. — HRS. WO D.P. — HRS. STANDBY — TOTAL DAY WORK

NO. OF DAYS FROM SPUD — CUMULATIVE ROTATING HRS. — TOTAL MUD COST

DRILLING ASSEMBLY (At end of run)

BIT			FT.
STR RMR	OD		FT.
17 D.C. ID 6 3/4	OD	224.44	FT.
STR RMR	OD		FT.
D.C. ID	OD		FT.
STR RMR	OD		FT.
1	10 SUB	1.32	
49	STANDS DP	4350.82	FT.
	SINGLES DP		FT.
	KELLY DOWN	41	FT.
	TOTAL		FT.
WT. OF STRING		112	LBS.

BIT RECORD

BIT NO.	9
SIZE	8 3/4
MFG.	REED
TYPE	STAG
JETS 1/32"	10 10 11
SER. NO.	736165
DEPTH OUT	4916
DEPTH IN	4738
TOTAL FTG.	178
TOTAL HRS. RUN	8 3/4
COND. T.B. G. GAGE	
GPM PD-PSI	

MUD RECORD

TIME	5'	4'	6'
WEIGHT	9.3	9.2	
PRESSURE GRADIENT			
VISC.-SEC.	45	42	45
PV YP	/	/	/
GELS			
WL-CC'S	9.4		
pH	9.5		
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	7 sx		
Lignite	9 sx		
Caustic	10 sx		
Soda Ash	3 sx	WATER	

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR'L'D RM'R CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT (000)	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN BIT / CORE
4720	4916											

DEVIATION RECORD

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

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	2:00	2		Drlg Bal Hole
2:00	2:30	1/2		Circ Sand & Gas
2:30	6:30	4 1/4		Trip
6:30	6:45	1/4		Survey
6:45	8:00	1 1/4		Hoist

DRILLER: R Hatton

DRILLING ASSEMBLY (At end of run)

BIT			FT.
STR RMR	OD		FT.
17 D.C. ID 6 3/4	OD	224.44	FT.
STR RMR	OD		FT.
D.C. ID	OD		FT.
STR RMR	OD		FT.
1	10 SUB	1.32	
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	10
SIZE	6 1/2
MFG.	HW
TYPE	X16
JETS 1/32"	11 11 11
SER. NO.	55199
DEPTH OUT	
DEPTH IN	4916
TOTAL FTG.	
TOTAL HRS. RUN	
COND. T.B. G. GAGE	
GPM PD-PSI	

MUD RECORD

TIME	9:00	10'	
WEIGHT	9.3	9.3	
PRESSURE GRADIENT			
VISC.-SEC.	45	45	
PV YP	/	/	/
GELS			
WL-CC'S			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DESILTER 3 HRS

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
4916	1/4							

DAY TOUR

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	10:00	2		Hoist Bit #9
10:00	10:15	1/4		Rig Service - B.O.P.S
10:15	1:00	2 3/4		Run in with Bit #10
1:00	4:00	3		Clean From 4825 to 4886

DRILLER: R Hatton

DRILLING ASSEMBLY (At end of run)

1	BIT		FT.
	STR RMR	OD	FT.
17	D.C. ID 6 3/4	OD 5244	FT.
	STR RMR	OD	FT.
	D.C. ID	OD	FT.
	STR RMR	OD	FT.
1	10 SUB	1.32	
40	STANDS DP	4441.60	FT.
2	SINGLES DP	60.01	FT.
	KELLY DOWN	16.63	FT.
	TOTAL	5044.00	FT.
WT. OF STRING		150,000	LBS.

BIT RECORD

BIT NO.	10
SIZE	8 3/4
MFG.	HW
TYPE	X16
JETS 1/32"	11 11 11
SER. NO.	55199
DEPTH OUT	
DEPTH IN	4916
TOTAL FTG.	128
TOTAL HRS. RUN	7 1/4
COND. T.B. G. GAGE	
GPM PD-PSI	

MUD RECORD

TIME	5:00	7:30	10:00
WEIGHT	9.4	9.4	9.4
PRESSURE GRADIENT			
VISC.-SEC.	42	40	44
PV YP	/	/	/
GELS			
WL-CC'S	5.6	5.6	5.6
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1000#		
Barex	6 sx		
Caustic	15#		
Soda Ash	20#	WATER	

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR'L'D RM'R CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT (000)	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN BIT / CORE
4916	5044	D			60	40	900	5 1/2	43			

DESILTER 7 1/2 Hr.

DEVIATION RECORD

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

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:15	1/4		CLEAN TO BOTTOM
4:15	6:00	1 3/4		DRLG.
6:00	6:30	1/2		SERVICE RIG & B.O.P.S
6:30	12:00	5 1/2		DRLG.

DRILLER: M Lentz

FORM 3T5 — APPROVED — APPROVED

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

DAILY DRILLING REPORT — REPORT NO.

LEASE: Amoco Murphy Coormack A-1 — WELL NO.: N-33 — API WELL NUMBER: 61° 00' 122° 30' — DATE:

OPERATOR: Amoco Can Petr — CONTRACTOR: Keen Drlg Ltd — RIG NO.:

SIGNATURE OF OPERATOR'S REPRESENTATIVE: Fred Bondar — SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Fred Redfern

LOCATION

D.P. SIZE	WT. P.F.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5	19.50	E	6 3/8	4 1/2 IF	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D800	16
2		DA750	16

LAST CASING TUBING OR LINER	SIZE	WAIVE	WT. & GR.	NO. JOINTS	PERF	RNG. TO CSG. NO.	SET AT
	9 7/8		40.75				720

WIRE LINE RECORD — REEL NO.: SIZE 1 1/4 — NO. LINES 8 — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH

TON MI. ON TRIPS SINCE LAST CUT

CUMULATIVE TON MI. ON TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL		2½	
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG	¼	¼	
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK	Blood Air	7¾	7¾ 5½
22				
23				

COMPLETION: A. PERF'T'N'G; B. TRG TRIPS; C. TREATING; D. SWABBING; E. TESTING; F. ADDIT'L; G.

TOTALS: 8 8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

DRILLING ASSEMBLY

NO.				
	BIT			FT.
	STB NMR	OD		FT.
17	D.C. ID 6¾"	OD	524.44	FT.
	STB NMR	OD		FT.
	D.C. ID	OD		FT.
	STB NMR	OD		FT.
1	KQ SUB		1.32	
	STANDS DP			FT.
	SINGLES DP			FT.
	KELLY DOWN			FT.
	TOTAL			FT.
WT. OF STRING				LBS.

BIT RECORD

BIT NO.	9
SIZE	8¾
MFG.	REED
TYPE	STJAG
JETS 1 32"	10 10 11
SER. NO.	856134
DEPTH OUT	
DEPTH IN	4738
TOTAL FTG.	
TOTAL HRS RUN	
COND. 1 B GAGE	
GPM PD PSI	

MUD RECORD

TIME	12:30	3:10	6:30
WEIGHT	9.3	9.2	9.1
PRESSURE GRADIENT			
VISC. SEC.	42	45	40
PV YP	/	/	/
GELS	/	/	/
WL CC'S			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	2 sacks		
Soda Ash	2 sacks		
Caustic	100#		

MOVING TOUR

FROM	TO	DRLD OR CORE, C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT (000)	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN
4738				DESILTER 8 HRS			50	5½	32			

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	1:00			CLEAN OUT 4410 -
1:00	1:00			+ SCRN VEL'S
1:00	9:00			CIRC 10.- 4410

Rod Cote

DRILLING ASSEMBLY

NO.				
	BIT			FT.
	STB NMR	OD		FT.
17	D.C. ID 6¾"	OD	524.44	FT.
	STB NMR	OD		FT.
	D.C. ID	OD		FT.
	STB NMR	OD		FT.
1	KQ SUB		1.32	
	STANDS DP			FT.
	SINGLES DP			FT.
	KELLY DOWN			FT.
	TOTAL			FT.
WT. OF STRING				LBS.

BIT RECORD

BIT NO.	9
SIZE	8½
MFG.	Reed
TYPE	STJAG
JETS 1 32"	10 10 11
SER. NO.	856134
DEPTH OUT	
DEPTH IN	4738
TOTAL FTG.	
TOTAL HRS RUN	
COND. 1 B GAGE	
GPM PD PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

FROM	TO	DRLD OR CORE, C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT (000)	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN
4738							90	5½	52.			

DESILTER 8 HRS

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	¼		Rig Service - B.O.P.'s
8:15	2:00	7¾		CLEAN TO BOTTOM

DRILLER: P. Nicholson

DRILLING ASSEMBLY

NO.				
	BIT			FT.
	STB NMR	OD		FT.
17	D.C. ID 6¾"	OD	524.44	FT.
	STB NMR	OD		FT.
	D.C. ID	OD		FT.
	STB NMR	OD		FT.
1	KQ SUB		1.32	
46	STANDS DP		4167.14	FT.
2	SINGLES DP		60.95	FT.
	KELLY DOWN		26.15	FT.
	TOTAL		4750.00	FT.
WT. OF STRING			142 000	LBS.

BIT RECORD

BIT NO.	9
SIZE	8½
MFG.	REED
TYPE	STJAG
JETS 1 32"	10 10 11
SER. NO.	856135
DEPTH OUT	
DEPTH IN	4738
TOTAL FTG.	4 3/2
TOTAL HRS RUN	2 3/2
COND. 1 B GAGE	
GPM PD PSI	

MUD RECORD

TIME	6:00	9:00	11:00
WEIGHT	9.3	9.3	9.3
PRESSURE GRADIENT			
VISC. SEC.	37	42	44
PV YP	/	/	/
GELS	/	/	/
WL CC'S			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	3200#		
Benex	1 a		
Water	1		

EVENING TOUR

FROM	TO	DRLD OR CORE, C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT (000)	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN
4738	4780	D			60	40	1000	5½	47			

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	9:30	5½		CLEANING TO BOTTOM
9:30	12:00	2½		DRLG.

DRILLER: M. Cote

FORM 375 — APPROVED — APPROVED

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

DAILY DRILLING REPORT — REPORT NO.

LEASE: Amoco Murphy Cormack A-1 | WELL NO.: N-33 | API WELL NUMBER: 61° 00' 122° 30' | DATE: Feb 19/70

OPERATOR: Amoco C:N Pete | CONTRACTOR: Keen Drlg LTD | RIG NO.: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE | SIGNATURE OF CONTRACTOR'S TOOL PUSHER

LOCATION: Cormack A-1 NWT

D.P. SIZE	WT. P.F.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
5	19.50	E	6 3/8	4 1/2 IF	1	1	Emsco	D800	18
						2		DA750	16

	SIZE	WGHT	WT. & GR.	NO. JOINTS	FEET	DEPTH TO CSG. NO.	SET AT
LAST CASING TUBING OR LINER	9 5/8		40.50				720

WIRE LINE RECORD — REEL NO.: SIZE 1 1/4 — NO. LINES 8 — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH — TRIPS NO. OR TRIPS SINCE LAST CUT — CUMULATIVE FROM NO. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN	DAY	EVE
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL			
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG	1/4	1/4	
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	O.H. WORK			
21				
22				
23				
COMPLETION	A. PERFORATING			
	B. TBG. TOOLS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDITIONAL			
	G.			
	TOTALS			

G.L. to Bottom 7 3/4 7 3/4

DAILY WORK TIME SUMMARY — OFFICE USE ONLY

HRS. W. CONTR. D.F. | HRS. W. OPR. D.F. | HRS. STANDBY

TOTAL DAY WORK | NO. OF DAYS P. WORK MADE | CUMULATIVE ROTATING HRS. | TOTAL MUD COST

DRILLING ASSEMBLY (at end of run)

NO.				
	BIT			FT.
	STB RMR	OD		FT.
17	D.C. ID 6 3/4	OD 10	524.44	FT.
	STB RMR	OD		FT.
	D.C. ID	OD		FT.
	STB RMR	OD		FT.
1	KO Sub		1.32	FT.
46	STANDS DP		4168.46	FT.
1	SINGLES DP		30.45	FT.
	KELLY DOWN		5	FT.
	TOTAL		4738	FT.
	WT. OF STRING			LBS.

BIT RECORD

BIT NO.	9
SIZE	8 1/2
MFG.	Reed
TYPE	S-J 4 9
JETS OR T.F.A.	10 10 11
SER. NO.	856135
DEPTH OUT	
DEPTH IN	4738
TOTAL FTG.	
TOTAL HRS. RUN	
COND. I.R. T. B. GAGE	
GPM PRESS.	

MUD RECORD

TIME	330
WEIGHT	9.4
PRESSURE GRADIENT	
VISC. SEC.	40
PV YP	
GELS	
WL CC'S	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	100 sx		
Diesel	3 bbls		
Soda Ash	100 lbs		

TOUR: MORNING

FOOTAGE / FORMATION

FROM	TO	DR'D FOR'N CORE'D	CORE NO.	FORMATION (WITH CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000 LBS	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 DRLG.
4738				Drilled 6 hrs			1100	6 1/2	96			

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	1/4		R.G. Serv. Pops
12:15	8 PM	7 3/4		Clean To Bottom 4050 - 4090

Driller

EVENING TOUR

DRILLING ASSEMBLY (at end of run)

NO.				
	BIT			FT.
	STB RMR	OD		FT.
17	D.C. ID 6 3/4	OD 10	524.44	FT.
	STB RMR	OD		FT.
	D.C. ID	OD		FT.
	STB RMR	OD		FT.
1	KO Sub		1.32	FT.
46	STANDS DP		4168.46	FT.
3	SINGLES DP		30.45	FT.
	KELLY DOWN		5	FT.
	TOTAL		4738	FT.
	WT. OF STRING			LBS.

BIT RECORD

BIT NO.	9
SIZE	8 1/2
MFG.	Reed
TYPE	S-J 4 9
JETS OR T.F.A.	10 10 11
SER. NO.	856135
DEPTH OUT	
DEPTH IN	4738
TOTAL FTG.	
TOTAL HRS. RUN	
COND. I.R. T. B. GAGE	
GPM PRESS.	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE / FORMATION

FROM	TO	DR'D FOR'N CORE'D	CORE NO.	FORMATION (WITH CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000 LBS	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 DRLG.
4738							800	5 1/2	51			

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	12:00	8		Cleaning out fill @ 4200 to 4410

Water 1"

Driller

MORNING TOUR

DRILLING ASSEMBLY (at end of run)

NO.				
	BIT			FT.
	STB RMR	OD		FT.
17	D.C. ID 6 3/4	OD 10	524.44	FT.
	STB RMR	OD		FT.
	D.C. ID	OD		FT.
	STB RMR	OD		FT.
1	KO Sub		1.32	FT.
46	STANDS DP		4168.46	FT.
3	SINGLES DP		30.45	FT.
	KELLY DOWN		5	FT.
	TOTAL		4738	FT.
	WT. OF STRING			LBS.

BIT RECORD

BIT NO.	9
SIZE	8 1/2
MFG.	Reed
TYPE	S-J 4 9
JETS OR T.F.A.	10 10 11
SER. NO.	856135
DEPTH OUT	
DEPTH IN	4738
TOTAL FTG.	
TOTAL HRS. RUN	
COND. I.R. T. B. GAGE	
GPM PRESS.	

MUD RECORD

TIME	6:00	8:00	10:00
WEIGHT	9.4	9.3	9.3
PRESSURE GRADIENT			
VISC. SEC.	49	45	38
PV YP			
GELS			
WL CC'S			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	100 sx		
Soda Ash	100 lbs		
Water	1"		

FOOTAGE / FORMATION

FROM	TO	DR'D FOR'N CORE'D	CORE NO.	FORMATION (WITH CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000 LBS	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 DRLG.
4738							800	5 1/2	51			

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	1/4		Rig Service B.O.P.s
8:15	4:00	7 3/4		Clean to Bottom

WATER 21 bbls

Driller

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

FORM 3TT5 — APPROVED — APPROVED

DAILY DRILLING REPORT REPORT NO.

LEASE: Kmoco Murphy Cormack A-1 | WELL NO: N-33 | API WELL NUMBER: 61° 00' 122° 30' | DATE: Feb 18/76

OPERATOR: Kmoco Can. Pete | CONTRACTOR: KEEN Drlg LTD | RIG NO: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature] | SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Fred Hadalin

LOCATION: Cormack A-1 NWT

D.P. SIZE	WT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
5	19.50	E	6 3/4	4 1/2 IF	1	1	Emsco	D800	17
						2		D4750	16

LAST CASING RUNNING OR LINER	SIZE	WEIGHT & GR.	NO. JOINTS	FEET	DRLG. TO ENG. NO.	SET AT
	9 5/8	40 J55				720

WIRE LINE RECORD REEL NO.
SIZE 1/4 NO. LINES 8 FT. SLIPPED
FT. CUT OFF PRESENT LENGTH
TON-MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON-MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MIDN	DAY	EVE
1	RIG UP AND TEAR DOWN			
2	DRLG. ACTUAL	2 3/4		
3	REAMING			3 1/2
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS	2 1/4		3 1/2
7	LUBRICATE RIG	1/4	1/4	1/2
8	REPAIR RIG	2 1/2	7 1/4	1 1/2
9	CUT DRLG. LINE		1/4	
10	DEVIATION SURVEY	1/4		
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	OTHER WORK			
21				
22				
COMPLETION	A. PERFORATING			
	B. TRIP TANKS			
	C. TREATING			
	D. WARRING			
	E. TESTING			
	F. ADDITIONAL			
	G.			
TOTALS		8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W. CONTR. D.P.
HRS. W.O.C. D.P.
HRS. W.O.C.
HRS. STAND AT

TOTAL DAY WORK

NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.

TOTAL MUD COST

DRILLING ASSEMBLY

BIT			FT.
STB RMR	OD		FT.
D.C. ID	OD	524.44	FT.
STB RMR	OD		FT.
D.C. ID	OD		FT.
STB RMR	OD		FT.
YD SUB		1.32	FT.
46 STANDS DP			FT.
1 SINGLES DP			FT.
KELLY DOWN		15'	FT.
TOTAL		4738	FT.
WT. OF STRING		143	LBS.

BIT RECORD

BIT NO.	A	9
SIZE	8 1/2	8 1/2
MFG.	REED	REED
TYPE	STIAG	STIAG
JETS 32nds	10 10 11	10 10 11
SER. NO.	856134	856134
DEPTH OUT	4738	
DEPTH IN	4489	
TOTAL FTG.	249	
TOTAL HRS. RUN	14 1/2	
COND. T.B.G.	3 B I	

MUD RECORD

TIME	2 PM
WEIGHT	9.4
PRESSURE GRADIENT	
VISC. SEC.	68
PV YP	/ /
GELS	/ /
W. LOSS CC'S	7.8
pH	9
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	100 #		
Resin	4 #		

DRILLING ASSEMBLY

BIT			FT.
STB RMR	OD		FT.
D.C. ID	OD	524.44	FT.
STB RMR	OD		FT.
D.C. ID	OD		FT.
STB RMR	OD		FT.
1 Or Sub		1.32	FT.
46 STANDS DP		4308.44	FT.
1 SINGLES DP		30 45	FT.
KELLY DOWN		15 00	FT.
TOTAL		11738	FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	9
SIZE	8 1/2
MFG.	REED
TYPE	STIAG
JETS 32nds	10 10 11
SER. NO.	856134
DEPTH OUT	
DEPTH IN	4788
TOTAL FTG.	
TOTAL HRS. RUN	
COND. T.B.G.	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC. SEC.	
PV YP	
GELS	
W. LOSS CC'S	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLING ASSEMBLY

BIT			FT.
STB RMR	OD		FT.
D.C. ID	OD		FT.
STB RMR	OD		FT.
D.C. ID	OD		FT.
STB RMR	OD		FT.
STANDS DP			FT.
SINGLES DP			FT.
KELLY DOWN			FT.
TOTAL			FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	9
SIZE	8 1/2
MFG.	REED
TYPE	STIAG
JETS 32nds	10 10 11
SER. NO.	856135
DEPTH OUT	
DEPTH IN	4738
TOTAL FTG.	
TOTAL HRS. RUN	
COND. T.B.G.	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC. SEC.	
PV YP	
GELS	
W. LOSS CC'S	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

FOOTAGE FROM 4700 TO 4738 | DRLD BRK'R CORE'D: D | CORE NO. | FORMATION (SHOW CORE RECOVERY): DACITE & SDS | ROTARY RPM | WT. ON BIT 1000's | PUMP PRESS | PUMP NO. LINER SIZE | PUMP NO. LINER SIZE | METHOD RUN

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 PM	2 PM	2 3/4		Drill 8 1/2 Hole
2 PM	3 PM	1/4		R. Sand VBops
3 PM	3 15	1/4		Survey
3 15	5 PM	2 1/4		Hoist
5 PM	8 PM	2 1/2		Repair Rotary Clutch Change Liner Gasket

DRILLER [signature]

EVENING TOUR

FOOTAGE FROM 4738 TO | DRLD BRK'R CORE'D | CORE NO. | FORMATION (SHOW CORE RECOVERY) | ROTARY RPM | WT. ON BIT 1000's | PUMP PRESS | PUMP NO. LINER SIZE | PUMP NO. LINER SIZE | METHOD RUN

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 PM	5 30	1 1/2		Finish Rotary Clutch
5 30	6 PM	1/2		Service Rig & B.O.P.
6 PM	8 30	2 1/2		Run in Hole
8 30	12 PM	3 1/2		Reaming Bridge from 3990 to 4030'

WATER 10 hrs

DRILLER [signature]

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

Form 375 APPROVED APPROVED

DAILY DRILLING REPORT — REPORT NO.

LEASE: Arco Mapes/Cannack A-1 | WELL NO.: N-33 | API WELL NUMBER: 61° 00' 122° 30' | DATE: 2-12-70

OPERATOR: Amoco Cal. Pet Co | CONTRACTOR: Reed Drlg LTD | RIG NO.: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE | SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Fred Hodgkin

LOCATION: Cannack A-1 NWT

O.D. SIZE	WT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
5	19.50	E	6 7/8	4 1/2 IF	1	1	Emsco	DB	18
						2		DH 750	16

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	BRD. TO CAL. REC.	SET AT
LAST CASING TUBING OR LINER	9 5/8		40 J55				720

WIRE LINE RECORD — REEL NO.: SIZE 1 1/4 | NO. LINES 8 | FT. SLIPPED | FT. CUT OFF | PRESENT LENGTH | TON MI. OR TRIPS SINCE LAST CUT | CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MIDNIGHT	DAY	EVE
1	RIG UP AND TEAR DOWN			
2	DRLG. ACTUAL		3¼	8
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG	¼	¼	¼
8	REPAIR RIG	½		
9	CUT OFF DRLG. LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRLG. STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	CHG. MUD			
21	Clean out 7¾ H			
22				
23				
	A. PERFORATING			
	B. INSTRUMENTS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ABANDONED			
	G.			
COMPLETION	TOTALS			8

DAY WORK TIME SLIP NO. (OFFICE USE ONLY)

HRS. W/ CONTR. D.P.

HRS. OPR. D.P.

HRS. MUD D.P.

HRS. STAND-BY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

DRILLING ASSEMBLY

NO.			FT.
	BIT		
	STB RMR	OD	FT.
12	D.C. ID 6 3/4	OD	524.44 FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	YOS40		1.32
45	STANDS DP		3827.88 FT.
1	SINGLES DP		30.55 FT.
	KELLY DOWN		35 FT.
	TOTAL		4489 FT.
	WT. OF STRING		140 LBS.

BIT RECORD

BIT NO.	8
SIZE	7 7/8
MFG.	REED
TYPE	STIAG
JETS 32nds	10 10 11
SER. NO.	B56134
DEPTH OUT	
DEPTH IN	4489
TOTAL FTG.	
TOTAL HRS. RUN	
COND. I.A.D. & GAGE	
GPM PD. PSI	

MUD RECORD

TIME	2:00	5:30
WEIGHT	9.5	0.5
PRESSURE GRADIENT		
VISC. SEC.	76	79
PV YP	/	/
GELS		
WL. CC'S		
pH		
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

MUD TANK

FOOTAGE 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 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM	METHOD USED SCL. PARAFFIN COMB. C
4489				DESILTER 8 HRS								

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	1:00	1		Clean To Bottom 4489.
1:00	1:15	¼		Rig Serv / BOPs
1:15	4:15	3		Clean To Bottom
4:15	4:45	½		Weld Mud Line
4:45	8:00	3¼		Clean To Bottom

Rod Ashe

DRILLING ASSEMBLY

NO.			FT.
	BIT		
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
17	D.C. ID 6¾	OD	524.44 FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
44	STANDS DP		4031.23 FT.
	SINGLES DP		FT.
	KELLY DOWN		3700 FT.
	TOTAL		4556. FT.
	WT. OF STRING		140,000 LBS.

BIT RECORD

BIT NO.	8
SIZE	8½"
MFG.	Reed
TYPE	STIAG
JETS 32nds	10 10 11
SER. NO.	B56134
DEPTH OUT	
DEPTH IN	4489
TOTAL FTG.	211
TOTAL HRS. RUN	11¾
COND. I.A.D. & GAGE	
GPM PD. PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

FOOTAGE 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 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM	METHOD USED SCL. PARAFFIN COMB. C
4489	4554.				57	40	1100	5½	46			

DESILTER 8 HR

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	¼		Rig Service B.O.P.'s
8:15	12:15	4		Clean To Bottom
12:15	4:00	3¾		Drill 8½" Hole

DRILLER R. Ashe

DRILLING ASSEMBLY

NO.			FT.
	BIT		
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
17	D.C. ID 6¾	OD	524.44 FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	YOS40		1.32
45	STANDS DP		4077.47 FT.
2	SINGLES DP		61.15 FT.
	KELLY DOWN		35.62 FT.
	TOTAL		4700.00 FT.
	WT. OF STRING		143,000 LBS.

BIT RECORD

BIT NO.	8
SIZE	8½
MFG.	Reed
TYPE	STIAG
JETS 32nds	10 10 11
SER. NO.	B56134
DEPTH OUT	
DEPTH IN	4489
TOTAL FTG.	211
TOTAL HRS. RUN	11¾
COND. I.A.D. & GAGE	
GPM PD. PSI	

MUD RECORD

TIME	6:00	8:00	10:00
WEIGHT	9.1	9.6	9.6
PRESSURE GRADIENT			
VISC. SEC.	60	70	65
PV YP			
GELS			
WL. CC'S			
pH	9	9	9
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	300#	Soda Ash	200#
Bonex	16#	Water	1"
Prehydrate 6 sx			
Quebracho 3 sx			

EVENING TOUR

FOOTAGE FROM	TO	DR. D RM. R CORE. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM	METHOD USED SCL. PARAFFIN COMB. C
4556	4700	D			60	40	1100	5½	46			

DESILTER 8 HR

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	12:00	8		DRLG.

WATER 10 bbls

DRILLER E. Cook

FORM 3TS — APPROVED — APPROVED

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

DAILY DRILLING REPORT — REPORT NO

LEASE: Amoco Murphy Cormack A-1 | WELL NO: N-33 | API WELL NUMBER: 61° 00' 122° 30' | DATE: Feb 16/70

OPERATOR: Amoco Can. Pete | CONTRACTOR: Kern Drlg Ltd. | RIG NO: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: R K [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Fred Hodgins

LOCATION: Cormack A-1 NWST

	D.P. SIZE	GRADE	TOOL JT O.D.	TOOL JT. THREAD	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
	5	E	6 3/8	4 1/2 IF	1	Emsco	DBM DA750	18 16

CASING / TUBING OR LINER	SIZE	WEIGHT & GR.	NO. JOINTS	FEET	MKR. TO CSG. HD.	SET AT
LAST	9 5/8	40 J55				720

WIRE LINE RECORD — REEL NO.: SIZE 1/4 — NO. LINES 8 — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH — TON MI. OR TRIPS SINCE LAST CUT — CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	DAY	EVE
1	RIG UP AND TEAR DOWN		
2	DRILL ACTUAL	5 1/4	
3	REAMING		
4	CORING		
5	CONDITION MUD & CIRCULATE	2 1/4	8 7 3/4
6	TRIPS	1/4	1/4
7	LUBRICATE RIG		
8	REPAIR RIG		
9	CUT OFF DRILLING LINE		
10	DEVIATION SURVEY	1/4	
11	WIRE LINE LOGS		
12	RUN CASING & CEMENT		
13	WAIT ON CEMENT		
14	NIPPLE UP B.O.P.		
15	TEST B.O.P.		
16	DRILL STEM TEST		
17	PLUG BACK		
18	SQUEEZE CEMENT		
19	FISHING		
20	[illegible]		
21			
22			
23			
COMPLETION	A. PERF'N'G'TH		
	B. TRC TRIPS		
	C. TREATING		
	D. SWABBING		
	E. TESTING		
	F. ADDITIONAL		
	G.		
TOTALS		8	8

DAY WORK TIME SUMMARY (TO P.M.'S USE ONLY)

HRS. = CONTR. D.P.

HRS. = OPR. D.P.

HRS. W/O D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

DRILLING ASSEMBLY (All out of hole)

BIT				FT.
STR RMR	OD			FT.
D.C. ID	OD			FT.
STR RMR	OD			FT.
D.C. ID	OD			FT.
STR RMR	OD			FT.
1	10 Sub			FT.
44	STANDS DP		3827.88	FT.
1	SINGLES DP		30.55	FT.
	KELLY DOWN		35	FT.
	TOTAL		4489	FT.

WT. OF STRING: 140 LBS.

BIT RECORD

BIT NO.	7
SIZE	8 1/2
MFG.	Reed
TYPE	ST1A9
JETS 1 32nds	10 10 11
SER. NO.	856132
DEPTH OUT	4489
DEPTH IN	4130
TOTAL FTG.	359
TOTAL HRS RUN	16 3/4
COND. 1-8 T-B GAGE	
GPM PD PSI	

MUD RECORD

TIME	7 00	4 00
WEIGHT	9.2	9.1
PRESSURE GRADIENT		
VISC. SEC.	75	72
PV YP	/	/
GELS		
WL CC'S		
pH		
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	2000#		
Lime	10 #		

MORNING TOUR

FOOTAGE / FORMATION

FROM	TO	DRLD RMR CORE	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT ON BIT (000)	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
4350	4489	D		DESILTER 6 HRS		40	1200	5 1/2 X 18	46	5 1/2 X 16		

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1200	1215			R.S. Serv. J Bo Pc
1215	530			Drlg. 8 1/2 Hole
530	545			Survey
545	9 00			Hoist Tight 2600 - 2050 SLM

Driller: R K [illegible]

BIT RECORD

BIT NO.	8
SIZE	8 1/2
MFG.	Reed
TYPE	STIA6
JETS 1 32nds	10 10 11
SER. NO.	856134
DEPTH OUT	4489
DEPTH IN	
TOTAL FTG.	
TOTAL HRS RUN	
COND. 1-8 T-B GAGE	
GPM PD PSI	

DRILLING ASSEMBLY (All out of hole)

BIT				FT.
STR RMR	OD			FT.
D.C. ID	OD	17	63/4 524.44	FT.
STR RMR	OD			FT.
D.C. ID	OD			FT.
STR RMR	OD			FT.
1	OR Sub		1.32	FT.
43	STANDS DP		3827.88	FT.
1	SINGLES DP		30.55	FT.
	KELLY DOWN		44.89	FT.
	TOTAL			FT.

WT. OF STRING: LBS.

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

FOOTAGE / FORMATION

FROM	TO	DRLD RMR CORE	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT ON BIT (000)	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
4489				DESILTER 5 HRS								

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
448	1/2°							

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	10:30	2 1/2		Tuk out
10:30	400			Run in with Bit #8 [Tight 5 stands Single off Bottom.

Driller: R K [illegible]

BIT RECORD

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

DRILLING ASSEMBLY (All out of hole)

BIT				FT.
STR RMR	OD			FT.
D.C. ID	OD			FT.
STR RMR	OD			FT.
D.C. ID	OD			FT.
STR RMR	OD			FT.
	STANDS DP			FT.
	SINGLES DP			FT.
	KELLY DOWN			FT.
	TOTAL			FT.

WT. OF STRING: LBS.

MUD RECORD

TIME	6 00	
WEIGHT	9.2	
PRESSURE GRADIENT		
VISC. SEC.	2	2
PV YP		
GELS		
WL CC'S	2.2	2.2
pH	A	A
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DRLD RMR CORE	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT ON BIT (000)	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
4489				DESILTER 8 HRS								

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
400	1230	8		CLEANING TO BOTTOM

WATER 10 Lbs.

Driller: M Cook

FORM 3T5 — APPROVED — APPROVED

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

DAILY DRILLING REPORT — REPORT NO

LEASE: Amoco Murphy Cormack A-1 — WELL NO: N-22 — API WELL NUMBER: 61° 00' 122° 30' — DATE: Feb 5/70

OPERATOR: Amoco Canada Pet — CONTRACTOR: Keen Drlg Ltd — RIG NO: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE — SIGNATURE OF CONTRACTOR'S TOOL PUSHER

LOCATION: Cormack A-1 NWT

D.P. SIZE	WT. PT.	GRADE	TOOL JT. I.D.	TYPE THREAD	CONDITION	NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
5	19.50	E	6¾	NC50	1	1	Emsco	DB50	14
						2		DB700	16

LAST CASING, TUBING OR LINER: SIZE 9⅝ — MAKE — WT. & GR. H40 — NO. JOINTS 35 — FEET — PER. TO CSG. PKR. — SET AT 720

WIRE LINE RECORD — REEL NO. — SIZE 1¼ — NO. LINES — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH — TOTAL NO. OF TRIPS SINCE LAST CUT — CUMULATIVE TOTAL NO. OF TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	NORM.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL		1	19½
3	REAMING			3½
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG		¼	¼
8	REPAIR RIG			
9	SLIP DRILLING LINE			
10	DEVIATION SURVEY		½	
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21	Clean out		7	3¾
22				
23				

COMPLETION: A. PERFORATING; B. TAG TRIPS; C. TREATING; D. SWABBING; E. TESTING; F. ADDITIONS; G.

TOTALS: 8 | 8

DAY WORK TIME REMARKS (OFFICE USE ONLY)

HRS. W. CONTR. D.P. — HRS. W. OPEN D.P. — HRS. WT. D.P. — HRS. ST. AHEAD

TOTAL DAY WORK — NO. OF DAYS FROM SPUD — CUM. & FIVE ROTATING HRS.

TOTAL MUD COST

DRILLING ASSEMBLY

NO.		FT.
	BIT	
	STB RMR OD	FT.
17	D.C. 10 6¾ OD	524.44 FT.
	STB RMR OD	FT.
	D.C. ID OD	FT.
	STB RMR OD	FT.
1	XO 5 46	1.32 FT.
37	STANDS DP	2536.65 FT.
1	SINGLES DP	29.00 FT.
	KELLY DOWN	41 FT.
	TOTAL	4130 FT.

WT. OF STRING — LBS.

BIT RECORD

BIT NO.	7
SIZE	8 ½
MFG.	Reed
TYPE	STiAG
JETS 32nds	10 10 11
SER. NO.	856132
DEPTH OUT	
DEPTH IN	4130
TOTAL FTG.	
TOTAL HRS RUN	
COND. 1 B. GAGE	
GPM PD PSI	

MUD RECORD

TIME	1230	1 30	6 00
WEIGHT	1.5	7.4	9.4
PRESSURE GRADIENT			
VISC. SEC.	49	50	62
PV YP			
GELS			
ML CC'S			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Lignox	12#		
Gel	3 sx		

WORKING TOUR

FOOTAGE / FORMATION

FROM	TO	DR'D RM'R CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT (000)	PUMP PRESS	PUMP NO. LINER SIZE	SPM	PUMP NO. LINER SIZE	SPM	METHOD USED
				DRILLER'S HRS								

DEVIATION RECORD — DEPTH / DEV. / DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	1 00	1		CLEAN TO BOTTOM
1 00	1 15	¼		SERV. R.B.'S
1 15	8 00	6¾		CLEAN TO BOTTOM

Rock Hrs.

DRILLING ASSEMBLY

NO.		FT.
	BIT	
	STB RMR OD	FT.
17	D.C. 10 6¾ OD	524.44 FT.
	STB RMR OD	FT.
	D.C. ID OD	FT.
	STB RMR OD	FT.
1	OR 5 46	1.32 FT.
40	STANDS DP	3707.07 FT.
	SINGLES DP	FT.
	KELLY DOWN	34.00 FT.
	TOTAL	4207 FT.

WT. OF STRING 135,000 LBS.

BIT RECORD

BIT NO.	7
SIZE	8 ½
MFG.	Reed
TYPE	STiAG
JETS 32nds	10 10 11
SER. NO.	856132
DEPTH OUT	
DEPTH IN	4130
TOTAL FTG.	77
TOTAL HRS RUN	
COND. 1 B. GAGE	
GPM PD PSI	

MUD RECORD

TIME	4 00		
WEIGHT	9.5		
PRESSURE GRADIENT			
VISC. SEC.	80		
PV YP			
GELS			
ML CC'S			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	30 00		
Barex	6 Sx		
Soda Ash	200#		

DAY TOUR

FOOTAGE / FORMATION

FROM	TO	DR'D RM'R CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT (000)	PUMP PRESS	PUMP NO. LINER SIZE	SPM	PUMP NO. LINER SIZE	SPM	METHOD USED
4130	4207				60	35	1200	5½	46			

RESUME 8 HRS

DEVIATION RECORD — DEPTH / DEV. / DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	8 15	¼		RIG SERVICE - BOP's
8 15	12 00	3¾		CLEAN TO BOTTOM
12 00	4 00	4		DRILL 7⅞" HOLE
		8		

DRILLER

DRILLING ASSEMBLY

NO.		FT.
	BIT	
	STB RMR OD	FT.
17	D.C. 10 6¾ OD	524.44 FT.
	STB RMR OD	FT.
	D.C. ID OD	FT.
	STB RMR OD	FT.
1	XO 5 46	1.32 FT.
42	STANDS DP	3805.82 FT.
	SINGLES DP	FT.
	KELLY DOWN	18.42 FT.
	TOTAL	4350 FT.

WT. OF STRING 140,000 LBS.

BIT RECORD

BIT NO.	-
SIZE	8½
MFG.	REED
TYPE	STiAG
JETS 32nds	10 10 11
SER. NO.	856132
DEPTH OUT	
DEPTH IN	4130
TOTAL FTG.	220
TOTAL HRS RUN	11½
COND. 1 B. GAGE	
GPM PD PSI	

MUD RECORD

TIME	5 00	7 30	10 00
WEIGHT	9.4	9.4	9.5
PRESSURE GRADIENT			
VISC. SEC.	85	75	68
PV YP			
GELS			
ML CC'S			7.6
pH			9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1000#	Soda Ash	700#
Barex	4 Sx		
Protectergic	30 Sx		
15 bbls diesel			

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR'D RM'R CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT (000)	PUMP PRESS	PUMP NO. LINER SIZE	SPM	PUMP NO. LINER SIZE	SPM	METHOD USED
4207	4350	D			60	40	1200	5½	46			

DEVIATION RECORD — DEPTH 4343 — DEV. 2½° — DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 00	11 00	7		DRLG.
11 00	11 30	½		SURVEY
11 30	12 00	½		DRLG.

WATER 18 hrs

DRILLER

FORM 3T5 — APPROVED — APPROVED

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

DAILY DRILLING REPORT — REPORT NO

LEASE	WELL NO.	API WELL NUMBER		DATE
Amoco Murphy Corridor A-1	N33	61° 00'	122° 30'	Feb 14, 1970

OPERATOR	CONTRACTOR	RIG NO.
Amoco Canada Petr	Keen Drlg. Ltd	2

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
[signature]	Fred Wesley

LOCATION

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	TOP & BTM. OF CSG. INS.	SET AT
LAST CASING, TUBING OR LINER							

WIRE LINE RECORD — RIG NO.

SIZE — NO. LINES — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH

TOOLS AT OR TRIPS SINCE LAST CUT

FINISH ATTENTIVE TOOLS AT OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN	DAY	EVE
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL			
	REAMING	8	8	8
3	CORING			
4	CONDITION MUD & CIRCULATE			
5	TRIPS			
6	LUBRICATE RIG			
7	REPAIR RIG			
8	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	OTHER WORK			
21				
22				
23				
COMPLETION	A. SERVICING			
	B. TRIP TANKS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDITIONAL			
	G.			
TOTALS		8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W. CONTR. D.P.
HRS. W. OPR. D.P.
HRS. NO D.P.
HRS. STANDBY

TOTAL DAY HOURS

NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD LOST

DRILLING ASSEMBLY

NO.				
	BIT			FT.
17	STB RMR	OD		FT.
	D.C. ID 6¾	OD 6¾	524.44	FT.
	STB RMR	OD		FT.
	D.C. ID	OD		FT.
	STB RMR	OD		FT.
1	K.O. SUB		1.32	FT.
39	STANDS DP		3536.65	FT.
1	SINGLES DP		29.05	FT.
	KELLY DOWN		41	FT.
	TOTAL		4130	FT.

WT. OF STRING — LBS.

BIT RECORD

BIT NO.	7
SIZE	8¾
MFG.	REED
TYPE	STING
JETS 32nds	10 10 11
SER. NO.	856132
DEPTH OUT	
DEPTH IN	4130
TOTAL FTG.	
TOTAL HRS. RUN	
COND. T.B.G. T. B. GAGE	
GPM PD PSI	

MUD RECORD

TIME			6.00
WEIGHT			9.3
PRESSURE GRADIENT			38
VISC. SEC.			
PV YP			
GELS			
WL CC'S			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

WORKING TOUR

FOOTAGE

FROM	TO	DR. D RM. R CORE. C	CORE NO.
4130			

FORMATION (SHOW CORE RECOVERY)

ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. SPM	PUMP NO. LINER SIZE	PUMP NO. SPM	METHOD MUD CONTROL

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	8:00	8		TRIPPING + CLEANING OUT TO BOTTOM HOLE CAVING.

DRILLER [signature]

DRILLING ASSEMBLY

NO.				
	BIT			FT.
17	STB RMR	OD		FT.
	D.C. ID 6¾	OD	524.44	FT.
	STB RMR	OD		FT.
	D.C. ID	OD		FT.
	STB RMR	OD		FT.
1	K.O. SUB		1.32	FT.
39	STANDS DP		3536.65	FT.
1	SINGLES DP		29.05	FT.
	KELLY DOWN		41	FT.
	TOTAL		4130	FT.

WT. OF STRING — LBS.

BIT RECORD

BIT NO.	7
SIZE	8 ¾
MFG.	REED
TYPE	STING.
JETS 32nds	10 10 11
SER. NO.	856132
DEPTH OUT	
DEPTH IN	4130
TOTAL FTG.	
TOTAL HRS. RUN	
COND. T.B.G. T. B. GAGE	
GPM PD PSI	

MUD RECORD

TIME	6:00		2:00
WEIGHT	9.4		9.4
PRESSURE GRADIENT			
VISC. SEC.	38		49
PV YP			
GELS			
WL CC'S			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	4500		
Lignex	60		
Caustic	20		
Water	100		

DAY TOUR

FOOTAGE

FROM	TO	DR. D RM. R CORE. C	CORE NO.
4130			

FORMATION (SHOW CORE RECOVERY)

ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. SPM	PUMP NO. LINER SIZE	PUMP NO. SPM	METHOD MUD CONTROL

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
11:30				DESILTER 6 HRS
8:00	4:00	8		CLEAN TO BOTTOM 3630 - 3860

DRILLER [signature]

DRILLING ASSEMBLY

NO.				
	BIT			FT.
17	STB RMR	OD		FT.
	D.C. ID 6¾	OD	524.44	FT.
	STB RMR	OD		FT.
	D.C. ID	OD		FT.
	STB RMR	OD		FT.
1	OESUB		1.32	FT.
39	STANDS DP		3536.65	FT.
1	SINGLES DP		29.05	FT.
1	KELLY DOWN		41.00	FT.
	TOTAL		4130	FT.

WT. OF STRING — LBS.

BIT RECORD

BIT NO.	7
SIZE	8¾
MFG.	REED
TYPE	STING
JETS 32nds	10 10 11
SER. NO.	856132
DEPTH OUT	
DEPTH IN	4130
TOTAL FTG.	
TOTAL HRS. RUN	
COND. T.B.G. T. B. GAGE	
GPM PD PSI	

MUD RECORD

TIME	5:00	9:00	11:00
WEIGHT	9.5		
PRESSURE GRADIENT			
VISC. SEC.	33	47	50
PV YP			
GELS			
WL CC'S			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	2500		
Bentex	50		
Soda Ash	100		

CLEANING TOUR

FOOTAGE

FROM	TO	DR. D RM. R CORE. C	CORE NO.
4130			

FORMATION (SHOW CORE RECOVERY)

ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. SPM	PUMP NO. LINER SIZE	PUMP NO. SPM	METHOD MUD CONTROL

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:15	¼		RIG SERVICE
4:15	12:00	7¾		CLEAN TO BOTTOM, MIXING MUD

WATER 10 hrs

DRILLER [signature]

FORM 3TD — APPROVED — APPROVED

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

DAILY DRILLING REPORT — REPORT NO.

LEASE: AMOCO MURPHY CORMACK A-1 | WELL NO: N 33 | API WELL NUMBER: 61° 00' — 122° 30' | DATE: FEB 13 1970

OPERATOR: AMOCO CANADA PETE | CONTRACTOR: KEEN DRG. LTD | RIG NO.: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature] | SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Fred Hodgkin

O.D. SIZE	WT.	GRADE	TOOL JT. I.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	LINER LENGTH
5"	19.5	E	6 3/4	WELE	1	1	EMSCO	D850	18
						2		DA 700	16

LOCATION

WIRE LINE RECORD — REEL NO. — SIZE 1/4 — NO. LINES 8 — FT. SLIPPED — FT. CUT OFF — PRESENT FOOTAGE

	SIZE	WT. & GR.	NO. JOINTS	FEET	BRK. TO CSG. NO.	DEPTH
LAST CASING TUBING OR LINER	9 5/8	40 J55				720

TON MI. OR TRIPS SINCE LAST CUT — CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION - HOURS

CODE NO.	OPERATION	MIDNIGHT	DAY	EVE
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	7	7 3/4	9.2
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			5 1/2
6	TRIPS	1/2	1/4	1 1/4
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY	1/2		1/4
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				

CODE LETTERS: A. PERFORATING; B. TRG. TRIPS; C. TREATING; D. SWABBING; E. TESTING; F. ADDITIVES; G.

TOTALS: 8 8 8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. = CUM. D.P.

HRS. W.O.D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

% SL MUD CONT.

DRILLING ASSEMBLY

NO.		FT.
	BIT	
	STB RMR OD	FT.
17	D.C. ID 6 3/4 OD	524.44 FT.
	STB RMR OD	FT.
	D.C. ID OD	FT.
	STB RMR OD	FT.
1	XO SUB	1.32
37	STANDS OF SINGLES DP	3356.65 FT.
	KELLY DOWN	35.58 FT.
	TOTAL	3915.00 FT.
	WT. OF STRING 124 M	LBS.

BIT RECORD

BIT NO.	6
SIZE	8 1/2
MFG.	REED
TYPE	STIAG
JETS 32nds	10 10 11
SER. NO.	364346
DEPTH OUT	
DEPTH IN	3345
TOTAL FTG.	570
TOTAL HRS. RUN	24 3/4
COND. T-B-G GAGE	
GPM PD PSI	

MUD RECORD

TIME	1.00	3:00	6.30
WEIGHT	9.4	9.2	9.0
PRES. INC GRADIENT			
VISC. SEC	30	35	30
PV YP			
GELS			
W. LOSS CC'S			12.0
pH	9	9	9
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	23 00		
Lignex			
Caustic			
Water			

MORNING TOUR

FOOTAGE / FORMATION

FROM	TO	DRLD RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT (000)	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 GPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 GPM	PERIOD RUN HRS. FT.
3750	3915	D			60	40	1200	6"	45			

DEVIATION RECORD: DEPTH 3799 — DEV. 2° — DIRECTION

TIME LOG / DETAILS OF OPERATIONS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	1 45	1 3/4		DRLG.
1 45	2 15	1/2		SURVEY @ 3799
2 15	5 00	2 3/4		DRLG.
5 00	5 30	1/2		SERVICE RIG - BOPs
5 30	8 00	2 1/2		DRLG.

DESILTER 8 HRS

DRILLER [signature]

FOOTAGE / FORMATION

FROM	TO	DRLD RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT (000)	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 GPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 GPM	PERIOD RUN HRS. FT.
3915	4095	D		DESILTER HRS.	60	0	1200	5 1/2 6	46	6 1/2 6	46	34

DEVIATION RECORD: DEPTH — DEV. — DIRECTION

TIME LOG / DETAILS OF OPERATIONS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	8 45	3/4		Drlg 8 1/2 Hole
8 45	9 00	1/4		Rig Serv BOP's
9 00	4 00	7		Drlg

DAY TOUR

FOOTAGE / FORMATION

FROM	TO	DRLD RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT (000)	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. GPM	PUMP NO. LINER SIZE	PUMP NO. GPM	PERIOD RUN HRS. FT.
4095	4130											

DESILTER - 2 HRS

DEVIATION RECORD: DEPTH 4102 — DEV. 3° — DIRECTION — DEPTH — DEV. — DIRECTION — DEPTH — DEV. — DIRECTION

TIME LOG / DETAILS OF OPERATIONS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 00	4 15	1/4		Rig Service
4 15	4 30	1/4		Survey @ 4102 3°
4 30	6 30	2		Drill 8 1/2" Hole
6 30	7 00	5 1/2		Pull out of hole (very tight

WATER 21 bbls

DRILLER [signature]

EVENING TOUR

DRILLING ASSEMBLY

NO.		FT.
	BIT	
	STB RMR OD	FT.
17	D.C. ID 6 3/4 OD	524.44 FT.
	STB RMR OD	FT.
	D.C. ID OD	FT.
	STB RMR OD	FT.
1	XO Sub	1.32
39	STANDS OF SINGLES DP	3536.65 FT.
	KELLY DOWN	34 FT.
	TOTAL	4095 FT.
	WT. OF STRING 128 M	LBS.

BIT RECORD

BIT NO.	6
SIZE	8 1/2
MFG.	Reed
TYPE	STIAG
JETS 32nds	10 10 11
SER. NO.	364346
DEPTH OUT	4130
DEPTH IN	3345
TOTAL FTG.	785
TOTAL HRS. RUN	34 1/2
COND. T-B-G GAGE	
GPM PD PSI	

MUD RECORD

TIME	8 20	10 00	3 00
WEIGHT	9.4	9.4	1.N
PRESSURE GRADIENT			
VISC. SEC	38	38	34
PV YP			
GELS			
W. LOSS CC'S			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
		WATER	

DRILLING ASSEMBLY

NO.		FT.
	BIT	
	STB RMR OD	FT.
17	D.C. ID 6 3/4 OD	524.44 FT.
	STB RMR OD	FT.
	D.C. ID OD	FT.
	STB RMR OD	FT.
1	XO Sub	1.32
37	STANDS OF SINGLES DP	3536.65 FT.
	KELLY DOWN	24.05 FT.
	TOTAL	4100 FT.
	WT. OF STRING 128 M	LBS.

BIT RECORD

BIT NO.	6
SIZE	8 1/2
MFG.	Reed
TYPE	STIAG
JETS 32nds	
SER. NO.	364346
DEPTH OUT	4130
DEPTH IN	3345
TOTAL FTG.	785
TOTAL HRS. RUN	34 1/2
COND. T-B-G GAGE	
GPM PD PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC. SEC	
PV YP	
GELS	
W. LOSS CC'S	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	16 00		
Water	100		

FORM 375 — APPROVED — APPROVED

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

DAILY DRILLING REPORT REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
AMOCO MURPHY CORNICK A-1	N33	61° 00' 122° 30'	FEB 12, 70
OPERATOR		CONTRACTOR	RIG NO
AMOCO CANADA PETE.		KEEN DRLG. LTD	2
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	
R. Martin		Fred Healy Pusher	

LOCATION

D.P. SIZE	WT. PT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
5"	19.5	E	6¾	4½ IF	1	2	EMSCO	DA 700	16

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RNG. TO CHG. NO.	SET AT
	9⅝		40 J55				720

WIRE LINE RECORD REEL NO.
SIZE 1¼ NO. LINES 8 FT. CLIPPED
FT. CUT OFF PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	4½	7	6¼
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS	2		
7	LUBRICATE RIG	½	½	½
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY		¼	¼
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21	REAM TO BTM	1	½	
22				
23				
COMPLETION	A. PERF'N'TH			
	B. TRG			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADD'TN'L			
	G.			
TOTALS		8		8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)
HRS. W-CONTR. D.P.
HRS. W-OPR. D.P.
HRS. NO DAY
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM MUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR	OD	FT.
17	D.C. ID 6¾	OD 524.44	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	X 0 SUB	2.32	
32	STANDS DP	2897.94	FT.
	SINGLES DP		FT.
	KELLY DOWN	25.30	FT.
	TOTAL	3450.00	FT.
	WT. OF STRING 120 M		LBS.

BIT RECORD

BIT NO.	6
SIZE	8½
MFG.	REED
TYPE	STIAG
JETS 1 32"	10 10 11
SER. NO.	364346
DEPTH OUT	
DEPTH IN	3345
TOTAL FTG.	105
TOTAL HRS. RUN	4½
COND. 1-1 T-B GAGE	
GPM PD-PM	

MUD RECORD

TIME	300	630	7.00
WEIGHT	9.2	9.2	9.2
PRESSURE GRADIENT			
VISC.-SEC.	35		33
PV YP	/	/	/
GELS	/	/	/
ML-CC'S	13.2	13.2	13.2
pH	9	9	9
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
	Water		

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR	OD	FT.
18	D.C. ID 6¾	OD 555.65	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	X 0 SUB	2.32	
34	STANDS DP	3052.10	FT.
0	SINGLES DP		FT.
	KELLY DOWN	11	FT.
	TOTAL	3628	FT.
	WT. OF STRING		LBS.

BIT RECORD

BIT NO.	6
SIZE	8½
MFG.	REED
TYPE	STIAG
JETS 1 32"	10 10 11
SER. NO.	364346
DEPTH OUT	
DEPTH IN	3345
TOTAL FTG.	273
TOTAL HRS. RUN	11¼
COND. 1-1 T-B GAGE	
GPM PD-PM	

MUD RECORD

TIME	9.00	12.00	3.00
WEIGHT	9.	9	8.9
PRESSURE GRADIENT			
VISC.-SEC.	35	35	33
PV YP	/	/	/
GELS	/	/	/
ML-CC'S			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR	OD	FT.
11	D.C. ID 6¾	OD 521.44	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	X 0 SUB	1.32	
35	STANDS DP	3442.85	FT.
1	SINGLES DP	30.42	FT.
	KELLY DOWN	21.40	FT.
	TOTAL	3795.40	FT.
	WT. OF STRING 120,000		LBS.

BIT RECORD

BIT NO.	6
SIZE	8½
MFG.	Reed
TYPE	STIAG
JETS 1 32"	10 10 11
SER. NO.	364346
DEPTH OUT	
DEPTH IN	3345
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1-1 T-B GAGE	
GPM PD-PM	

MUD RECORD

TIME	4.00	8.00	11.00
WEIGHT	9.4	9.3	9.2
PRESSURE GRADIENT			
VISC.-SEC.	34	33	30
PV YP	/	/	/
GELL	/	/	/
ML-CC'S			
pH			
SOLIDS %			

WATER 17 BBLS

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR. D RM. R CORE C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. SPM	PUMP NO. LINER SIZE	PUMP NO. SPM	METHOD RUN
3345	3450	D			60	40	1200	6"	45			

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12⁰⁰	12³⁰	½		SERVICE RIG & B.O.P.'s + MOTOR SHUT OFFS
12³⁰	2³⁰	2		RUN IN - LAY DOWN 1 D.C.
2³⁰	3³⁰	1		CLEAN 125 TO BOTTOM
3³⁰	8⁰⁰	4½		DRLG.
				DESILTER 4½ HRS.

DRILLER R. Martin

FOOTAGE / FORMATION

FROM	TO	DR. D RM. R CORE C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. SPM	PUMP NO. LINER SIZE	PUMP NO. SPM	METHOD RUN
3450	3618			DESILTER 8 HRS	62	40	1200	6¼	46			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
3525	2°							

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8⁰⁰	8³⁰	½		DRILL
8³⁰	8⁴⁵	¼		R.G. SERV. B.O.P.'s
8⁴⁵	11¹⁵	2½		DRLG. 8½ HOLE
11¹⁵	11³⁰	¼		SURVEY @ 3525
11³⁰	12⁰⁰	½		TIGHT HOLE BREAK CIRC
12⁰⁰	4⁰⁰	4		DRILL

DRILLER R. Martin

FOOTAGE / FORMATION

FROM	TO	DR. D RM. R CORE C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. SPM	PUMP NO. LINER SIZE	PUMP NO. SPM	METHOD RUN
3618	3750	D			61	40	1200	6"	45			

DESILTER 6¼ HRS.

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
3740	4°							

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	5:00	1		DRILL 8½" HOLE
5:00	5:30	½		RIG SERVICE, B.O.P.'s
5:30	10:00	4½		DRILL 8½" HOLE
10:00	11:15	1¼		SURVEY @ 3740 - 4° 1ST ONE MISTRUN
11:15	12:00	¾		DRILL 8½" HOLE

DRILLER R. Martin

FORM. 375 APPROVED APPROVED

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

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
PACIFIC MURPHY CORMACK A-1	N-33	61° 00' 122° 30'	FEB 11, 1970

OPERATOR: PACIFIC MURPHY CORMACK A-1 — CONTRACTOR: KEEN DRLG. LTD. — RIG NO.: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: DMOCO CANADA PETE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Fred Hodgkin

LOCATION

D.P. SIZE	WT. PT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5"	19.5	E	6 3/8	WX-F	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
2	EMSCO	DA 700	16

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	BRN. TO CIC. NO.	SET AT
LAST CASING TUBING OR LINER	9 5/8		40	55			720

WIRE LINE RECORD — REEL NO.

SIZE 1/4 — NO. LINES 8 — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

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

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. @ CONTR. D.P.

HRS. @ OPR. D.P.

HRS. NO D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour)

BIT			FT.
STB		OD	FT.
18	D.C.	OD 6 3/4	555.65 FT.
STB		OD	FT.
D.C.	ID	OD	FT.
STB		OD	FT.
1	KO 548		1.32
27	STANDS DP		2446.32 FT.
2	SINGLES DP		60.89 FT.
	KELLY DOWN		35.82 FT.
	TOTAL		3100.00 FT.

WT. OF STRING 116,000 LBS

BIT RECORD

BIT NO.	5
SIZE	8 1/2
MFG.	REED
TYPE	STING
JETS 1 32nds	10 10 11
SER. NO.	852613
DEPTH OUT	
DEPTH IN	2384
TOTAL FTG.	716
TOTAL HRS. RUN	28 3/4
COND. 1-8 T B GAGE	
GPM PD-PM	

MUD RECORD

TIME	2:00	4:00	
WEIGHT	9.0	9.0	
PRESSURE GRADIENT			
VISC.-SEC.	30	30	35
PV YP	/	/	/
GELS			
WL-CC'S	15.5		
pH	9.5		
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1600#		
Benex	6#		
Water	1 str.		

MORNING TOUR

FOOTAGE

FROM	TO	DR'D BR'R CORE'D	CORE NO.
2921	3100	D	

FORMATION (SHOW CORE RECOVERY)

DESILTER 6 1/2 HRS.

ROTARY RPM: 60 — WT. ON BIT 1000#: 40 — PUMP PRESS: 950 — PUMP NO. LINER SIZE: 6" — PUMP NO. L.P.M.: 445 — METHOD RUN

DRILLER: M Coates

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	1:30	1 1/2		CLEAN BACK TO BOTTOM
1:30	8:00	6 1/2		DRLG.

DRILLING ASSEMBLY (At end of tour)

BIT			FT.
STB		OD	FT.
18	D.C.	OD 6 3/4	555.65 FT.
STB		OD	FT.
D.C.	ID	OD	FT.
STB		OD	FT.
1	KO 548		1.32
29	STANDS DP		2628.50 FT.
2	SINGLES DP		60.20 FT.
	KELLY DOWN		26 FT.
	TOTAL		3270 FT.

WT. OF STRING LBS

BIT RECORD

BIT NO.	5
SIZE	8 1/2
MFG.	REED
TYPE	STIA9
JETS 1 32nds	10 10 11
SER. NO.	852613
DEPTH OUT	
DEPTH IN	2384
TOTAL FTG.	886
TOTAL HRS. RUN	36 1/4
COND. 1-8 T B GAGE	
GPM PD. PSI	

MUD RECORD

TIME	9:00	12:00	2:30
WEIGHT	9.00	9.	9.9
PRESSURE GRADIENT			
VISC.-SEC.	35	38	37
PV YP	/	/	/
GELS			
WL-CC'S			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	1000#		
BENEX	6#	WATER	
SOLTEX	40#		

DAY TOUR

FOOTAGE

FROM	TO	DR'D BR'R CORE'D	CORE NO.
3100	3270	D	

FORMATION (SHOW CORE RECOVERY)

DESILTER 8 HRS

ROTARY RPM: 61 — WT. ON BIT 1000#: 40 — PUMP PRESS: 1100 — PUMP NO. LINER SIZE: 6X16 — PUMP NO. L.P.M.: 46 — METHOD RUN

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
3105	1 3/4							

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
Boy	8:15	1/4		Drill 8 1/2 Hole
8:15	8:20	1/4		Rig Serv. BOPs
8:20	8:45	1/4		Survey @ 3105
8:45	4:00	7 1/4		Drlg

DRILLING ASSEMBLY (At end of tour)

BIT			FT.
STB		OD	FT.
18	D.C.	OD	555.65 FT.
STB		OD	FT.
D.C.	ID	OD	FT.
STB		OD	FT.
1	OX 548		1.32
30	STANDS DP		2719.20 FT.
2	SINGLES DP		39.83 FT.
	KELLY DOWN		41.00 FT.
	TOTAL		3345.64 FT.

WT. OF STRING 118,000 LBS

BIT RECORD

BIT NO.	5
SIZE	8 1/2
MFG.	Reed
TYPE	STING
JETS 1 32nds	10 10 11
SER. NO.	852613
DEPTH OUT	3345
DEPTH IN	2384
TOTAL FTG.	961
TOTAL HRS. RUN	40
COND. 1-8 T B GAGE	
GPM PD-PM	

MUD RECORD

TIME	4:00
WEIGHT	9.3
PRESSURE GRADIENT	
VISC.-SEC.	35
PV YP	/
GELS	
WL-CC'S	
pH	
SOLIDS %	
WATER 11 bbls	

MUD & CHEMICALS ADDED

EVENING TOUR

FOOTAGE

FROM	TO	DR'D BR'R CORE'D	CORE NO.
3270		V	

FORMATION (SHOW CORE RECOVERY)

DESILTER-4 HRS

ROTARY RPM: 60 — WT. ON BIT 1000#: 4 — PUMP PRESS: 1100 — PUMP NO. LINER SIZE: 6" — PUMP NO. L.P.M.: 45 — METHOD RUN

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
3315	2°							

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	6:15	2 1/4		DRILL 8 1/2" HOLE
6:15	6:30	1/4		RIG SERVICE
6:30	6:45	1/4		SURVEY @ 3315 - 2°
6:45	8:30	1 3/4		DRILL 8 1/2" HOLE
8:30	12	3 1/2		TRIP FOR B.T., PULL OUT

DRILLER: R Parker

FORM 3T5 — APPROVED — APPROVED

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

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
AMOCO MURPHY CORMACK A-1	N33	61° 00' 122° 30'	FEB 10/82

OPERATOR: AMOCO CANADA PETE — CONTRACTOR: KEEN DRLG. LTD — RIG NO.: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature] — SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Fred Coughlin

LOCATION

D.P. SIZE	WT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
5"	19.5	E	6 3/8	4 1/2 IF	1	2	EMSCO	DA 700	16

LAST CASING TUBING OR LINER: SIZE 9 5/8 — MAKE — WT. & GR. 40 — NO. JOINTS — FEET — RKB TO CSG. HD. — SET AT 720

WIRE LINE RECORD — REEL NO. — SIZE 1/4 — NO. LINES 8 — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH — TON MI. ON TRIPS SINCE LAST CUT — CUMULATIVE TON MI. ON TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MIDNIGHT	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	7 3/4	7 1/4	2 1/4
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			7 3/4
7	LUBRICATE RIG		1/4	1/2
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY	1/4	1/4	1/4
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	PISSING			
20	DWN. WORK			
21	Working Tight Hole			1/4
22				
23				

COMPLETION: A. PERF'D'TH; B. TBG TRIPS; C. TREATING; D. SWABBING; E. TESTING; F. ABORT'MT; G.

TOTALS: 8 9 8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
	STB RMR OD	FT.
18	D.C. ID 6 3/4 OD 555.65	FT.
	STB RMR OD	FT.
	D.C. ID OD	FT.
	STB RMR OD	FT.
1	X O 5 1/8	1.32
23	STANDS DP	2081.38 FT.
1	SINGLES DP	30.39 FT.
	KELLY DOWN	21.26 FT.
	TOTAL	2690.00 FT.
	WT. OF STRING	110000 LBS.

BIT RECORD

BIT NO.	5
SIZE	8 1/2
MFG.	REED
TYPE	STIAC
JETS 1 32nds	10 10 11
SER. NO.	852613
DEPTH OUT	
DEPTH IN	2384
TOTAL FTG.	306
TOTAL HRS. RUN	12 3/4
COND. 1 B. 1 R. GAGE	
GPM PD. PSI	

MUD RECORD

TIME	12:30	3:00	6:30
WEIGHT	9.0	9.0	8.8
PRESSURE GRADIENT			
VISC. SEC.	35	37	35
PV YP	/	/	/
GELS	/	/	/
ML CC'S		15	12.0
pH		9	9
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
G-1	1500 lbs		
Benex	4 sx		
Sulfa	4 sx	Ash Mould	11
Water			

MORNING TOUR

FOOTAGE / FORMATION

FROM	TO	DR'L'D RUN-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. SPM	PUMP NO. LINER SIZE	PUMP NO. SPM	METHOD RUN TOOTH BIT / JET SUB
2528	2690	D			70	40	950	6"	43			

DEVIATION RECORD: DEPTH 2618 — DEV. 1 1/2 — DIRECTION

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS
12:00	3:45	3 3/4		DRLG.
3:45	4:00	1/4		SURVEY @ 2618'
4:00	8:00	4		DRLG.

DESILTER 8 HRS.

DRILLER

BIT RECORD

BIT NO.	5
SIZE	8 1/2
MFG.	REED
TYPE	STIAC
JETS 1 32nds	10 10 11
SER. NO.	852613
DEPTH OUT	
DEPTH IN	2384
TOTAL FTG.	446
TOTAL HRS. RUN	20
COND. 1 B. 1 R. GAGE	
GPM PD. PSI	

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
	STB RMR OD	FT.
18	D.C. ID 6 3/4 OD 555.65	FT.
	STB RMR OD	FT.
	D.C. ID OD	FT.
	STB RMR OD	FT.
1	X O 5 1/8	1.32
23	STANDS DP	2264.52 FT.
1	SINGLES DP	30.43 FT.
	KELLY DOWN	30 FT.
	TOTAL	2880 FT.
	WT. OF STRING	112 M LBS.

MUD RECORD

TIME	9:00	1:00	5:00
WEIGHT	8.9	9.	8.9
PRESSURE GRADIENT			
VISC. SEC.	37	32	32
PV YP	/	/	/
GELS	/	/	/
ML CC'S			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

FOOTAGE / FORMATION

FROM	TO	DR'L'D RUN-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM	PUMP NO. LINER SIZE	PUMP NO. SPM	METHOD RUN TOOTH BIT / JET SUB
2690	2880	D		DESILTER 8 HRS	60	40	1050	6 1/2	46			

DEVIATION RECORD: DEPTH 2705 — DEV. 2° — DIRECTION — DEPTH 2900 — DEV. 1 3/4 — DIRECTION

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS
8:00	10:00	2		Drill 8 1/2 Hole
10:00	10:15	1/4		K.S. Serv. / B.O.P.'s
10:15	10:30	1/4		Survey @ 2705 1 1/2°
10:30	1:00	2 1/2		Drlg
1:00	1:15	1/4		Survey @ 2800 1 5/8°
1:15	4:00	2 3/4		Drill.

DESILTER 8 HRS

DRILLER

FOOTAGE / FORMATION

FROM	TO	DR'L'D RUN-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. SPM	PUMP NO. LINER SIZE	PUMP NO. SPM	METHOD RUN TOOTH BIT / JET SUB
2880	2921	D			60	40	150	6"	44			

DEVIATION RECORD: DEPTH 2890 — DEV. 1 5/8° — DIRECTION — DEPTH — DEV. — DIRECTION

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS
4:00	4:45	3/4		Drill 8 1/2" Hole
4:45	5:15	1/2		Rig Service - B.O.P.
5:15	5:30	1/2		Survey @ 2890 - 1 5/8°
5:30	7:00	1 1/2		Drill 8 1/2" Hole
7:00	8:15	1 1/4		Working Pipe Tight Making Conn.
8:15	12:00	3 3/4		Pull out to Regain Circ. 10 Stands

DRILLER

EVENING TOUR

FORM 3T5 — APPROVED — APPROVED

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

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
AMOCO MURPHY CORMACK A-1	N33	61° 00' 122° 30'	FEB 9, 1970

OPERATOR: AMOCO CANADA PETE — CONTRACTOR: KEEN DRLG. LTD. — RIG NO. 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: D.J. — SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Fred Hodgson

LOCATION

D.P. SIZE	WT. PT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5"	19.5	E	6 3/8	4½ IF	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	D 850	18
2		DA 700	16

LAST CASING TUBING OR LINER

SIZE	WEIGHT	WT. & GR.	NO. JOINTS	DEPT	DEPTH TO CSG. MK.	SET AT
9 5/8						720

WIRE LINE RECORD — REEL NO.

SIZE 1/4 — NO. LINES 8 — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN		3	
2	DRILL ACTUAL	6		5
3	REAMING	4¾		
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS		2	
7	LUBRICATE RIG	1/4	1/4	1/4
8	REPAIR RIG	3/4		
9	SLIP OR CUT DRILLING LINE	1/4		
10	DEVIATION SURVEY	3/4		1½
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			1/4
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				

COMPLETION: A. PERF'N'TN; B. TBG TRIPS; C. TREATING; D. SWABBING; E. TESTING; F. ADDIT'L; G.

TOTALS: 6 8 8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

MRS. W CONTR. D.P.
MRS. W OPN. D.P.
MRS. NO D.P.
MRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.

TOTAL MUD COST

DRILLING ASSEMBLY (At end of hour)

NO.				
	BIT			FT.
	STB			
	REAM	OD		FT.
18	D.C. ID 6 3/4	OD 9	555.65	FT.
	STB			
	REAM	OD		FT.
	D.C. ID	OD		FT.
	STB			
	REAM	OD		FT.
1	XO SUB		1.32	
	STANDS DP		1696.23	FT.
	SINGLES DP			FT.
	KELLY DOWN		21.80	FT.
	TOTAL		2275	FT.
WT. OF STRING			104,000	LBS.

BIT RECORD

BIT NO.	4
SIZE	8½
MFG.	REED
TYPE	SCM
JETS 1 32nds	10 10 10
SER. NO.	576190
DEPTH OUT	
DEPTH IN	2052
TOTAL FTG.	223
TOTAL HRS. RUN	14¾
COND. 1 B. GAGE	
GPM PD-PSI	

MUD RECORD

TIME	2:00	4:00	6:00
WEIGHT	8.6	8.7	8.7
PRESSURE GRADIENT			
VISC.-SEC.	30	30	27
PV YP	/	/	/
GELS	/	/	/
WL-CC'S			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Soda Ash	4.00 #		

MORNING TOUR

FOOTAGE / FORMATION

FROM	TO	DR'L'D RUN B 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
2203	2275	D			60	15	900	5½	45			

DEVIATION RECORD: DEPTH 2234 — DEV. 2¼ — DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:30	½		SERVICE RIG. ← BOP & MOTOR SHUT OFFS
12:30	1:15	¾		WORK ON PUMP
1:15	4:45	3		DRLG.
4:45	5:00	¼		2 SURVEYS. 1 MISS RUN
5:00	8:00	3		DRLG.
				RAN DESILTER.

DRILLER: M. Cook

DRILLING ASSEMBLY (At end of hour)

NO.				
	BIT			FT.
	STB			
	REAM	OD		FT.
18	D.C. ID 6¾	OD 9	555.65	FT.
	STB			
	REAM	OD		FT.
	D.C. ID	OD		FT.
	STB			
	REAM	OD		FT.
1	XO SUB		1.32	
20	STANDS DP			FT.
	SINGLES DP			FT.
	KELLY DOWN		41	FT.
	TOTAL		2384	FT.
WT. OF STRING			106	LBS.

BIT RECORD

BIT NO.	4	5
SIZE	8½	8½
MFG.	REED	REED
TYPE	SCM	STIAG
JETS 1 32nds	10 10 10	10 10 10
SER. NO.	576190	852613
DEPTH OUT	2384	
DEPTH IN	2052	
TOTAL FTG.	332	
TOTAL HRS. RUN	19¾	
COND. 1 B. GAGE	1 1 E	
GPM PD-PSI		

MUD RECORD

TIME	10:00	10:00	
WEIGHT	9.5	9.5	
PRESSURE GRADIENT			
VISC.-SEC.	30	32	
PV YP	/	/	
GELS	/	/	
WL-CC'S			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL			
BENEX			

DAY TOUR

FOOTAGE / FORMATION

FROM	TO	DR'L'D RUN B 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
2275	2384			DESANDER 4 HRS	60	30	900	5½	45			

DEVIATION RECORD: DEPTH 2320 — DEV. 2. — DIRECTION — DEPTH 2384 — DEV. 2 — DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
9:00	10:00	2		DRILL 8½ HOLE
10:00	10:15	¼		R.S. SERV JETS
10:15	10:30	¼		SURVEY @ 2320
10:30	1:30	3		DRLG.
1:30	1:45	¼		SURVEY
1:45	4:00	2¼		TRIP
				RAN DESILTER
				SLM 3407.78. DIFF 22.95.
				BOARD 2384.73

DRILLER: D. Wall

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR'L'D RUN B 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
2407	2528	D			70	36	950	6"	43			
					67	24	600	6"	46			

DEVIATION RECORD: DEPTH 2498 — DEV. 2° — DIRECTION — DEPTH — DEV. — DIRECTION — DEPTH — DEV. — DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	6:00	2		RUN WITH NEW 8½" STIAG BIT.
6:00	6:30	½		BREAK CIRCULATION
6:30	10:30	4		DRILL 8½" HOLE
10:30	11:00	½		SURVEY @ 2498 2° (1ST. ONE M.S.RUN)
11:00	12:00	1		DRILLER 8½" HOLE
				RAN DESILTER

DRILLER: R. Cook

FORM 3T5 — APPROVED — APPROVED

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

DAILY DRILLING REPORT — REPORT NO.

LEASE: PANCO MURPHY CANADA MACK A33 — WELL NO.: MV33 — API WELL NUMBER: MV-33 — DATE: FEB 8, 1990

OPERATOR: AMOCO CANADA PETE — CONTRACTOR: KEEN DRLG LTD — RIG NO.: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: D.A. — SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Fred Rodtka

LOCATION

	SIZE	WT.	GRADE	TOOL JT. O.D.	TYPE THREAD	STRING NO.
D.P.	5"	19.5	E	6 3/8	NC 50 I.F.	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1/2	EMSCO	D850	18
		DA700	16

	SIZE	WT. & GR.	NO. JOINTS	FEET	REEL TO CSG. NO.	SET AT
LAST CASING TUBING OR LINER	9 5/8					720

WIRE LINE RECORD — REEL NO.

SIZE 1/4 — NO. LINES 8 — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

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

COMPLETION

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W. CONTR. D.P.
HRS. W/OPR. D.P.
HRS. W/O D.P.
HRS. STANDBY
TOTAL DAY WORK 8 8 8
NO. DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (at end of tour)

BIT — FT.

STB RMR OD — FT.

18 — D.C. ID 6 3/4 OD 555.65 FT.

STB RMR OD — FT.

D.C. ID OD — FT.

STB RMR OD — FT.

1 — XO SUB — 1.32

STANDS DP — FT.

SINGLES DP — FT.

KELLY DOWN 23.30 FT.

TOTAL 2035.00 FT.

WT. OF STRING 94,000 LBS.

BIT RECORD

BIT NO.	3
SIZE	8 1/2
MFG.	REED
TYPE	STIAG
JETS 1 32nds	12 12 12
SER. NO.	852612
DEPTH OUT	
DEPTH IN	720
TOTAL FTG.	1315
TOTAL HRS. RUN	38 1/2
COND. I. B. T. B. GAGE	
GPM PD-PSI	

MUD RECORD

TIME	1:00	4:00	7:00
WEIGHT	8.8	8.8	8.9
PRESSURE GRADIENT			
VISC.-SEC.	40	32	35
PV YP	/	/	/
GELS			
WL-CC'S			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1000#		
Bonex	4 sx		

FOOTAGE / FORMATION

FROM	TO	DR'D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN
1835	2035	D			75	40	600	5 1/2	45			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
1900	1°		1990	1 1/2				

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	2:45	2 3/4		DRLG.
2:45	3:00	1/4		SURVEY @ 1700' + SERVICE RIG.
3:00	6:15	3 1/4		DRLG.
6:15	6:30	1/4		SURVEY @ 1990'
6:30	8:00	1 1/2		DRLG.

RAN DESILTER.

DRILLER: M Carter

MORNING TOUR

DRILLING ASSEMBLY (at end of tour)

BIT — FT.

STB RMR OD — FT.

A — D.C. ID 6 3/4 OD 555.65 FT.

STB RMR OD — FT.

D.C. ID OD — FT.

STB RMR OD — FT.

1 — XO SUB — 1.32

16 STANDS DP — 1456.01 FT.

2 SINGLES DP — 60.67 FT.

KELLY DOWN — 18 FT.

TOTAL — 2090 FT.

WT. OF STRING 96 M LBS.

BIT RECORD

BIT NO.	3	4
SIZE	8 1/2	8 1/2
MFG.	REED	REED
TYPE	STIAG	SCM
JETS 1 32nds	12 12 12	10 10 10
SER. NO.	852612	576190
DEPTH OUT	2052	
DEPTH IN	720	2052
TOTAL FTG.	1332	38
TOTAL HRS. RUN	89	1 1/2
COND. I. B. T. B. GAGE		
GPM PD-PSI		

MUD RECORD

TIME		3:00	
WEIGHT		8.8	
PRESSURE GRADIENT			
VISC.-SEC.		32	
PV YP		/	
GELS			
WL-CC'S			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Water			

FOOTAGE / FORMATION

FROM	TO	DR'D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN
2035	2052	D			75	40	800	5 1/2	46			
2052	2090	D			45	25	900	5 1/2	46			

DEVIATION RECORD

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

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:30	1/2		DRILL 8 1/2 HOLE
8:30	8:45	1/4		R.S. SERV. BOPs HYDRIL PIPE RAMS OK.
8:45	11:45	3		TRIP FOR BIT CHECK BLIND RAMS OK
11:45	2:30	2 3/4		CLEAN 100' BOTTOM
2:30	4:00	1 1/2		DRILL 8 1/2 HOLE

RAN DESILTER

DRILLER: Rudd Cooper

EVENING TOUR

DRILLING ASSEMBLY (at end of tour)

BIT — FT.

STB RMR OD — FT.

18 — D.C. ID 6 3/4 OD 555.65 FT.

STB RMR OD — FT.

D.C. ID OD — FT.

STB RMR OD — FT.

1 — OX SUB — 1.32

17 STANDS DP — 1547.18 FT.

SINGLES DP — 60.16 FT.

KELLY DOWN — 41.00 FT.

TOTAL — 2203.97 FT.

WT. OF STRING LBS.

BIT RECORD

BIT NO.	4
SIZE	8 1/2
MFG.	REED
TYPE	SCM
JETS 1 32nds	10 10 10
SER. NO.	576190
DEPTH OUT	
DEPTH IN	2052
TOTAL FTG.	151
TOTAL HRS. RUN	8 3/4
COND. I. B. T. B. GAGE	
GPM PD-PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
WATER	17 HRS Gel		

FOOTAGE / FORMATION

FROM	TO	DR'D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN
2090	2203	D			41	25	950	5 1/2	45	5 1/2		
					57	28	950	5 1/2	46			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
2203	2 3/4°							

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	6:00	2		DRILL 8 1/2" HOLE
6:00	6:15	1/4		RIG SERVICE
6:15	6:30	1/4		SURVEY @ 2213 MISRUN
6:30	11:30	5		DRILL 8 1/2" HOLE
11:30	11:45	1/4		SURVEY @ 2203 2 3/4°
11:45	1:00			DRILL 8 1/2" HOLE

RAN DESILTER.

DRILLER: M Carter

DAILY DRILLING REPORT — REPORT NO.

LEASE: Murphy — WELL NO: A1 — API WELL NUMBER: N-33 — DATE: Feb 8/70

OPERATOR: Amoco Cormack #A1 — CONTRACTOR: Keen Drlg. LTD. — RIG NO.: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: Amoco

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Fred Hardgrain

LOCATION: W-00'N-1220-30'W

D.P. SIZE	WT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	D-850	18
2		D-700	16

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	9⅝			19	720		720

WIRE LINE RECORD — MODEL NO.

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TOH ML OR TRIPS SINCE LAST CUT

CUMULATIVE TOH ML OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN	1		
2	DRILL ACTUAL		6½	7¼
3	REAMING	1		
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG	½		¼
8	REPAIR RIG			
9	CUT OFF DRILLING LINE	½		
10	DEVIATION SURVEY		1¼	¼
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
A	PERF'T'N			
B	TRC TRIPS			
C	TREATING			
D	SWABBING			
E	TESTING			
F	ADD'T'N'L			
G				
	TOTALS	4	8	

COMPLETION

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W. CONTR. D.P.

HRS. W. DPM. D.P.

HRS. NO D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR	OD	FT.
18	D.C. ID 6¾	OD	555.65 FT.
	STB RMR	OD	FT.
	D.C.		FT.
	STB RMR	OD	FT.
1	OK Sub		1.32
8	STANDS DP		802.79 FT.
2	SINGLES DP		60.24 FT.
	KELLY DOWN		13.00 FT.
	TOTAL		1371.60 FT.

WT. OF STRING ____ LBS.

BIT RECORD

BIT NO.	3
SIZE	8½
MFG.	Reed
TYPE	STIAG
JETS 1 32nds	12 12 12
SER. NO.	85262
DEPTH OUT	
DEPTH IN	720
TOTAL FTG.	
TOTAL HRS. RUN	17¼
COND. 1 8's T B GAGE	
GPM PD-PSI	

MUD RECORD

TIME	8:00		
WEIGHT	8.4		
PRESSURE GRADIENT			
VISC.-SEC.	31		
PV YP			
GELS			
WL-CC's			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	100		
Benex	3 sx		
Soda Ash	4 sx		

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR	OD	FT.
18	D.C. ID 6¾	OD	555.65 FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	SUB		1.32
11	STANDS DP		1001.80 FT.
2	SINGLES DP		60.92 FT.
	KELLY DOWN		15.31 FT.
	TOTAL		1635.00 FT.

WT. OF STRING 90,000 LBS.

BIT RECORD

BIT NO.	3
SIZE	8½
MFG.	STIAG
TYPE	REED
JET 1 32nds	12 12 12
SER. NO.	85262
DEPTH OUT	
DEPTH IN	720
TOTAL FTG.	915
TOTAL HRS. RUN	23¼
COND. 1 8's T B GAGE	
GPM PD-PSI	

MUD RECORD

TIME	10:00	12:00	3:00
WEIGHT	8.8	8.6	8.7
PRESSURE GRADIENT			
VISC.-SEC.	35	30	29
PV YP			
GELS			
WL-CC's			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Q-1	13.00		
Bemex	6 sx		

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR	OD	FT.
18	D.C. ID 6¾	OD	555.65 FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	XO Sub		1.32
13	STANDS DP		1198.72 FT.
2	SINGLES DP		58.27 FT.
	KELLY DOWN		35 FT.
	TOTAL		1835 FT.

WT. OF STRING ____ LBS.

BIT RECORD

BIT NO.	3
SIZE	8¾
MFG.	REED
TYPE	STIAG
JETS 1 32nds	12 12 12
SER. NO.	852612
DEPTH OUT	
DEPTH IN	720
TOTAL FTG.	1115
TOTAL HRS. RUN	31
COND. 1 8's T B GAGE	
GPM PD-PSI	

MUD RECORD

TIME	5:00	7:30	11:00
WEIGHT	8.6	8.9	8.7
PRESSURE GRADIENT			
VISC.-SEC.	35	33	33
PV YP			
GELS			
WL-CC's			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	300 sx		
Soda Ash	400 lb		
Benex	14 sx		
WATER			

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DRLD BY ROT. OR CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN BIT NO. / CORE NO.
1210	1371	D			63	8m	600	5½	49			

DEVIATION RECORD

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

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	¼		Rig Service + B.O.P's
12:15	3:15	3		Drill 8½" Hole (Holding Back on Wt. To Try to Hold Back out 1½°)
3:15	3:45	½		Work on Rotary Clutch
3:45	4:15	½		Drill 8½" Hole
4:15	4:45	½		Survey @ 1268 3/4° (Pull with Hand Crank
4:45	8:00	3¼		Drill 8½" Hole

DRILLER R.O. Johnston

FOOTAGE / FORMATION

FROM	TO	DRLD BY ROT. OR CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN BIT NO. / CORE NO.
1371	1635	D			75	30	600	5½	49			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
1389	¾		1508	½				

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:45	¾		DRLG.
8:45	9:15	½		SURVEY @ 1389 - SERVICE RIG & BOPS
9:15	11:45	2½		DRLG.
11:45	12:15	½		SURVEY MISSRUN
12:15	12:45	½		DRLG.
12:45	1:15	½		SURVEY @ 1506
1:15	4:00	2¾		DRLG.

DRILLER [signature]

FOOTAGE / FORMATION

FROM	TO	DRLD BY ROT. OR CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN BIT NO. / CORE NO.
1635	1835	D		Watson Lm 22	75	40	600	5½	45			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
1691	¾		1782	¾				

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	5:00	1		Drill 8¾ Hole — Check Fire Extinguishers OK.
5:00	5:15	¼		Rig Serv. BOPs
5:15	6:00	¾		Drill
6:00	6:15	¼		Survey @ 1691 — Check Rig Savers OK.
6:15	9:20	3¼		Drill
9:20	9:45	¼		Survey @ 1782
9:45	12:00	2¼		Drill

DRILLER [signature]

FORM 3T5 — APPROVED — APPROVED

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

DAILY DRILLING REPORT REPORT NO.

LEASE: Murphy Amoco, Cormack "A1" WELL NO.: A1 API WELL NUMBER: DATE: Feb 6/70

OPERATOR: Amoco CONTRACTOR: KEEN DRLG. LTD. RIG NO.: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Fred Hedglin

LOCATION: 61-00'N-122°-30'W

O.P. SIZE	GRADE	TOOL JT O.D.	TYPE THREAD	SERIAL NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
					1	EMSCO	D850	18
					2	EMSCO	D700	16

WIRE LINE RECORD REEL NO. SIZE NO. LINES FT. SLIPPED FT. CUT OFF REMAIN LENGTH TON MI. OR TRIPS SINCE LAST CUT CUMULATIVE TON MI. OR TRIPS

	SIZE	WARE	WT. & GR.	NO. JOINTS	FEET	HRS. TO L.C. NO.	SET AT
LAST CASING TURNING ON LINER	9⅝"		40#	19	720		720

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN	1¾		
2	DRILL ACTUAL		3¼	7¾
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS		1	
7	LUBRICATE RIG			¼
8	REPAIR RIG			
9	SLIP AND CUT DRILLING LINE			
10	DEVIATION SURVEY			1½
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.	¼	1	
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	OTHER WORK			
21	D.H.L.R.	6.	¼	
22	Steve Rig		½	
23	Dan Crews		2	
COMPLETION	A. PERF'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'NL			
	G.			
TOTALS		8	8	8.

DAYWORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/ CONTR. D.P.
HRS. W/ OPR. D.P.
HRS. NO D.P.
HRS. STANDBY

TOTAL DAY'S WORK

NO. OF DAYS FROM SPUD: 6
CUMULATIVE ROTATING HRS.: 11

TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

BIT NO.	3
SIZE	8½
MFG.	REED
TYPE	STIAG
JETS 1 32nds	12 12 12
SER. NO.	852612
DEPTH OUT	
DEPTH IN	720
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1 8's T. B. GAGE	
GPM PD-PM	

MUD RECORD

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

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

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		FT.
	STB RMR	OD	FT.
18	D.C. ID 6¾	OD 555.65	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	X0 SUB	1.32	
3	STANDS DP	275.24	FT.
	SINGLES DP		FT.
	KELLY DOWN	17.19	FT.
	TOTAL	850	FT.
	WT. OF STRING	82000	LBS.

BIT RECORD

BIT NO.	3
SIZE	8½
MFG.	REED
TYPE	STIAG
JETS 1 32nds	12 12 12
SER. NO.	852612
DEPTH OUT	
DEPTH IN	720
TOTAL FTG.	130
TOTAL HRS. RUN	3¼
COND. 1 8's T. B. GAGE	
GPM PD-PM	

MUD RECORD

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

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

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		FT.
	STB RMR	OD	FT.
18	D.C. ID 6¾	OD 555.65	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	X0	1.32	
7	STANDS DP	741.74	FT.
	SINGLES DP		FT.
	KELLY DOWN	13	FT.
	TOTAL	1210	FT.
	WT. OF STRING	94 m	LBS.

BIT RECORD

BIT NO.	3
SIZE	8½
MFG.	REED
TYPE	STIAG
JETS 1 32nds	12 12 12
SER. NO.	852612
DEPTH OUT	
DEPTH IN	720
TOTAL FTG.	490
TOTAL HRS. RUN	10½
COND. 1 8's T. B. GAGE	
GPM PD-PM	

MUD RECORD

TIME		
WEIGHT	8.6	8.8
PRESSURE GRADIENT		
VISC.-SEC.	39	29
PV-YP		
GELS		
WL-CC'S		
pH		
SOLIDS %		

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

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DRLD BY WIRE LINE OR CORE BBL	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. GPM	PUMP NO. LINER SIZE	PUMP NO. GPM	METHOD RUN

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	¼		RIG SERVICE
12:15	2:00	1¾		WORK ON HyDril LINES
2:00	2:30	½		MOVE DRILL COLLARS ON PIPE RACKS
2:30	5:45	3¼		LONG MOUSE HOLE DOWN [redacted] CEMENT
5:45	6:30	¾		RUN IN MOUSE HOLE (Rocks SPUDIT DOWN)
6:30	8:00	1½		PICK UP 6¾" DRILL COLLARS.

DRILLER: R. Clarke

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DRLD BY WIRE LINE OR CORE BBL	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. GPM	PUMP NO. LINER SIZE	PUMP NO. GPM	METHOD RUN
720	850	D			60	20	800	5½	260			

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	9:00	1		FINISH PICKUP COLLARS & RUN IN
9:00	9:30	½		SERVICE RIG
9:30	10:30	1		PRESSURE HYDRIL - PIPE RAMS & MANIFOLD
10:30	12:30	2		DRLG OUT FLOAT & SHOE & FLOAT @ 681'
12:30	12:45	¼		PRESSURE FORMATION TO 250 PSI. - FCO BACK TO 0
12:45	4:00	3¼		DRLG 8½" HOLE
				PRESS TEST HYDRIL PIPE RAMS & MANIFOLD 1500 PSI 15 MIN'S EACH.

DRILLER: M Coates

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DRLD BY WIRE LINE OR CORE BBL	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. GPM	PUMP NO. LINER SIZE	PUMP NO. GPM	METHOD RUN
850	1210	D										

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
964	¼°		1177	1½°				

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4AM	7:30	3½		DRILL 8½ HOLE - 39 m
7:30	7:45	¼		LUB SERV & BOPs
7:45	8:00	¼		SURVEY @ 964
8:00	10:30	2½		DRILL 8½ HOLE - 35 m
10:30	10:45	¼		SURVEY @ 1177
10:45	12:00	¼		DRILL - 10 m.

FORM 1T5 APPROVED APPROVED

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

DAILY DRILLING REPORT REPORT NO.

LEASE: Murphy Amoco, Cormack "A1" WELL NO.: A1 API WELL NUMBER DATE: Feb 6/70

OPERATOR: Amoco CONTRACTOR: KEEN DRLG. LTD. RIG NO.: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Fred Radford

LOCATION: 61-00'N-123°-30'W

D.P. SIZE	GRADE	TOOL JT O.D.	TYPE THREAD	CONDITION

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	D850	18
		D700	16

CASING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB TO CSG. HD.	SET AT
LAST	9 5/8"		40#	19	720		720

WIRE LINE RECORD REEL NO.

SIZE | NO. LINES | FT. STRIPPED | FT. CUT OFF | PRESENT LENGTH | TON MI. OR TRIPS SINCE LAST CUT | CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION - HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN	1 3/4		
2	DRILL ACTUAL		3 1/4	7 3/4
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS		1	
7	LUBRICATE RIG			1/4
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			1/2
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.	1/4	1	
15A	DRILL STEM TEST			
17	PLUG BACK			
16	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21	Weld	6. 1/4		
22	Steam Rig	1/2		
23	Dress Crown	2		
COMPLETION	A. PERF'N'G			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDITN'L			
	G.			
TOTALS		8	8	8

DAY WORK TIME CHARGE (OFFICE USE ONLY)

HRS. W. CONTR. D.P.	
HRS. W. OPR. D.P.	
HRS. NO. D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	6
CUMULATIVE ROTATING HRS.	77
TOTAL MUD COST	

DRILLING ASSEMBLY (At end of hour)

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

BIT RECORD

BIT NO.	3
SIZE	8 1/2
MFG.	REED
TYPE	STIMG
JETS 1 32nds	12 12 12
SER. NO.	852612
DEPTH OUT	
DEPTH IN	720
TOTAL FTG.	
TOTAL HRS. RUN	
COND. T. B. GAGE	
GPM PD. PSI	

MUD RECORD

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

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

MORNING TOUR

FOOTAGE / FORMATION

FROM	TO	DR'LD OR CORE	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD MUD PARTIAL CONVENTIONAL

DEVIATION RECORD

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

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	1/4		RIG SERVICE
12:15	2:00	1 3/4		WORK ON HYDRIL LINES
2:00	2:30	1/2		MOVE DRILL COLLARS ON PIPE RACKS
2:30	5:45	3 1/4		LONG MOUSE HOLE DOWN [redacted] (CEMENT)
5:45	6:30	3/4		RUN IN MOUSE HOLE (Rocks Spud it Down)
6:30	8:00	1 1/2		Pick up 6 3/4" DRILL COLLARS.

DRILLER: R. McArthur

DRILLING ASSEMBLY (At end of hour)

NO.			FT.
	BIT		
	STB		
18	D.C. 10 6 3/4 OD	555.65	FT.
	STB		
	D.C. ID OD		FT.
	STB		
1	X0 SUB	1.32	FT.
3	STANDS DP	275.24	FT.
	SINGLES DP		FT.
	KELLY DOWN	17.79	FT.
	TOTAL	850	FT.
	WT. OF STRING	82000	LBS.

BIT RECORD

BIT NO.	3
SIZE	8 1/2
MFG.	REED
TYPE	STIMG
JETS 1 32nds	12 12 12
SER. NO.	852612
DEPTH OUT	
DEPTH IN	720
TOTAL FTG.	130
TOTAL HRS. RUN	3 1/4
COND. T. B. GAGE	
GPM PD. PSI	

MUD RECORD

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

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

DAY TOUR

FOOTAGE / FORMATION

FROM	TO	DR'LD OR CORE	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD MUD PARTIAL CONVENTIONAL
720	850	D			60	20	800	5 1/2	60			

DEVIATION RECORD

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

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	9:00	1		FINISH PICKING COLLARS & RUN IN
9:00	9:30	1/2		SERVICE RIG
9:30	10:30	1		PRESSURE HYDRIL - PIPE RAMS & MANIFOLD
10:30	12:30	2		DRLG OUT FLOAT & SHOE - FLOAT @ 682.
12:30	12:45	1/4		PRESSURE FORMATION TO 250 PSI. - FCD BACK TO 0
12:45	4:00	3 1/4		DRLG 8 1/2" HOLE
				PRESS TEST HYDRIL PIPE RAMS & MANIFOLD
				1500 PSI 15 MIN's EACH.

DRILLER: M Cook

DRILLING ASSEMBLY (At end of hour)

NO.			FT.
	BIT		
	STB		
18	D.C. 10 6 3/4 OD	555.65	FT.
	STB		
	D.C. ID OD		FT.
	STB		
1	X0	1.32	FT.
7	STANDS DP	741.74	FT.
	SINGLES DP		FT.
	KELLY DOWN	13	FT.
	TOTAL	1210	FT.
	WT. OF STRING	94 M	LBS.

BIT RECORD

BIT NO.	3
SIZE	9 1/2
MFG.	Reed
TYPE	STIMG
JETS 1 32nds	12 12 12
SER. NO.	852612
DEPTH OUT	
DEPTH IN	720
TOTAL FTG.	490
TOTAL HRS. RUN	10 1/2
COND. T. B. GAGE	
GPM PD. PSI	

MUD RECORD

TIME		
WEIGHT	8.6	8.8
PRESSURE GRADIENT		
VISC. SEC.	29	29
PV YP		
GELS		
WL CC'S		
pH		
SOLIDS %		

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

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR'LD OR CORE	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD MUD PARTIAL CONVENTIONAL
850	1210	D										

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
964	1/4		1127	1 1/2				

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	7:30	3 1/2		DRILL 9 1/2 Hole - 39 M
7:30	7:45	1/4		Rig Serv & BOPE
7:45	8:00	1/4		SURVEY @ 964
8:00	10:30	2 1/2		DRILL 9 1/2 Hole - 35 M
10:30	10:45	1/4		SURVEY @ 1127
10:45	12:00	1 1/4		DRILL - 10 m.

DRILLER: R McArthur

FORM. 3T5 APPROVED APPROVED

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

DAILY DRILLING REPORT — REPORT NO.

LEASE: Murphy, Amoco, Cormack #1 — WELL NO.: A1 — API WELL NUMBER — DATE: Feb 5/70

OPERATOR: Amoco — CONTRACTOR: Keen Drlg. LTD — RIG NO.: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: D. [illegible] — SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Fred Hadley

LOCATION: 61 - 00'N - 122° - 30W

WIRE LINE RECORD — REEL NO.

D.P. SIZE	WT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	D-850	16
2		D-700	16

	SIZE	WT.	FT. & GR.	NO. JOINTS	FEET	BRD. TO CSG. NO.	SET AT
LAST CASING TUBING OR LINER	9 5/8			19	720		720

WIRE LINE RECORD: SIZE — NO. LINES — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH — TON MI. OR TRIPS SINCE LAST CUT — CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	NORM.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL			
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG	1/4		
8	REPAIR RIG			
9	SLIP DRLG. LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT	D/4		
14	NIPPLE UP B.O.P.		8	7½
15	TEST B.O.P.			1½
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'TN			
	B. TRG. TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'NL			
	G.			
	TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. @ CONTR. D.P.
HRS. @ OPR. D.P.
HRS. NO D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL HOLE SIZE

DRILLING ASSEMBLY (At end of hour)

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

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1 32nd"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. T. B. G.	
GPM PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV YP	
GELL	
WL-CC'S	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

MORNING TOUR

FOOTAGE / FORMATION

FROM	TO	DR'D RUN OR CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	1/4		Rig Service
12:15	3:15	3		W.O.C.
3:15	4:30			Pick up Bowen Tube 70 Jts. Cut + 22 ft 6½ Down Outside 9⅝" 36.
4:30	8:00			W.O.C.

DRILLER: D. [illegible]

MORNING TOUR

DRILLING ASSEMBLY (At end of hour)

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

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1 32nd"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. T. B. G.	
GPM PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV YP	
GELL	
WL-CC'S	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

FOOTAGE / FORMATION

FROM	TO	DR'D RUN OR CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT (1000)	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	10:30	2½		WELD ON CSG. BOWL
10:30	4:00	5½		NIPPLE UP

DRILLER

DRILLING ASSEMBLY (At end of hour)

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

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1 32nd"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. T. B. G.	
GPM PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV YP	
GELL	
WL-CC'S	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR'D RUN OR CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT (1000)	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	11:30	7½		Nipple up
11:30	12:00	½		Press Test Blind Rams.

Press Test B. Rams 5000 P.S.I. 15 min O.K.

DRILLER

FORM 3TB — APPROVED — APPROVED

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

PAN AMERICAN PETROLEUM CORPORATION

PIPE TALLY AND CEMENTING RECORD

LEASE Rocco Morgan A-1 Carmack WELL NO. A-1 DATE Feb 4 19 70

PIPE RUN, SIZE 9 5/8 WEIGHT 40# GRADE J-55 TYPE JOINT 8rd LTC MAKE Lone Star NO. FT. 339.81

PIPE RUN, SIZE 9 5/8 WEIGHT 40# GRADE J-55 TYPE JOINT 8rd STC MAKE — NO. FT. 209.84 938.80

NO	LENGTH OF JOINT FEET	IN.	NO.	LENGTH OF JOINT FEET	IN.	NO.	LENGTH OF JOINT FEET	IN.	NO.	LENGTH OF JOINT FEET	IN.	NO.	LENGTH OF JOINT FEET	IN.
1	42	96	51			101			151			201		
2	42	08	52			102			152			202		
3	41	38	53			103			153			203		
4	38	90	54			104			154			204	Tonnage	
5	39	95	55			105			155			205	977.84	
6	37	28	56			106			156			206		
7	38	05	57			107			157			207		
8	36	40	58			108			158			208		
9	36	10	59			109			159			209		
10	35	26	60			110			160			210		
11	34	60	61			111			161			211		
12	37	87	62			112			162			212		
13	36	95	63			113			163			213		
14	41	31	64			114			164			214		
15	41	85	65			115			165			215		
16	42	27	66			116			166			216		
17	41	92	67			117			167			217		
18	38	06	68			118			168			218		
19	27	52	69			119			169			219		
20	35	58 *	Not Run			120			170			220		
21	38	68 *	Not Run			121			171			221		
22	32	92 *	"			122			172			222		
23	44	55 *	"			123			173			223		
24	30	28 *	"			124			174			224		
25	26	73 *	"			125			175			225		
26	32	21 *	"			126			176					
27			77			127			177					
28			78			128			178					
29			79			129			179					
30			80			130			180					
31			81			131			181					
32			82			132			182					
33			83			133			183					
34			84			134			184					
35			85			135			185					
36			86			136			186					
37			87			137			187					
38			88			138			188					
39			89			139			189					
40			90			140			190					
41			91			141			191					
42			92			142			192					
43			93			143			193					
44			94			144			194					
45			95			145			195					
46			96			146			196					
47			97			147			197					
48			98			148			198					
49			99			149			199	90' KB =				
50			100			150			200	Ck				

TALLY OF JOINTS NOT RUN

NO.	LENGTH OF JOINT FEET	IN.
1	38	68
2	28	85 cut
3	32	92
4	44	55
5	30	28
6	26	73
7	32	21
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
	235	20

RECEIVED FEB 1970 OKLA. CITY, OKLA.

NO. JOINTS DELIVERED	(24)	939.75
NO. JOINTS RUN	(20)	703.95
Front Cut Front Stub		3.08
TOTAL RUN — OVERALL		707.03
OFF FOR THREADS		6.53
TOTAL — THREADS OFF		700.50
TOP PIPE BELOW		
ROTARY DRIVE BUSHING		19.50
DERRICK FLOOR		220.00
DEPTH LANDED		K.B.

CEMENT — MAKE Lone Star Dominion

KIND USED Class A Neat

NO. SACKS 460 + 2% CaCl

METHOD 2 Plug Displace

REMARKS:

Used One Dowell T.P. Cmtr.
To the x Displacement
Cmtd Casing on Front x Stub
977.84 (50 Cmtr) Excess
Slurry Cmt Followed w/
10 BBLS Spacer & 1" Pipe to
90' + 22 Back Side

939.75

APPROVED [signature]

PAN AMERICAN REPRESENTATIVE

DAILY DRILLING REPORT — REPORT NO.

LEASE: McCurdy, Amoco, Cormack #1 — WELL NO.: A1 — API WELL NUMBER — DATE: Feb 4/70

OPERATOR: Amoco — CONTRACTOR: KEEN DRLG LTD. — RIG NO.: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE — SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Fred Hodgkin

LOCATION: 61'-00N-122°-30'W

D.P. SIZE	WT. PT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1		D-850	16
2	EMSCO	D-700	16

WIRE LINE RECORD — REEL NO. — SIZE — NO. LINES — FT. SLIPPED — WT. CUT OFF — PRESENT LENGTH

CASING TUBING OR LINER	SIZE	MAKE	WT. & TOR.	NO. JOINTS	FEET	BKR. FO CSG. NO.	SET AT
LAST	9 5/8			19			

TON MI. ON TRIPS SINCE LAST CUT

CUMULATIVE TON MI. ON TRIPS

TIME DISTRIBUTION - HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
	DRILL ACTUAL		½	
3	REAMING	1		
4	CORING			
5	CONDITION MUD & CIRCULATE	¼	1	1¾
6	TRIPS	1¼	2	
7	LUBRICATE RIG	¼		
8	REPAIR RIG	¾		
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY	¼		
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT		5	1½
13	WAIT ON CEMENT			4½
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DAR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TRC TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G			
	TOTALS			

DAYWORK TIME SUMMARY (OFFICE USE ONLY):

HRS. W CONTR. D.P.

HRS. W OPR. D.P.

HRS. NO D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD

CUMULATIVE NOT DRLG. HRS.

TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT	1.00	FT.
2	9" DC OD	585.8	FT.
1	D.C. ID 7" OD	28.50	FT.
8	STB RMR OD	184.99	FT.
6	D.C. ID 6 1/4" STB RMR OD	61.44	FT.
4	Subs	5.99	
4	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL	720	FT.
	WT. OF STRING		LBS.

BIT RECORD

BIT NO.	2
SIZE	13 3/4
MFG.	HW
TYPE	OSC-3J
JETS 1 32nds	14 14 14
SER. NO.	TN129
DEPTH OUT	720
DEPTH IN	440
TOTAL FTG.	280
TOTAL HRS. RUN	14½
COND. 1 8's T. B. GAGE	
GPM PD. PSI	

MUD RECORD

TIME		
WEIGHT		
PRESSURE GRADIENT		
VISC. SEC.		
PV YP		
GELS		
WL - CC's		
pH		
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	2500		
Quick Sil	10 sx		
Sawdust	20 sx		

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1 32nds	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1 8's T. B. GAGE	
GPM PD. PSI	

MUD RECORD

TIME		
WEIGHT		
PRESSURE GRADIENT		
VISC. SEC.		
PV YP		
GELS		
WL - CC's		
pH		
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1 32nds	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1 8's T. B. GAGE	
GPM PD. PSI	

MUD RECORD

TIME		
WEIGHT		
PRESSURE GRADIENT		
VISC. SEC.		
PV YP		
GELS		
WL - CC's		
pH		
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR'L'D RM'R CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. SPM	PUMP NO. LINER SIZE	PUMP NO. SPM	METHOD RUN VALVES / JETS / CONE
715	720	D			120	30	350	5½	63			

DEVIATION RECORD: DEPTH 720 — DEV. 1/2° — DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	¼		RIG SERVICE
12:15	1:00	¾		WORK ON MUD LINE
1:00	2:00	1		REAM TO BOTTOM, LOST CIRC
2:00	5:00	3		BUILD UP VOL. MIX MUD TO REGAIN CIRC
5:00	5:30	½		DRILL
5:30	5:45	¼		SURVEY @ 720, ½°
5:45	6:45	1		CIRC. CONDITION HOLE TO RUN CASING
6:45	8:00	1¼		TRIP OUT OF HOLE TO RUN CASING

DRILLER: R.N. Hook

FOOTAGE / FORMATION

FROM	TO	DR'L'D RM'R CORE'D	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. SPM	PUMP NO. LINER SIZE	PUMP NO. SPM	METHOD RUN

DEVIATION RECORD: DEPTH — DEV. — DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	10:00	2		LAY DOWN 7" & 9" D.C. & RIG TO RUN CSG.
10:00	3:00	5		RUN 9 5/8" CSG.
3:00	3:30	½		RIG TO CIRC. CSG.
3:30	4:00	½		CIRC.

DRILLER: M Curdy

FOOTAGE / FORMATION

FROM	TO	DR'L'D RM'R CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. SPM	PUMP NO. LINER SIZE	PUMP NO. SPM	METHOD RUN VALVES / JETS / CONE
	720											

DEVIATION RECORD: DEPTH — DEV. — DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	5:00			CIRC CSG
5:00	6:45			CMT. CEMENT
6:00	7:15			DISPLACE W/ MUD
7:15	12:00			WOC

RAN 19 JTS 9 5/8" 40# New Used ITEC, STC & CSG. LANDED AT 720' F.B. Plug Down 7:15 PM 2/4/70.

WATER TRUCK 14 HRS.

DRILLER: M Curdy

DAILY DRILLING REPORT — REPORT NO.

LEASE: Murphy, Amoco, CORMACK "A1" — WELL NO.: A1 — API WELL NUMBER — DATE: Feb 3/70

OPERATOR: Amoco — CONTRACTOR: KEEN DRLG. L.T.D. — RIG NO.: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE — SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Fred Hadkin

LOCATION: 61° 00'N - 122° 30'W

D.P. SIZE	WT. PER FT.	GRADE	TOOL JT. O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
						1	EMSCO	D-850	
						2		D-700	

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

WIRE LINE RECORD — REEL NO. — SIZE — NO. LINES — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH — TON MI. ON TRIPS SINCE LAST CUT — CUMULATIVE TON MI. ON TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	2	7½	
3	REAMING	3/4		
4	CORING			
5	CONDITION MUD & CIRCULATE	3¼		
6	TRIPS	1¾		
7	LUBRICATE RIG	¼		
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY		½	
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				

COMPLETION: A. PERF'N'TN; B. TBG TRIPS; C. TREATING; D. SWABBING; E. TESTING; F. ADD'T'N'L; G.

TOTALS: 8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

MRS. W. CONTR. D.P.
MRS. W. OPR. D.P.
MRS. NO. D.P.
MRS. STANDBY

TOTAL DAY WORK

DP DATA: NUM. STDS. / CUMULATIVE ROTATING HRS.

TOTAL MUD COST

DRILLING ASSEMBLY

NO.		SIZE	O.D.	FT.
	BIT		100	FT.
	STB			
	STB			
2	D.C. I.D. 9"	O.D.	58.58	FT.
1	D.C.	7¾ O.D.	28.50	FT.
6	D.C. I.D. 6¼	O.D.	184.99	FT.
	STB	O.D.		FT.
4	Subs		5.99	
	STANDS DP		148.80	FT.
5	SINGLES DP			
	KELLY DOWN		41.00	FT.
	TOTAL		468.86	FT.
	WT. OF STRING		64000	LBS.

BIT RECORD

BIT NO.	1	2
SIZE	13¾	13¾
MFG.	REED	HW
TYPE	YT3A	OSC3J
JETS 1 32nds	14 14 H	14 14 H
SER. NO.	676388	TH129
DEPTH OUT	440	
DEPTH IN	0	440
TOTAL FTG.	440	
TOTAL HRS. RUN	29¾	1¼
COND. I.B.T.H. GAGE		
GPM PD PSI		

MUD RECORD

TIME	4:00
WEIGHT	9.6
PRESSURE GRADIENT	
VISC. SEC.	51
PV YP	
GELS	
WL. CC'S	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1500		

WORKING TOUR

DRILLING ASSEMBLY

NO.		SIZE	O.D.	FT.
	BIT		1.00	FT.
	STB			
	STB			
2	D.C. I.D. 9"	O.D.	58.58	FT.
1	D.C.	7¾ O.D.	28.50	FT.
6	D.C. I.D. 6¼	O.D.	184.99	FT.
	STB	O.D.		FT.
4	SUBS		5.99	
	STANDS DP		269.12	FT.
3	SINGLES DP		60.87	FT.
2	KELLY DOWN		20.90	FT.
	TOTAL		630.00	FT.
	WT. OF STRING		68000	LBS.

BIT RECORD

BIT NO.	2	
SIZE	13¾	
MFG.	HW	
TYPE	OSC-3J	
JETS 1 32nds	H H H	
SER. NO.	TH129	
DEPTH OUT		
DEPTH IN	440	
TOTAL FTG.	190	
TOTAL HRS. RUN	8¾	
COND. I.B.T.H. GAGE		
GPM PD PSI		

MUD RECORD

TIME	2:00
WEIGHT	9.8
PRESSURE GRADIENT	
VISC. SEC.	62
PV YP	
GELS	
WL. CC'S	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL			

DAY TOUR

DRILLING ASSEMBLY

NO.		SIZE	O.D.	FT.
	BIT			FT.
	STB			
	STB			
2	D.C. I.D. 9	O.D.	58.58	FT.
1	STB	7" O.D.	28.50	FT.
6	D.C. I.D. 6¼	O.D.	184.99	FT.
	STB	O.D.		FT.
4	SUBS		5.99	
	STANDS DP			FT.
	SINGLES DP			FT.
	KELLY DOWN			FT.
	TOTAL			FT.
	WT. OF STRING			LBS.

BIT RECORD

BIT NO.	2
SIZE	13¾
MFG.	HW
TYPE	OSC-3J
JETS 1 32nds	H H H
SER. NO.	TH129
DEPTH OUT	
DEPTH IN	440
TOTAL FTG.	286
TOTAL HRS. RUN	14¾
COND. I.B.T.H. GAGE	
GPM PD PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	2800		

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DRLD MIN. 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 DRLG. ROTARY, SLIDE, COMBINED
438	468	D			120	5M	32	5½	63			
468	630	D			120	20	350	5½	63			
630	716	D			70	30	350	5½	64			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
468	¼		580	½				
680	¾							

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	¼		RIG SERVICE
12:15	1:00	¾		REAMING TO MAKE CONNECTION (Boulder, Stuffing
1:00	3:45	2¾		MIX MUD
3:45	4:30	¾		DRILL 13¾" HOLE (Low circulation, blow up
4:30	5:30	1		MIX MUD
5:00	6:45	1¾		TRIP FOR BIT #2
6:45	8:00	1¼		DRILL 13¾" HOLE

DRILLER: R.D.

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	¼		SURVEY
8:15	1:05	5		DRLG.
1:15	1:30	¼		SURVEY + SERVICE RIG.
1:30	4:00	2½		DRLG.

DRILLER: Tom Curtis

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	8:30	4½		DRLG
8:30	9:45	1¼		R.S. & OIL
9:45	10:00	¼		SURVEY
10:00	10:45	¾		TRIP P.U.M.
10:45	11:00	¼		CIRC TO BOTTOM
11:00	12:45	1¾		DRILL
12:45	12:??			ON MUD LINE

DRILLER: Rod Wilson

APPROVED — APPROVED

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

FORM 3TB

DAILY DRILLING REPORT

REPORT NO.

LEASE: Murphy, AMOCO, Cormack #1 — WELL NO. A1 — API WELL NUMBER

OPERATOR: AMOCO

SIGNATURE OF OPERATOR'S REPRESENTATIVE: D.H.

CONTRACTOR: KEEN Drlg. L.T.d.

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Fred Hodgkins

DATE: Feb 2/80

RIG NO.: 2

LOCATION

D.P. SIZE	WT. P.F.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	D-850	
2		D-700	

	SIZE	MAKE	WT. & GR.	NO. JOINTS	PERF	BAR. TO CSG. NO.	SET AT
LAST CASING TUBING OR LINER							

WIRE LINE RECORD — REEL NO.

SIZE — NO. LINES — FT. SLIPPED

FT. CUT OF P — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	6	4	6½
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE		3	1
6	TRIPS			
7	LUBRICATE RIG	¼	¼	
8	REPAIR RIG	1½		
9	SLIP AND CUT DRILLING LINE			
10	DEVIATION SURVEY	¼	¼	½
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21	Clean Mud Lines		½	
22				
23				

COMPLETION: A. PERF'G'TN; B. TRG TRIPS; C. TREATING; D. SWABBING; E. TESTING; F. ADJUSTING; G.

TOTALS: 8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W. CONTR. D.P.

HRS. W. OPR. D.P.

HRS. NO D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS PREVIOUS REPORT

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

DRILLING ASSEMBLY (At end of hour)

NO.				
1	BIT		100	FT.
2	DC ID 9" OD		58.58	FT.
1	STB 7" OD / DC ID 7" OD		28.50	FT.
5	STB 6¼ OD / DC ID 6¼ OD		153.76	FT.
4	Subs		5.99	FT.
	STANDS DP			FT.
	SINGLES DP			FT.
	KELLY DOWN		36.00	FT.
	TOTAL		283.73	FT.
	WT. OF STRING			LBS.

BIT RECORD

BIT NO.	1
SIZE	12¼
MFG.	REED
TYPE	YT3A
JETS 1 32nds	H H H
SER. NO.	576388
DEPTH OUT	—
DEPTH IN	0
TOTAL FTG.	283.
TOTAL HRS. RUN	18½
COND. T.B. GAGE	
GPM PD. PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	1800#		

MORNING TOUR

FOOTAGE / FORMATION

FROM	TO	DR. D. RUN COMP. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM	METHOD RUN
195	283	D			120	6H	325			5½	63	

DEVIATION RECORD: DEPTH 195 — DEV. ¼° — DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	¼		RIG SERVICE
12:15	12:30	¼		SURVEY @ 195' ¼°
12:30	6:30	6		DRILL 12¼" HOLE
6:30	8:00	1½		FUEL GEL OFF TO FLOOR MOTORS
		8		K.B. TO GR. LEVEL 17.95'

DRILLER: R. Hodgkins

NO. 2 DRILLING ASSEMBLY (At end of hour)

NO.				
	BIT		100	FT.
	STB 9" OD			FT.
2	DC ID 9" OD		58.58	FT.
1	STB 7" OD / DC ID 7" OD		28.50	FT.
6	DC ID 6¼ OD		184.97	FT.
4	STB 6¼ OD / Subs		5.99	FT.
	STANDS DP			FT.
1	SINGLES DP		30.45	FT.
	KELLY DOWN		41	FT.
	TOTAL		350	FT.
	WT. OF STRING		63000	LBS.

BIT RECORD

BIT NO.	1
SIZE	12¼
MFG.	REED
TYPE	YT3A
JETS 1 32nds	H H H
SER. NO.	576388
DEPTH OUT	
DEPTH IN	0
TOTAL FTG.	350
TOTAL HRS. RUN	22½
COND. T.B. GAGE	
GPM PD. PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	1500#		
SAWDUST	30 SACKS		
QUICK SEAL	10 SACKS.		

DAY TOUR

FOOTAGE / FORMATION

FROM	TO	DR. D. RUN COMP. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM	METHOD RUN
283	350	D			120	20	325	5½	63			

DEVIATION RECORD: DEPTH 258 — DEV. ½ — DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:30	½		BLOW KELLY + MUD LINES
8:30	8:45	¼		SERVICE RIG.
8:45	9:45	1		DRLG.
9:45	10:00	¼		CIRC.
10:00	10:30	½		DRLG.
10:30	1:30	3		WASHED OUT AROUND CONDUCTOR BBL. MIX PILL + STUFF MUD SACKS AROUND CONDUCTOR BBL. + PUMP DRY PILL
1:30	4:00	2½		DRLG.

DRILLER: M. Cook

EVENING TOUR

NO. 3 DRILLING ASSEMBLY (At end of hour)

NO.				
	BIT			FT.
	STB 9" OD			FT.
2	DC ID 9" OD		58.58	FT.
1	STB 7" OD / DC ID 7" OD		28.50	FT.
6	DC ID 6¼ OD		184.99	FT.
4	STB 6¼ OD / Subs		5.99	FT.
	STANDS DP			FT.
	SINGLES DP			FT.
	KELLY DOWN		41	FT.
	TOTAL		438	FT.
	WT. OF STRING			LBS.

BIT RECORD

BIT NO.	1
SIZE	12¼
MFG.	REED
TYPE	YT3A
JETS 1 32nds	14 14 14
SER. NO.	576388
DEPTH OUT	
DEPTH IN	0
TOTAL FTG.	438
TOTAL HRS. RUN	29
COND. T.B. GAGE	
GPM PD. PSI	

MUD RECORD

TIME	
WEIGHT	8.9
PRESSURE GRADIENT	
VISC. SEC.	40
PV YP	
GELS	
ML CC'S	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1400		
SAWDUST	10 SKS		
QUIKSEAL	6 SKS		

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR. D. RUN COMP. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM	METHOD RUN
350	438	D			70	35	325	5½	63			

DEVIATION RECORD: DEPTH 38 — DEV. ¼ — DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	5:30	1½		DR. 11 Conductor Pipe Washing Out
5:30	6:30	1		Mix Mud Loss Circ Materials Put Down Skid
6:30	9:00	2½		DRILL
9:00	9:30	½		Survey @ 380
9:30	12:00	2½		DRILL

DRILLER: M. Cook

FORM 3TS — APPROVED — APPROVED

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

DAILY DRILLING REPORT REPORT NO.

LEASE: Murphy Amoco Permac WELL NO.: A-2 API WELL NUMBER: DATE: 2-1-10

OPERATOR: AMOCO CONTRACTOR: Leen Drlg Ltd. RIG NO.:

SIGNATURE OF OPERATOR'S REPRESENTATIVE: F Barker SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Fred Hodgkin

LOCATION

CSG. SIZE	WT. PT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LAST CASING TUBING OR LINER: SIZE | MAKE | WT. & GR. | NO. JOINTS | FEET | REG. TO EXC. NO. | SET AT

WIRE LINE RECORD REEL NO. SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL			
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				

COMPLETION: A. PERF'G'TN; B. TBG TRIPS; C. TREATING; D. SWABBING; E. TESTING; F. ADDIT'NL; G.

TOTAL

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1 32nds	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. T. B. G.	
GPM PD-PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT	1.00	FT.
	STB Rmr	OD	FT.
2	D.C. ID 9"	OD 5 5/8	58.58 FT.
	STB Rmr	OD	FT.
	D.C. ID	OD	FT.
	STB Rmr	OD	FT.
3	SUBS		4.38
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		12.04 FT.
	TOTAL		75.00 FT.
	WT. OF STRING	48,000	LBS.

BIT RECORD

BIT NO.	1
SIZE	12 1/4
MFG.	REED
TYPE	YT3A
JETS 1 32nds	14 14 14
SER. NO.	576388
DEPTH OUT	
DEPTH IN	0
TOTAL FTG.	75
TOTAL HRS. RUN	5
COND. T. B. G.	
GPM PD-PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB Rmr	OD	FT.
2	D.C. ID 9	OD	58.58 FT.
1	STB Rmr 7	OD	28.50 FT.
3	D.C. ID 6 1/4	OD	92.18 FT.
	STB Rmr	OD	FT.
4	SUBS		5.99
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN	0	FT.
	TOTAL		FT.
	WT. OF STRING	55M	LBS.

BIT RECORD

BIT NO.	1
SIZE	12 1/4
MFG.	REED
TYPE	YT3A
JETS 1 32nds	14 14 14
SER. NO.	576388
DEPTH OUT	
DEPTH IN	0
TOTAL FTG.	195
TOTAL HRS. RUN	
COND. T. B. G.	
GPM PD-PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR'D BY BIT / CONT. C	CORE NO.	FORMATION (WITH CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. SPM	PUMP NO. LINER SIZE	PUMP NO. SPM	METHOD MUD CONTROL

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12.00	12.05	1/4		RIG SERVICE
12.15	2:00	1 3/4		Hook up Flow Line, Steam Shale Shaker
2:00	8.00	6		Rig up To Spud in.
		8		

DRILLER: R.D. Johnston

FOOTAGE / FORMATION

FROM	TO	DR'D BY BIT / CONT. C	CORE NO.	FORMATION (WITH CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. SPM	PUMP NO. LINER SIZE	PUMP NO. SPM	METHOD MUD CONTROL
0	75	D			60	10	250	5 1/2				

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	11 00	3		RIG TO SPUD
11 00	4:00	5		DRLG. 12 1/4" HOLE SPUDDED @ 11 AM.

DRILLER: M Coats

FOOTAGE / FORMATION

FROM	TO	DR'D BY BIT / CONT. C	CORE NO.	FORMATION (WITH CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. SPM	PUMP NO. LINER SIZE	PUMP NO. SPM	METHOD MUD CONTROL
75	105	D			115	15	250	5 1/2	65			

DEVIATION RECORD: DEPTH 90 | DEV. 1/4 | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 00	6 00	2		Drill 12 1/4 Hole
6 00	6 30	1/2		Survey @ 90'
6 30	12 00	5 1/2		Drill

Form 3TB APPROVED APPROVED

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

DAILY DRILLING REPORT REPORT NO.

LEASE: Murphy Amoco Comac WELL NO: A-1 API WELL NUMBER: DATE: 1-31-70

OPERATOR: AMOCO CONTRACTOR: Keen Drlg Ltd. RIG NO.: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: F Borden SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Fred Hodgkin

LOCATION

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

	SIZE	GRADE	WT. & GR.	NO. JOINTS	FEET	WHERE SET (CSG. PT.)	SET AT
LAST CASING TUBING OR LINER							

WIRE LINE RECORD WIRE NO.

SIZE NO. LINES FT. LOGGED

FT. CUT OFF PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION - HOURS

CODE NO.	OPERATION	HOURS	DAY	EVE
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL			
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'N'TN			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADD'N'L			
	G.			
TOTALS				

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W CONTR. D.P.

HRS. W OPR. D.P.

HRS. NO D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

DRILLING ASSEMBLY (1st and at Finish)

BIT ... FT.

STB NMDC OD ... FT.

D.C. ID OD ... FT.

STB NMDC OD ... FT.

D.C. ID OD ... FT.

STB NMDC OD ... FT.

STANDS DP ... FT.

SINGLES DP ... FT.

KELLY DOWN ... FT.

TOTAL ... FT.

WT. OF STRING ... LBS.

BIT RECORD

BIT NO.

SIZE

MFG.

TYPE

JETS 1 32nds"

SER. NO.

DEPTH OUT

DEPTH IN

TOTAL FTG.

TOTAL HRS. RUN

COND. I B TB GAGE

GPM PD PSI

MUD RECORD

TIME

WEIGHT

PRESSURE GRADIENT

VISC. SEC.

PV YP

GELS

WL CC'S

pH

SOLIDS %

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

WORKING TOUR

FOOTAGE

FROM	TO	DR'LD OR W'SH'D CORE'D	CORE NO.

FORMATION (SHOW CORE RECOVERY)

ROTARY RPM | WT. ON BIT (1000's) | PUMP PRESS | PUMP NO. LINER SIZE | SPM | PUMP NO. LINER SIZE | SPM | METHOD USED

DEVIATION RECORD

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

TIME LOG FROM | TO | ELAPSED TIME | CODE NO. | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1200	800	8		RIGGING UP.

DRILLER R. V. Johnston

DAY TOUR

DRILLING ASSEMBLY (1st and at Finish)

BIT ... FT.

STB NMDC OD ... FT.

D.C. ID OD ... FT.

STB NMDC OD ... FT.

D.C. ID OD ... FT.

STB NMDC OD ... FT.

STANDS DP ... FT.

SINGLES DP ... FT.

KELLY DOWN ... FT.

TOTAL ... FT.

WT. OF STRING ... LBS.

BIT RECORD

BIT NO.

SIZE

MFG.

TYPE

JETS 1 32nds"

SER. NO.

DEPTH OUT

DEPTH IN

TOTAL FTG.

TOTAL HRS. RUN

COND. I B TB GAGE

GPM PD PSI

MUD RECORD

TIME

WEIGHT

PRESSURE GRADIENT

VISC. SEC.

PV YP

GELS

WL CC'S

pH

SOLIDS %

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR'LD OR W'SH'D CORE'D	CORE NO.

FORMATION (SHOW CORE RECOVERY)

ROTARY RPM | WT. ON BIT (1000's) | PUMP PRESS | PUMP NO. LINER SIZE | SPM | PUMP NO. LINER SIZE | SPM

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.

TIME LOG FROM | TO | ELAPSED TIME | CODE NO. | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
800	805	12		RIG UP

DRILLER M Cowden

EVENING TOUR

DRILLING ASSEMBLY (1st and at Finish)

BIT ... FT.

STB NMDC OD ... FT.

D.C. ID OD ... FT.

STB NMDC OD ... FT.

D.C. ID OD ... FT.

STB NMDC OD ... FT.

STANDS DP ... FT.

SINGLES DP ... FT.

KELLY DOWN ... FT.

TOTAL ... FT.

WT. OF STRING ... LBS.

BIT RECORD

BIT NO.

SIZE

MFG.

TYPE

JETS 1 32nds"

SER. NO.

DEPTH OUT

DEPTH IN

TOTAL FTG.

TOTAL HRS. RUN

COND. I B TB GAGE

GPM PD PSI

MUD RECORD

TIME

WEIGHT

PRESSURE GRADIENT

VISC. SEC.

PV YP

GELS

WL CC'S

pH

SOLIDS %

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR'LD OR W'SH'D CORE'D	CORE NO.

FORMATION (SHOW CORE RECOVERY)

ROTARY RPM | WT. ON BIT (1000's) | PUMP PRESS | PUMP NO. LINER SIZE | SPM | PUMP NO. LINER SIZE | SPM | METHOD USED

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.

TIME LOG FROM | TO | ELAPSED TIME | CODE NO. | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1800	1200			R.U. MP R.U. To Spud

DRILLER W N Doty

EVENING TOUR

Form 375 APPROVED APPROVED

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

DAILY DRILLING REPORT REPORT NO.

LEASE Conroe WELL NO. A-2 API WELL NUMBER DATE 1-30-10

OPERATOR Exxon Co CONTRACTOR Keen Drlg Ltd RIG NO 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE F Bowden SIGNATURE OF CONTRACTOR'S TOOL PUSHER Fred Hodgkin

O.D. SIZE	WT. PT.	GRADE	TOOL JT O.D.	TYPE THREAD	SERIAL NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LOCATION

WIRE LINE RECORD REEL NO.

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

SIZE NO. LINES FT. SLIPPED

FT. CUT OFF PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION - HOURS

CODE NO.	OPERATION	HORN.	DAY	EVE.
1.	RIG UP AND TEAR DOWN			
2.	DRILL ACTUAL			
3.	REAMING			
4.	CORING			
5.	CONDITION MUD & CIRCULATE			
6.	TRIPS			
7.	LUBRICATE RIG			
8.	REPAIR RIG			
9.	CUT OFF DRILLING LINE			
10.	DEVIATION SURVEY			
11.	WIRE LINE LOGS			
12.	RUN CASING & CEMENT			
13.	WAIT ON CEMENT			
14.	NIPPLE UP B.O.P.			
15.	TEST B.O.P.			
16.	DRILL STEM TEST			
17.	PLUG BACK			
18.	SQUEEZE CEMENT			
19.	FISHING			
20.	DIR. WORK			
21.				
22.				
23.				
COMPLETION	A. PERF'ING			
	B. TEST TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ACIDIZING			
	G.			
	TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. = CONTR. D.P.

HRS. = OPR. D.P.

HRS. NO D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS SPUD TO RIG REL.

CUMULATIVE ROTATING HRS.

TOTAL COST

DRILLING ASSEMBLY (At end of tour)

WT. PT.

STR.	MAKE	OD	FT.
D.C.	ID	OD	FT.
STR.	MAKE	OD	FT.
D.C.	ID	OD	FT.
STR.	MAKE	OD	FT.

STANDS DP PT.

SINGLES DP PT.

KELLY DOWN PT.

TOTAL PT.

WT. OF STRING LBS.

BIT RECORD

BIT NO. SIZE MFG. TYPE JETS 1 32nds SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HRS. RUN COND. T. B. G. GAGE GPM PD-PSI

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

MORNING TOUR

FOOTAGE

FROM	TO	DR. D OR W. CORE C

CORE NO.

FORMATION (SHOW CORE RECOVERY)

ROTARY RPM WT. ON BIT 1000's PUMP PRESS

PUMP NO.	LINER SIZE	S.P.M.

PUMP NO.	LINER SIZE	S.P.M.

METHOD MUD SCL. GEL CHEM. P.F. OIL

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	5:00	9		WORK ON Pumps, Repair Pumphouse Floors R.16 UP

DRILLER R. Johnston

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

WT. PT.

STR.	MAKE	OD	FT.
D.C.	ID	OD	FT.
STR.	MAKE	OD	FT.
D.C.	ID	OD	FT.
STR.	MAKE	OD	FT.

STANDS DP PT.

SINGLES DP PT.

KELLY DOWN PT.

TOTAL PT.

WT. OF STRING LBS.

BIT RECORD

BIT NO. SIZE MFG. TYPE JETS 1 32nds SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HRS. RUN COND. T. B. G. GAGE GPM PD-PSI

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR. D OR W. CORE C

CORE NO.

FORMATION (SHOW CORE RECOVERY)

ROTARY RPM WT. ON BIT 1000's PUMP PRESS

PUMP NO.	LINER SIZE	S.P.M.

PUMP NO.	LINER SIZE	S.P.M.

METHOD MUD SCL. GEL CHEM. P.F. OIL

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
9:00	12:00			Put up Derrick Rig up Books Tour

DRILLER Bob Ash

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

WT. PT.

STR.	MAKE	OD	FT.
D.C.	ID	OD	FT.
STR.	MAKE	OD	FT.
D.C.	ID	OD	FT.
STR.	MAKE	OD	FT.

STANDS DP PT.

SINGLES DP PT.

KELLY DOWN PT.

TOTAL PT.

WT. OF STRING LBS.

BIT RECORD

BIT NO. SIZE MFG. TYPE JETS 1 32nds SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HRS. RUN COND. T. B. G. GAGE GPM PD-PSI

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR. D OR W. CORE C

CORE NO.

FORMATION (SHOW CORE RECOVERY)

ROTARY RPM WT. ON BIT 1000's PUMP PRESS

PUMP NO.	LINER SIZE	S.P.M.

PUMP NO.	LINER SIZE	S.P.M.

METHOD MUD SCL. GEL CHEM. P.F. OIL

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	9:00	13		RIG UP

DRILLER M Coates

FORM 3TN APPROVED APPROVED

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

DAILY DRILLING REPORT REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Cormac	A-1		JAN 29/70
OPERATOR	CONTRACTOR		RIG NO.
Amoco	Keen Drlg LTD.		2
SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER		LOCATION
Fred Boudar	Fred Hodgson		

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

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	WHERE TO CSG. NO.	SET AT

WIRE LINE RECORD REEL NO.

SIZE NO. LINES FT. SLIPPED

FT. CUT OFF PRESENT LENGTH

TON MI. ON TRIPS SINCE LAST CUT

CUMULATIVE TON MI. ON TRIPS

TIME DISTRIBUTION - HOURS

TODF NO.	OPERATION	MORN.	DAY	EVE.
1.	RIG UP AND TEAR DOWN			
2.	DRILL ACTUAL			
3.	REAMING			
4.	CORING			
5.	CONDITION MUD & CIRCULATE			
6.	TRIPS			
7.	LUBRICATE RIG			
8.	REPAIR RIG			
9.	CUT OFF DRILLING LINE			
10.	DEVIATION SURVEY			
11.	WIRE LINE LOGS			
12.	RUN CASING & CEMENT			
13.	WAIT ON CEMENT			
14.	NIPPLE UP B.O.P.			
15.	TEST B.O.P.			
16.	DRILL STEM TEST			
17.	PLUG BACK			
18.	SQUEEZE CEMENT			
19.	FISHING			
20.	DIR. WORK			
21.				
22.				
23.				
COMPLETION	A. PERF'G'TN			
	B. TBG. TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ACIDIZING			
	G.			
TOTALS				

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. ON CONTR. D.P.	
HRS. ON OPER. D.P.	
HRS. ON D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS COMPLETED	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1 32nds	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. T.B.'s T. B. GAGE	
GPM PD-PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

MORNING TOUR

FOOTAGE / FORMATION

FROM	TO	DR'G HR'S CORE'G	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN PARTIAL CORE

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
800	600	10		WORK ON PUMPHOUSE, R.I.G. UP.

DRILLER R.D. Johnston

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1 32nds	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. T.B.'s T. B. GAGE	
GPM PD-PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

FOOTAGE / FORMATION

FROM	TO	DR'G HR'S CORE'G	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN PARTIAL CORE

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
800	600			FIRST DERRICK R.I.G. UP.
				BOILER STARTED 4 P.M. FH.

DRILLER R.D. Johnston

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1 32nds	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. T.B.'s T. B. GAGE	
GPM PD-PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR'G HR'S CORE'G	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN PARTIAL CORE

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
800	630	10		RIG UP START BOILER

DRILLER R.D. Johnston

FORM 575 APPROVED APPROVED

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

DAILY DRILLING REPORT REPORT NO.

LEASE CORMACK WELL NO. A-1 API WELL NUMBER DATE 1-28-70

OPERATOR AMOCO CONTRACTOR KEEN DRLG LTD RIG NO. 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE Fred Bender

SIGNATURE OF CONTRACTOR'S TOOL PUSHER Fred Hodgkin

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

LOCATION

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

WIRE LINE RECORD REEL NO.

SIZE NO. LINES FT. SLIPPED

FT. CUT OFF PRESENT LENGTH

TON MI. ON TRIPS SINCE LAST CUT

CUMULATIVE TON MI. ON TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	TRIP IN AND TEAR DOWN			
2	DRLG. ACTUAL			
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERFORATING			
	B. TBG TRIPS			
	C. SWEATING			
	D. SWABBING			
	E. TESTING			
	F. MEASURING			
	G.			
TOTALS				

DAYWORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W COMPTR. D.P.

HRS. W OPER. D.P.

HRS. TO D.P.

HRS. STANDBY

TOTAL DAY'S WORK

NO. OF DAYS FROM WELL

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

DRILLING ASSEMBLY (At end of run)

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

BIT RECORD

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

MUD RECORD

TIME; WEIGHT; PRESSURE GRADIENT; VISC.-SEC.; PV-YP; GELS; ML.-CC'S; pH; SOLIDS %

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

WORKING TOUR

DRILLING ASSEMBLY (At end of run)

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

BIT RECORD

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

MUD RECORD

TIME; WEIGHT; PRESSURE GRADIENT; VISC.-SEC.; PV-YP; GELS; ML.-CC'S; pH; SOLIDS %

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

DAY TOUR

DRILLING ASSEMBLY (At end of run)

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

BIT RECORD

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

MUD RECORD

TIME; WEIGHT; PRESSURE GRADIENT; VISC.-SEC.; PV-YP; GELS; ML.-CC'S; pH; SOLIDS %

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

EVENING TOUR

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR. D HRS. N CORE C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT (000's)	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD MUD TYPE 1 PARTS 2 COMB.

DEVIATION RECORD: DEPTH / DEV. / DIRECTION (×3)

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
800	600	10		RIGGING UP

DRILLER R. D. Johnston

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR. D HRS. N CORE C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT (000's)	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD MUD TYPE 1 PARTS 2 COMB.

DEVIATION RECORD: DEPTH / DEV. / DIRECTION (×3)

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
900	600	—		START #1 MOTOR BUILD UP AIR PRESS UP

Robert Asher

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR. D HRS. N CORE C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT (000's)	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD MUD TYPE 1 PARTS 2 COMB.

DEVIATION RECORD: DEPTH / DEV. / DIRECTION (×3)

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8-00	6-00	10		RIG UP

DRILLER M Lucas

FORM 3TB APPROVED APPROVED

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

DAILY DRILLING REPORT REPORT NO.

LEASE: Cormack WELL NO.: A-1 API WELL NUMBER: DATE: 1-27-70

OPERATOR: CONTRACTOR: Keen Drlg Ltd. RIG NO.: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: Fred Sinclair SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Fred Hodgkin

LOCATION

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

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	ANN. VEL. DRL. PIPE	ANN. VEL. D.C.	SET AT
LAST CASING TUBING OR LINER								

WIRE LINE RECORD REEL NO.

SIZE	NO. LINES	FT. SLIPPED

FT. CUT ON PRESENT LENGTH

TON MI. ON TRIPS SINCE LAST CUT

CUMULATIVE TON MI. ON TRIPS

TIME DISTRIBUTION - HOURS

CODE NO.	OPERATION	MIDN.	DAY	EVE.
1.	RIG UP AND TEAR DOWN			
2.	DRILL ACTUAL			
3.	REAMING			
4.	CORING			
5.	CONDITION MUD & CIRCULATE			
6.	TRIPS			
7.	LUBRICATE RIG			
8.	REPAIR RIG			
9.	CUT OFF DRILLING LINE			
10.	DEVIATION SURVEY			
11.	WIRE LINE LOGS			
12.	RUN CASING & CEMENT			
13.	WAIT ON CEMENT			
14.	NIPPLE UP B.O.P.			
15.	TEST B.O.P.			
16.	DRILL STEM TEST			
17.	PLUG BACK			
18.	SQUEEZE CEMENT			
19.	FISHING			
20.	DIR. WORK			
21.				
22.				
23.				
COMPLETION	A. PERF'N'TN			
	B. TRG TRIPS			
	C. TIME & TBG			
	D. SWABBING			
	E. TESTING			
	F. ACID'N'G			
	G.			
	TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W CONT'M. D.P.

HRS. W OPN. D.P.

HRS. NO D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1 32nds	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1 & 1 T. B. GAGE	
GPM PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV YP	
GELS	
ML-CC'S	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

MORNING TOUR

FOOTAGE FROM	TO	DR'LD RUN OR CORE	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN CONV. OR DIR.

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	6:00	10		Rig Up, Unload Trucks

DRILLER: R.D. Johnston

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1 32nds	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1 & 1 T. B. GAGE	
GPM PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV YP	
GELS	
ML-CC'S	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

FOOTAGE FROM	TO	DR'LD RUN OR CORE	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN CONV. OR DIR.

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	6:00			Rig up & Unload Trucks

DRILLER: R.D. Johnston

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1 32nds	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1 & 1 T. B. GAGE	
GPM PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV YP	
GELS	
ML-CC'S	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE FROM	TO	DR'LD RUN OR CORE	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN CONV. OR DIR.

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	6:00	10		RIG UP - UNLOAD TRUCKS

DRILLER: [illegible]

FORM 3T5 APPROVED APPROVED

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

DAILY DRILLING REPORT REPORT NO.

LEASE: CORMACK. WELL NO.: A-1 API WELL NUMBER DATE: 1-26-70

OPERATOR: AMOCO CONTRACTOR: KEEN DRLG LTD. RIG NO.: 2.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: Fred Tucker

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Fred Hodgkin.

LOCATION

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

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	NEW TO USE NO.	WT. AT

WIRE LINE RECORD REEL NO.

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	NORM.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL			
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETED	A. PERFORATING			
	B. TBG. TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDITIONAL			
	G.			
TOTALS				

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. — COMPL. D.F.

HRS. — OPR. D.F.

HRS. NO. D.F.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

BIT NO. | SIZE | MFG. | TYPE | JETS 1 32nds | SER. NO. | DEPTH OUT | DEPTH IN | TOTAL FTG. | TOTAL HRS. RUN | COND. 1 B 1 T B GAGE | GPM PD-PSI

MUD RECORD

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

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

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

BIT NO. | SIZE | MFG. | TYPE | JETS 1 32nds | SER. NO. | DEPTH OUT | DEPTH IN | TOTAL FTG. | TOTAL HRS. RUN | COND. 1 B 1 T B GAGE | GPM PD-PSI

MUD RECORD

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

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

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

BIT NO. | SIZE | MFG. | TYPE | JETS 1 32nds | SER. NO. | DEPTH OUT | DEPTH IN | TOTAL FTG. | TOTAL HRS. RUN | COND. 1 B 1 T B GAGE | GPM PD-PSI

MUD RECORD

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

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

EVENING TOUR

FOOTAGE / FORMATION (Show Core Recovery)

FROM	TO	DR'L'D RUN OR CORE-C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
800	600			Rig Up. Unload Trucks

DRILLER: R.D. Johnston

FOOTAGE / FORMATION (Show Core Recovery)

FROM	TO	DR'L'D RUN OR CORE-C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
600	600	10		R.G.U. Unload Trucks

DRILLER: Fred Baker

FOOTAGE / FORMATION (Show Core Recovery)

FROM	TO	DR'L'D RUN OR CORE-C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
800	600	10		RIG UP - UNLOAD TRUCKS

DRILLER: M. Linton

Form 3T5 APPROVED APPROVED

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

DAILY DRILLING REPORT — REPORT NO.

LEASE: Cormac — WELL NO.: A-1 — API WELL NUMBER — DATE: Jan 25/70

OPERATOR: Amoco — CONTRACTOR: Kreb Drlg Ltd — RIG NO.: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: Fred Sanders — SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Fred Hodgkins

LOCATION

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

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

WIRE LINE RECORD — REEL NO.

SIZE — NO. LINES — FT. SLIPPED

FT. CUT OFF — PRESENT LENGTH

TON MI. ON TRIPS SINCE LAST CUT

CUMULATIVE TON MI. ON TRIPS

TIME DISTRIBUTION - HOURS

CODE NO.	OPERATION	MIDNIGHT	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL			
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	OTHER WORK			
21				
22				
23				

COMPLETION: A. PERF'D'TN; B. TBG TRIPS; C. TREATING; D. SWABBING; E. TESTING; F. ADDITIONAL; G.

TOTALS

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. ON CONTR. S.P.

HRS. ON OPR. D.P.

HRS. ND D.P.

HRS. STDBY

TOT. ALL DAY WORK

NO. OF DAYS FROM SPUD: CUMULATIVE

NO. OF STRING HRS.

TOT. ALL MUD COST

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

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

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

MORNING TOUR

FOOTAGE / FORMATION

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

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
800	600	10		Rig up, Dig Rat Hole

DRILLER: R Johnston

DAY TOUR

FOOTAGE / FORMATION

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

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
6		10		T.G.U. Digging Ratkole

DRILLER: R Johnston

EVENING TOUR

FOOTAGE / FORMATION

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

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
800	6-	1.0		Rig up - Dig Rat Hole

DRILLER: M Gunton

Form 3T5

APPROVED — APPROVED

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

DAILY DRILLING REPORT REPORT NO.

LEASE: CORMACK WELL NO.: 4-1 API WELL NUMBER: DATE: 1-24-90

OPERATOR: AMOCO CONTRACTOR: KLEIN DRLG LTD RIG NO.: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: Ted Bordas

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Fred Hodgkin

LOCATION

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

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

WIRE LINE RECORD REEL NO.

SIZE NO. LINES FT. SLIPPED

FT. CUT OFF PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL			
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'G'N			
	B. TBG. TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDT'L			
	G			
TOTALS				

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.

HRS. W/OPR. D.P.

HRS. NO D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS PREVIOUS CUMULATIVE

DAYS SINCE SPUD

TOTAL MUD COST

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
	BIT	FT.	BIT NO.	
			SIZE	
	STB RMR OD	FT.	MFG.	
	D.C. ID OD	FT.	TYPE	
	STB RMR OD	FT.	JETS 32nds	
	D.C. ID OD	FT.	SER. NO.	
	STB RMR OD	FT.	DEPTH OUT	
			DEPTH IN	
			TOTAL FTG.	
			TOTAL HRS. RUN	
	STANDS DP	FT.	COND. I.R. GAGE	
	SINGLES DP	FT.	GPM PD. PSI	
	KELLY DOWN	FT.		
	TOTAL	FT.		
	WT. OF STRING	LBS.		

MUD RECORD	
TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV YP	
GELS	
WL-CC'S	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	TO	DR'L'D RUN OR CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT ON BIT (1000's)	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8.00	6.00			R.G. UP UNLOAD TRUCKS

DRILLER

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
	BIT	FT.	BIT NO.	
			SIZE	
	STB RMR OD	FT.	MFG.	
	D.C. ID OD	FT.	TYPE	
	STB RMR OD	FT.	JETS 32nds	
	D.C. ID OD	FT.	SER. NO.	
	STB RMR OD	FT.	DEPTH OUT	
			DEPTH IN	
			TOTAL FTG.	
			TOTAL HRS. RUN	
	STANDS DP	FT.	COND. I.R. GAGE	
	SINGLES DP	FT.	GPM PD. PSI	
	KELLY DOWN	FT.		
	TOTAL	FT.		
	WT. OF STRING	LBS.		

MUD RECORD	
TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV YP	
GELS	
WL-CC'S	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	TO	DR'L'D RUN OR CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT ON BIT (1000's)	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8.00	6.00			R.G. UP UNLOAD TRUCKS

DRILLER

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
	BIT	FT.	BIT NO.	
			SIZE	
	STB RMR OD	FT.	MFG.	
	D.C. ID OD	FT.	TYPE	
	STB RMR OD	FT.	JETS 32nds	
	D.C. ID OD	FT.	SER. NO.	
	STB RMR OD	FT.	DEPTH OUT	
			DEPTH IN	
			TOTAL FTG.	
			TOTAL HRS. RUN	
	STANDS DP	FT.	COND. I.R. GAGE	
	SINGLES DP	FT.	GPM PD. PSI	
	KELLY DOWN	FT.		
	TOTAL	FT.		
	WT. OF STRING	LBS.		

MUD RECORD	
TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV YP	
GELS	
WL-CC'S	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	TO	DR'L'D RUN OR CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT ON BIT (1000's)	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8.00	6.00			R.G. UP UNLOAD TRUCKS

DRILLER

EVENING TOUR

FORM 375 APPROVED APPROVED

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

DAILY DRILLING REPORT REPORT NO.

LEASE: CORMACK A-1 WELL NO. API WELL NUMBER DATE: Jan 22/72

OPERATOR CONTRACTOR: KEEN DRLG LTD. RIG NO. 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: Fred J Bonder SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Fred Hodgkin

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

LOCATION

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

WIRE LINE RECORD REEL NO.

SIZE NO. LINES FT. SLIPPED

FT. CUT OFF PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL			
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				

COMPLETION: A. PERF'R'TN B. TBG TRIPS C. TREATING D. SWABBING E. TESTING F. ADDIT'NL G.

TOTALS

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

DRILLING ASSEMBLY (At end of run)

NO.

BIT FT.
STB Ream OD FT.
D.C. ID OD FT.
STB Ream OD FT.
D.C. ID OD FT.
STB Ream OD FT.
STANDS DP FT.
SINGLES DP FT.
KELLY DOWN FT.
TOTAL FT.
WT. OF STRING LBS.

BIT RECORD

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

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

MORNING TOUR

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR. D RM. R CORE. C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN

DEVIATION RECORD

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

TIME LOG FROM / TO ELAPSED TIME CODE NO. DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

LOAD OUT CAMP MOVE TO CORMAC SET UP CAMP
START LIGHT PLANT.

DRILLER

DAY TOUR

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR. D RM. R CORE. C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN
				JAN 23/72								

DEVIATION RECORD

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

TIME LOG FROM / TO ELAPSED TIME CODE NO. DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

9:00 7:00 SET 42 CAMP PARTIES WORK ON CAMP AFTER MOVE

DRILLER

EVENING TOUR

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR. D RM. R CORE. C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN

DEVIATION RECORD

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

TIME LOG FROM / TO ELAPSED TIME CODE NO. DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

RIG UP CAMP
UNLOAD TRUCKS

DRILLER

FORM 3TS APPROVED APPROVED

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

DAILY DRILLING REPORT REPORT NO.

LEASE: Fleth A-1 WELL NO. API WELL NUMBER DATE: JAN 19/70

OPERATOR: AMOCO CONTRACTOR: KERR DRLG LTD RIG NO. 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: Fred J Bordas SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Fred Hodgkins

LOCATION

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

WIRE LINE RECORD REEL NO.

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

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. ON TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OF TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL			
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERFORATING			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDT'NL			
	G			
TOTALS				

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB NMR	OD	FT.
	D.C. ID	OD	FT.
	STB NMR	OD	FT.
	D.C. ID	OD	FT.
	STB NMR	OD	FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.

WT. OF STRING ____ LBS.

BIT RECORD

BIT NO. | SIZE | MFG. | TYPE | JETS 1 32nds | SER. NO. | DEPTH OUT | DEPTH IN | TOTAL FTG. | TOTAL HRS. RUN | COND. T.B.'s T.B. GAGE | GPM PD-PSI

MUD RECORD

TIME | WEIGHT | PRESSURE GRADIENT | VISC.-SEC. | PV YP | GELS | ML.-CC'S | pH | SOLIDS %

MUD & CHEMICALS ADDED: TYPE AMT. TYPE AMT.

MORNING TOUR

FOOTAGE / FORMATION

FOOTAGE FROM	TO	DR'L'D RUN OR CORE	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD MUD CONTROL

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4P	4P			CHANGE O.I. AMOCO CREWS FARR OUT 2.9
				GEORGE MITCHEL - ROBERT SAXON SWAMP FOR KAPS TRUCK

DRILLER: Fred Hodgkins

DAY TOUR

FOOTAGE / FORMATION

FOOTAGE FROM	TO	DR'L'D RUN OR CORE	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD MUD CONTROL
				Jan 20/70								

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4P	4P			TEAR OUT R.G CLEAN UP LOCATION R.G OUT RIG MOTORS

DRILLER: Fred Hodgkins

DAY TOUR

FOOTAGE / FORMATION

FOOTAGE FROM	TO	DR'L'D RUN OR CORE	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD MUD CONTROL
				Jan 21/70								

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
9P	10P			TEAR OUT Rig

DRILLER: Fred Hodgkins

EVENING TOUR

DAILY DRILLING REPORT REPORT NO.

LEASE | WELL NO. | API WELL NUMBER | DATE: Jan 16 '70

OPERATOR: Amoco | CONTRACTOR: Veco Drlg LTD. | RIG NO.: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE | SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Fred Hadyka

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

LOCATION

WIRE LINE RECORD REEL NO.

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	MAN. YD CYL. NO.	SET AT
LAST CASING, TUBING, OR LINER							

SIZE | NO. LINES | FT. SLIPPED | FT. CUT OFF | PRESENT LENGTH | TON MI. ON TRIPS SINCE LAST CUT | CUMULATIVE TON MI. ON TRIPS

TIME DISTRIBUTION - HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL			
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'N'G			
	B. TRG. TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDT'NL			
	G.			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1 32nds	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. T. B. GAGE	
GPM PD-PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

WORKING TOUR

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1 32nds	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. T. B. GAGE	
GPM PD-PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1 32nds	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. T. B. GAGE	
GPM PD-PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR'D MIN. CORE	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT (1000's)	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
				Start Light Plant
				Start Mix Camp.
				Started Camp 6 PM 1-16-70 FH.

DRILLER: Hadyka

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR'D MIN. CORE	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT (1000's)	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN

Jan 17 '70

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
9am	5pm			Start Keen Roller Warden
				Haul Water For Camp
				Tear Out Camp Partsns

DRILLER: Hadyka

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR'D MIN. CORE	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT (1000's)	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	PUMP NO. LINER SIZE	PUMP NO. L.P.M.	METHOD RUN

Jan 18 '70

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
9am	4pm			Tear Out Camp Partsns
				Clean up Camp Location

DRILLER: Hadyka

FORM 3TD APPROVED APPROVED

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