Indian and Northern Affairs Affaires indiennes et du Nord

Well Name
Nom du puits: Amoco A-4 Pointed Mountain A-55

Drilling Authority No.
Autorisation de forage n° 746

Field/Area
Gisement/Région

Date Issued
Date d'émission 20-02-74

Location: Unit / Section
Emplacement: Unité A-55-60-30-123-45

Permit or Lease
703-70

Latitude 60° 24' 05.021" Longitude 123° 54' 39.056"

U.W.L.R.
N.R.U.E.P. 60.40139 - 123.91085

U.W.I. No.
N.T.P. No. 300A556030123450

File Microfilmed

Rig Release Date
Date de transfert de la tour de forage 13-08-74

Tour Sheets, Microfilmed

Status
Statut Gas Well Development

Information Release Date
Date de publication autorisée des informations 13-09-77

CHANGE OF NAME:
CHANGEMENT DE NOM:

Change of Location
Changement de emplacement

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

Drilling Authority No. 746

CANADA

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT

OIL AND MINERAL DIVISION

Department of Indian Affairs and Northern Development
Conservation Engineer
FEB 11 1974
Yellowknife, N.W.T.
Northern Economic Development Branch

Application for a Drilling Authority

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

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

Name and number of well . . Amoco A-4 Pointed Mountain A-55

Location: Unit . . A . . Section . . 55 . . Grid 60 - 30 - 123 - 45
Latitude 60° 24' 05.021" Longitude 123° 54' 39.056"
Unique Well Identifier 300A556030123450
Universal Well Location Reference Lat. 60.401397° N., Long. 123.910850° W.

Elevation: Ground 1472' K.B. N/A feet above sea-level.
Well is expected to produce from Nahanni (Mid-devonian carbonate) formation at a depth of about 10,200 feet. Expected total final depth 13,500
Area assigned to well Development Well
(for District Conservation Engineer's use only)

Permit No. Lease No. 703-70 Acreage 12,624
Permittee, licensee, or lessee Amoco Canada Petroleum Company Ltd.
Exploratory Licence No. 2266
Surface owned by Crown or Crown
(If alienated submit name and address of owner and occupant.)

Petroleum and natural gas rights owned by Crown
We propose to use the following strings of casing, either cementing or landing them as indicated below:–

Casing Size O.D. (Inches)	Weight (Lb./Ft.)	Grade	New or Used	Estimated Depth	Sacks of Cement
1.					
2.		See Attachment			
3.					
4. Requested M.D.T. to specify Pressure Rating of B.O.P. equipment					
5. on this well - not less than 5000 p.s.i. below 10,000'					

what pressure rating ? psi ?

Expected water, gas, and oil horizons and type of control equipment. Water at Mattson and Gas at Nahanni. Drilling mud and blow out preventors: 1 hydril and 1 double gate shaeffer hydril with remote control.

Well will be drilled with Rotary Rig No. 72 by Loffland Brothers of Canada
(Drilling Contractor or company)

7th Floor, Elveden House, Calgary

Responsible agent of applicant:– Contractor's Business Licence No. 1-0020
At well J. W. Savage At registered office Same
Address 10603 - 107 Avenue, Edmonton Address Same
It is understood that if changes become necessary, notice of the change of plan will be submitted.
Dated at Edmonton, this 8 day of February 1974.
Signed by . . . Company Amoco Canada Petroleum Co. Ltd.
Title Supervisor in Charge Operator's Licence No. 2266

(For Oil and Mineral Division use only)

APPROVED

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

PLEASE SEE ATTACHED SHEET FOR CONDITIONS OF APPROVAL.

Dated. February 20, 19 74.

District Conservation Engineer

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

IAND 52-90-1 (8-71)

Voir au verso

AMOCO A-4 POINTED MOUNTAIN A-55

CASING PROGRAM

Size O.D. Inches	Weight Lb./Ft.	Grade	New or Used	Estimated Depth	Sacks of Cement
Conductor Casing					
20"	94.0#	H-40	New	0 - 230'	To surface
Surface Casing					
13 3/8"	61.0#	K-55	New	0 - 30'	To surface
13 3/8"	48.0#	H-40	New	30 - 1411'	To surface
13 3/8"	54.5#	K-55	New	1411 - 2165'	To surface
13 3/8"	61.0#	K-55	New	2165 - 2300'	To surface
Intermediate Casing					
9 5/8"	47.0#	N-80	New	0 - 30'	As required
9 5/8"	40.0#	N-80	New	30 - 655'	As required
9 5/8"	40.0#	K-55	New	655 - 1780'	As required
9 5/8"	36.0#	K-55	New	1780 - 1832'	As required
9 5/8"	40.0#	K-55	New	1832 - 3599'	As required
9 5/8"	40.0#	N-80	New	3599 - 5052'	As required
9 5/8"	43.5#	N-80	New	5052 - 6583'	As required
9 5/8"	47.0#	N-80	New	6583 - 7504'	As required
9 5/8"	43.5#	SO-95	New	7504 - 9000'	As required
Production Casing					
7"	26.0#	SO-95	New	0 - 30'	As required
7"	23.0#	SO-95	New	30 - 1282'	As required
7"	23.0#	N-80	New	1282 - 2396'	As required
7"	26.0#	K-55	New	2396 - 3286'	As required
7"	26.0#	K-55	New	3286 - 5659'	As required
7"	23.0#	SO-95	New	5659 - 9679'	As required
7"	26.0#	SO-95	New	9679 - 12500'	As required

TO BE ATTACHED TO AND MADE A PART OF DRILLING AUTHORITY NO. 746

FOR AMOCO A-4 POINTED MOUNTAIN A-55 APPROVED FEBRUARY 20, 1974

CONDITIONS OF APPROVAL:

1. Copies of this Drilling Authority or Amendments to a Drilling Authority shall be exhibited at the drilling rig in both the Doghouse and the Drilling Foreman's office between spud and rig release dates.

2. The Company shall submit to this office, on Tuesday of each week/daily, the latest reports received on the progress of the well.

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

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

5. Approval must be obtained from the District Conservation Engineer to run any casing or liners not approved on the Drilling Authority.

6. All shows of oil and/or gas, and water flows, or any unusual events shall be reported to the District Conservation Engineer immediately.

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

8. Two field print copies of all well logs and three copies of the core analyses and fluid analyses must be forwarded to the District Conservation Engineer as soon as they are available.

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

10. The District Conservation Engineer must be notified at least 24 hours before spudding the well.

11. Permission to drill beyond the approved final total depth MUST be obtained from the District Conservation Engineer.

G. E. Blue
District Conservation Engineer
District 2

/mj

Drilling Authority No. .....

CANADA

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT

OIL AND MINERAL DIVISION

Application to Amend a Drilling Authority

This application, in triplicate, must be submitted and approved before commencing operations. If the well location is changed, this application must be accompanied where required, with a plan of survey approved by the Surveyor General.

In compliance with the "Canada Oil and Gas Land Regulations", application is hereby made to amend Drilling Authority No. 746, concerning Amoco A-4 Pointed Mountain A-55

(Name and Number of Well)

Original application - Run surface casing from surface to 2300'KB.

This amendment - Run surface casing from surface to 2500'KB.

Reasons for the amendments: The 2300' surface casing string was designed estimating the top of the mississippian formation to be at 1815'KB. However the top of the formation was found at 2326'KB. In order to set the casing into a competent section of the mississippian, we request permission to run to 2500'KB.

Dated at Edmonton, this 30 day of April, 19 74

Signed by .....

Title Area Superintendent

Company Amoco Canada Petroleum Co. LTd.

(For Oil and Mineral Division use only)

APPROVED

This application has been examined and approved subject to the following conditions: Confirming verbal approval given by Mr. G.E. Blue on April 7, 1974.

Date May 6, 19 74

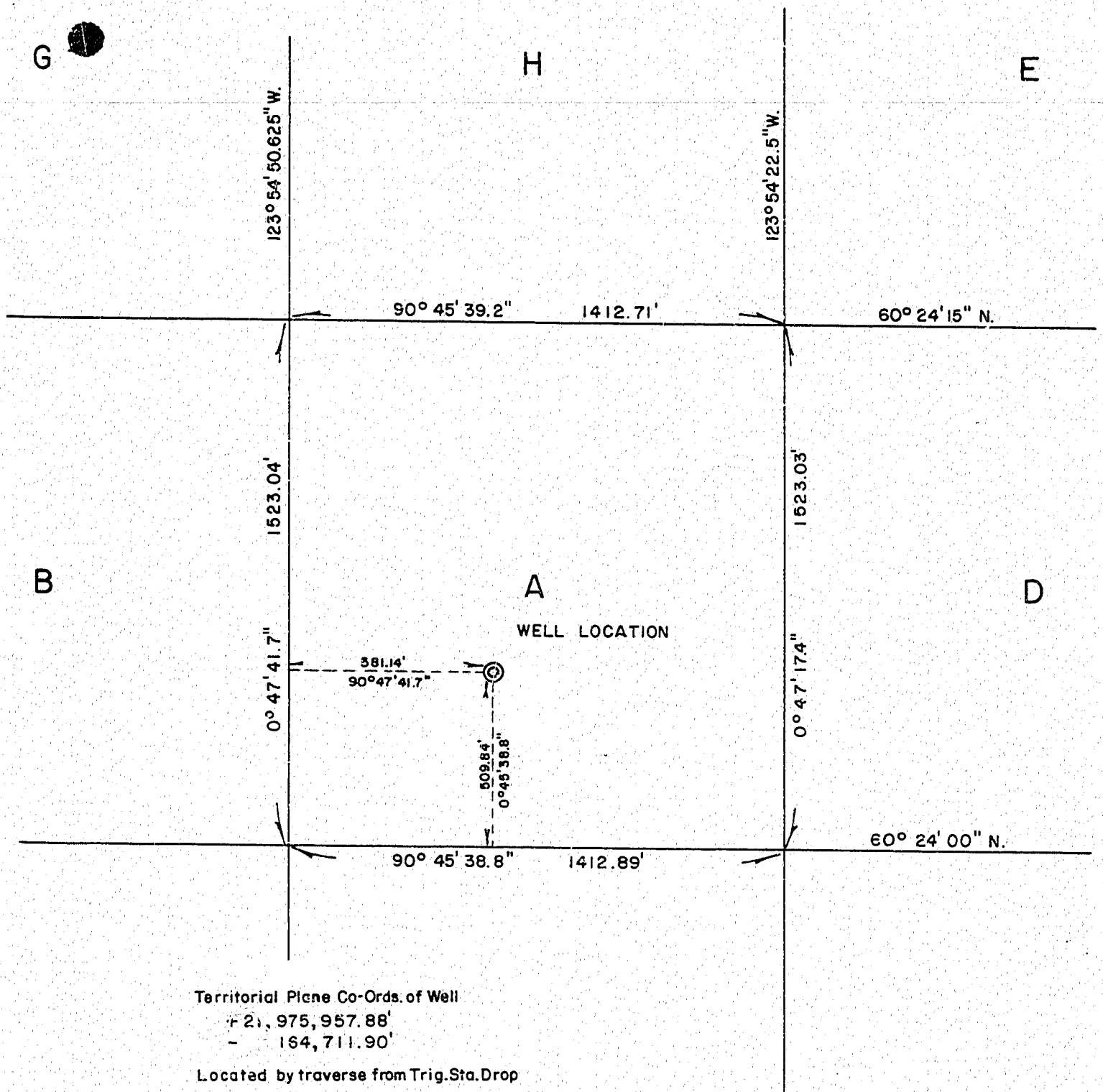
District Conservation Engineer

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

IAND 52-90-3 (8-71)

Voir au verso

PRELIMINARY PLAN



PLAN OF SURVEY OF WELLSITE LOCATION

AMOCO A-4 POINTED MOUNTAIN A-55

Latitude 60° 24' 05.021" Longitude 123° 54' 39.056"

UNIT A, SECTION 55, GRID AREA 60°30'N. - 123°45' W.

AMOCO CANADA PETROLEUM COMPANY LTD.

SIGNATURES:
AMOCO CANADA PETROLEUM COMPANY LTD.

Mel Brethour P Eng Harold A Eberts
Staff Assistant

I hereby certify that the survey represented by this plan is correct and true and was completed on February 7, 1974.

Lloyd E. Hayes D.L.S.

Lew G. Hayes Witness.

ELEVATION		CO-ORDINATES
ON GROUND AT WELLHEAD : 1478.6'	N.E. Cor. = S.E. Cor. = N.W. Cor. = S.W. Cor. =	WELLHEAD IS LOCATED 509.84 FEET NORTH OF THE SOUTH BDY. AND 581.14' FEET EAST OF THE WEST BDY. OF UNIT A, SECTION 55.

LEGEND	AREAS REQUIRED		
Survey Monument found..... ●	WELLSITE	=	ACRES
Iron Bar found..... ♦	ACCESS ROAD	=	ACRES
Iron Bar established..... ◊		=	ACRES
SCALE: 1" = 400'	TOTAL AREA	=	ACRES

WHITE, HOSFORD & IMPEY LTD.
10404 - 100 th. Street,
Grande Prairie, Alberta.

GRANDE PRAIRIE, EDMONTON, WHITEHORSE, YELLOWKNIFE.

FILE NO.: 73373-1 DATE: February 10, 1974.

AMOCO A-4 POINTED MOUNTAIN A-5

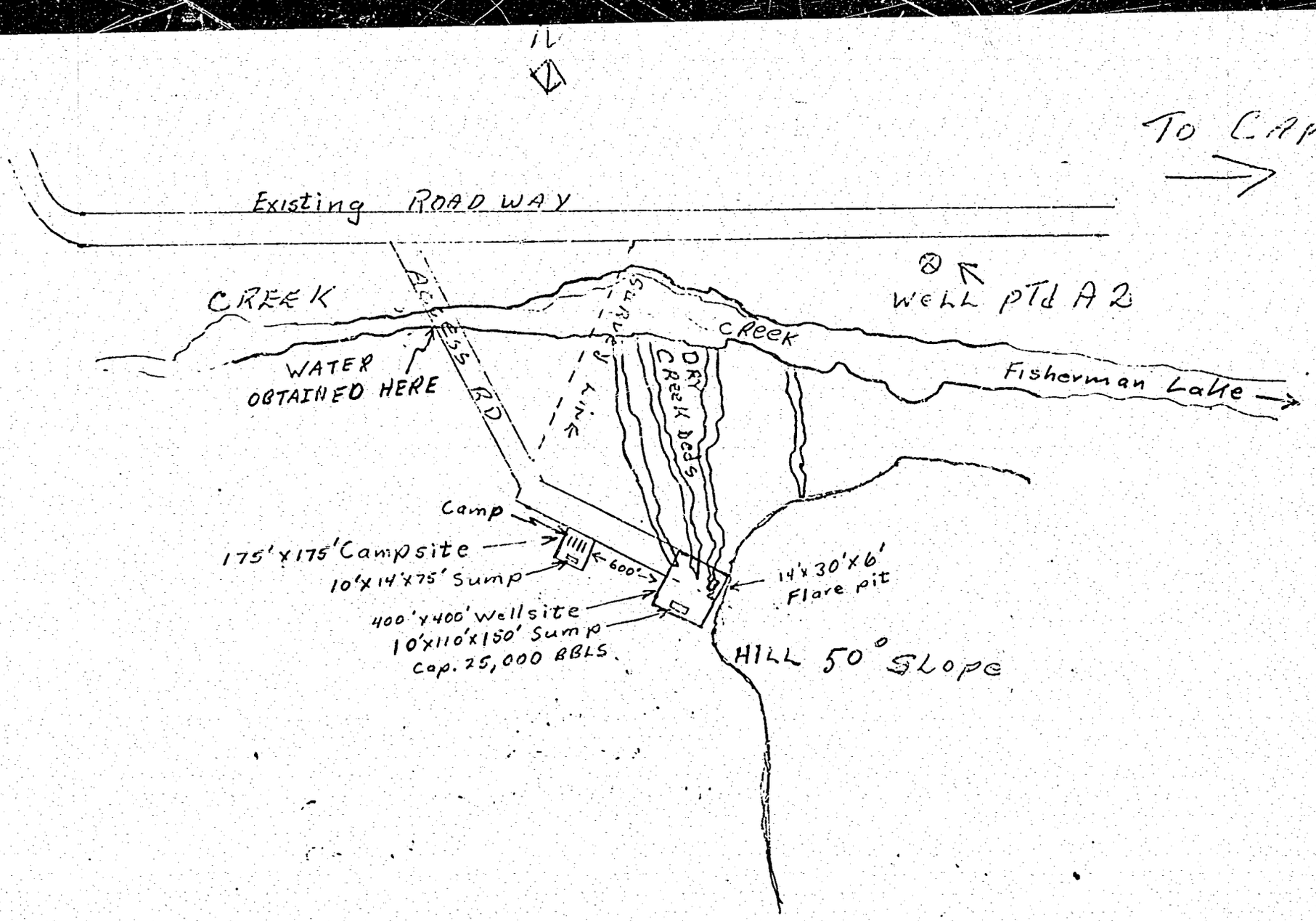
GEOLOGICAL PROGNOSIS

SURFACE	MATTSON
2005'	Mississippian Limestone Shale
6965'	Banff (Hard)
8435'	First Black Shale
10205'	Mid devoniam Carbonate (Nahanni)

AMOCO A-4 POINTED MOUNTAIN A-55

GEL-BENEX MUD SYSTEM

MATERIAL	QUANTITY
Barite	8000 sxs
Bentonite	5000 sxs
Benex	2000 bags
C M C	200 sxs
WL-100	200 sxs
Soda Ash	150 sxs
Caustic Soda	200 sxs
Kwik Seal (Coarse)	400 sxs
Kwik Seal (Medium)	400 sxs
Diaseal M	200 sxs
Sawdust	300 sxs
Bicarbs	50 sxs
Ligno Sulfonates	50 sxs
Defoamer	100 gals
Pipe Freeing	150 gals
Agent A-XMDL (Torque Reducer)	100 gals
Super Visbestos	500 sxs
Lime	40 sxs
Gilsonite X-Pel-G	1500 sxs

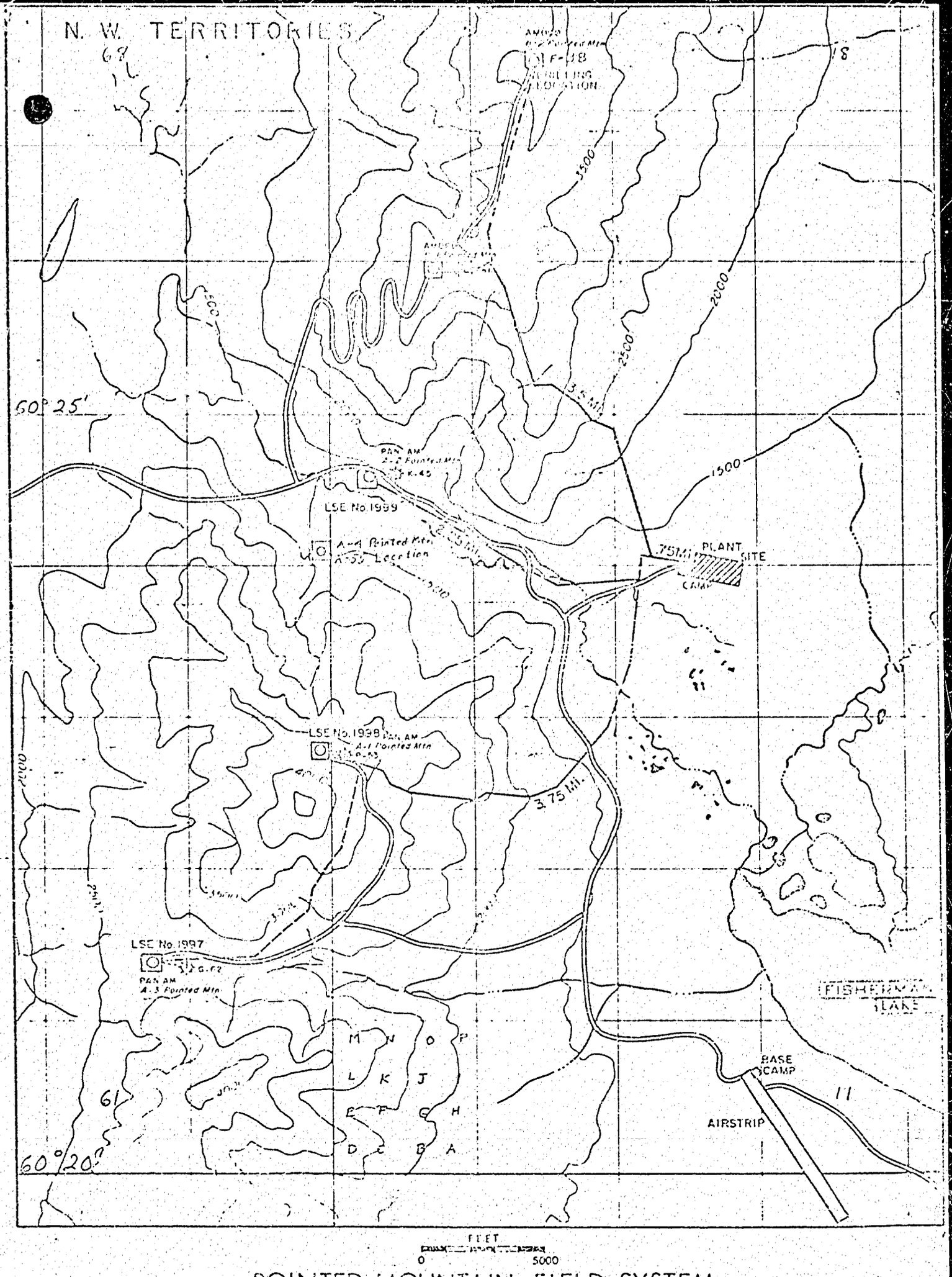


Amoco A-4 Pointed Mountain A-55

By G. B. CROSS

Drawing not to scale

5



POINTED MOUNTAIN FIELD SYSTEM

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

14240 - 115 AVENUE, EDMONTON 42, ALBERTA

SUMP FLUID ANALYSIS

COMPANY: AMOCO CANADA PETROLEUM COMPANY LTD. LABORATORY NUMBER: E72-1727
FORMATION: Mattson ELEVATION: K.B. 4170'
WELL: Pointed Mtn. B-2 (F-38) DATE SAMPLED, BY: Nov. 10, 1972 by K. Samis
SAMPLED FROM: Blooey Line
DATE RECEIVED: Nov. 13, 1972; Analysis instructions received Dec. 1, 1972
DRILLING DEPTH: 2600'.
APPEARANCE: Soapy, Trace sediment.

Hydrocarbon Present: Yes ☐ No ☒

Calcium Chloride Treatment Required To Clarify: Yes ☐ No ☒ Lbs./Bbl.

Filtered Sample: Color Green Odor Soapy

pH

Calcium (Mg/l.)

Chloride (Mg/l.)

Sulfate (Mg/l.)

FISH BIOASSAY

Immediate	OK
24 Hour	OK
48 Hour	OK
72 Hour	OK
96 Hour	OK

Sample of formation fluid collected while air drilling with mist (foam).

NOTE:

Routine complete analysis done on Laboratory Report Number: E72-1394.

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

WATER ANALYSIS

Lab No. E72-1394

Received: Nov. 13, 1972 Reported: Nov. 17, 1972

Well: Location: Pointed Mtn. B-2 (F-38)

Operator: AMOCO CANADA PETROLEUM COMPANY LTD.

Field or Area: North West Territories

Elev.: K.B. 4170' Grd.

Zone/Formation: Mattson

Sample Interval: 2600'.

Method of Production:

Sampled from: Blooey Line

Sampled by: K. Samis

Date: Nov. 10, 1972

OTHER PERTINENT DATA Formation Fluid Collected While Air Drilling With Mist Foam.

(Signed)

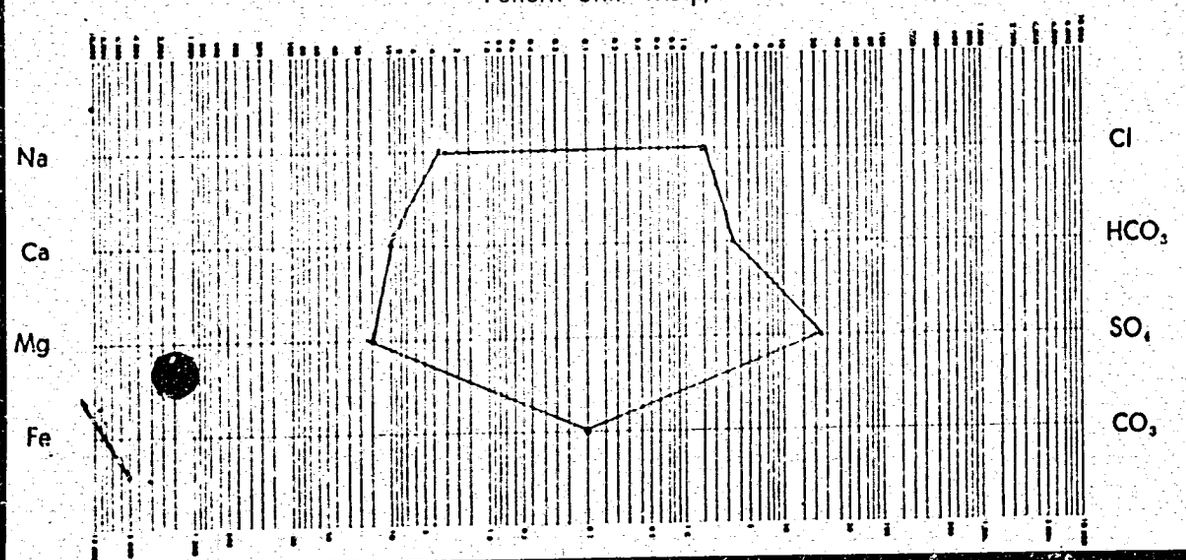
	Na & K	K	Ca	Mg					SO_4	Cl			CO_3	HCO_3	OH	
Mg./L	81		211	195					1,207	55			Nil	210	Nil	
Meq./L	3.54		10.53	16.03					25.11	1.55			---	3.44	---	
Meq. %	5.88		17.49	26.63					41.71	2.57			---	5.71	---	

Total Solids Mg/L: By Evaporation 2,074 Fe Present Specific Gravity 1.002 @60°F Observed pH 7.6 @ 78 °F

Calculated 1,959 After Ignition 1,780 H_2S Nil Refractive Index 1.3334 @25°C Resistivity 5.33 ohm meters @ 68 °F

Organic Matter: Trace

Pattern Unit Meq./L



Remarks and Conclusions

Sample consisted of colorless water with a trace of sediment present.

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

EDMONTON — FORT ST. JOHN — CALGARY

— WATER ANALYSIS —

CONTAINER IDENTITY

LABORATORY NUMBER
E74-1253

OPERATOR NAME AND ADDRESS
AMOCO CANADA PETROLFUM COMPANY LTD.

SAMPLE LOCATION

WELL OR SAMPLE LOCATION NAME
POINTED MTN. A 4

ELEVATIONS
KB GRD

FIELD OR AREA
N.W.T.

POOL OR ZONE

NAME OF SAMPLER
LEN ADAIR

COMPANY

TEST TYPE & NO

TEST RECOVERY
FLUID FROM WATER FLOW

TEST INTERVAL OR PERFS

POINT OF SAMPLE
1508' KB

AMT & TYPE OF CUSHION

MUD RESISTIVITY
@ °F

TYPE OF PRODUCTION
PUMPING FLOWING GAS LIFT SWAB

PRODUCTION RATES
WATER BBLS/D OIL BBLS/D GAS MCF/D

PRESSURES - PSIG
SEPARATOR TREATER RESERVOIR CONTAINER WHEN SAMPLED CONTAINER WHEN RECEIVED

TEMPERATURES (°F)
SEPARATOR TREATER CONTAINER WHEN SAMPLED CONTAINER WHEN RECEIVED

DATE SAMPLED (D/M/Y)	DATE RECEIVED (D/M/Y)	DATE ANALYZED (D/M/Y)	ANALYST	REMARKS
09/04/74	29/04/74	09/05/74	R.J. MALONEY	

ION	MG/L	MG%	MEQ/L	ION	MG/L	MG%	MEQ/L
Na	312	17.07	13.56	Cl	27	1.48	0.76
K				Br			
Ca	84	4.60	4.19	I			
Mg	106	5.80	8.71'	HCO_3	300	16.41	4.92
Ba				SO_4	999	54.65	20.78
Sr				CO_3	NIL		
Fe	PRESENT			OH	NIL		
				H_2S	NIL		

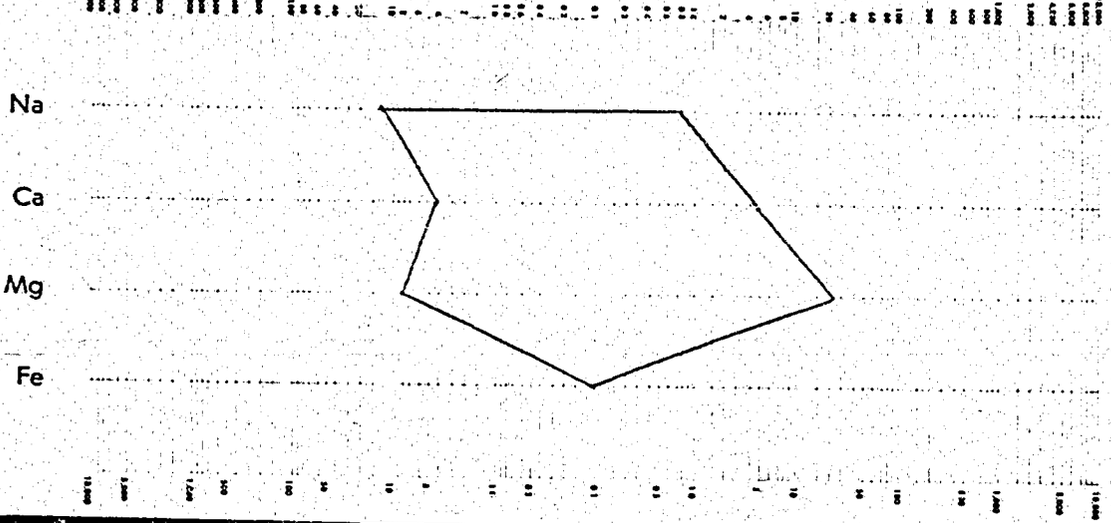
TOTAL SOLIDS Mg/L
BY EVAPORATION @ 110°C: 1780
BY EVAPORATION @ 180°C:
AT IGNITION: 1596
CALCULATED: 1828

ORGANIC MATTER: Present

SPECIFIC GRAVITY: 1.002 @ 60°F
REFRACTIVE INDEX: 1.3332 @ 25°C

OBSERVED PH: 8.3 @ 74 °F
RESISTIVITY (Ohm/meters): 4.62 @ 25°C

LOGARITHMIC PATTERN MEQ PER LITER



Remarks and Conclusions

The sample consisted of 80% clear, colorless water, 20% sediment layer.

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

EDMONTON — FORT ST. JOHN — CALGARY

— WATER ANALYSIS —

CONTAINER IDENTITY

LABORATORY NUMBER
E74-1253

OPERATOR NAME AND ADDRESS
AMOCO CANADA PETROLEUM COMPANY LTD.

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WELL OR SAMPLE LOCATION NAME
POINTED MTN. A 4

ELEVATIONS KB GRD

FIELD OR AREA
N.W.T.

POOL OR ZONE

NAME OF SAMPLER
LEN ADAIR

COMPANY

TEST TYPE & NO

TEST RECOVERY
FLUID FROM WATER FLOW

TEST INTERVAL OR PERFS

POINT OF SAMPLE
1508' KB

AMT & TYPE OF CUSHION

MUD RESISTIVITY @ °F

TYPE OF PRODUCTION
PUMPING FLOWING GAS LIFT SWAB

PRODUCTION RATES
WATER BBLS/D OIL BBLS/D GAS MCF/D

PRESSURES - PSIG

SEPARATOR	TREATER	RESERVOIR	CONTAINER WHEN SAMPLED	CONTAINER WHEN RECEIVED

TEMPERATURES (°F)

SEPARATOR	TREATER	CONTAINER WHEN SAMPLED	CONTAINER WHEN RECEIVED

DATE SAMPLED (D/M/Y)	DATE RECEIVED (D/M/Y)	DATE ANALYZED (D/M/Y)	ANALYST	REMARKS
09/04/74	29/04/74	09/05/74	R.J. MALONEY	

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Ba				SO_4	999	54.65	20.78
Sr				CO_3	NIL		
Fe	PRESENT			OH	NIL		
				H_2S	NIL		

TOTAL SOLIDS Mg/L

BY EVAPORATION @ 110°C	BY EVAPORATION @ 180°C
1780	
AT IGNITION	CALCULATED
1596	1828

ORGANIC MATTER: Present

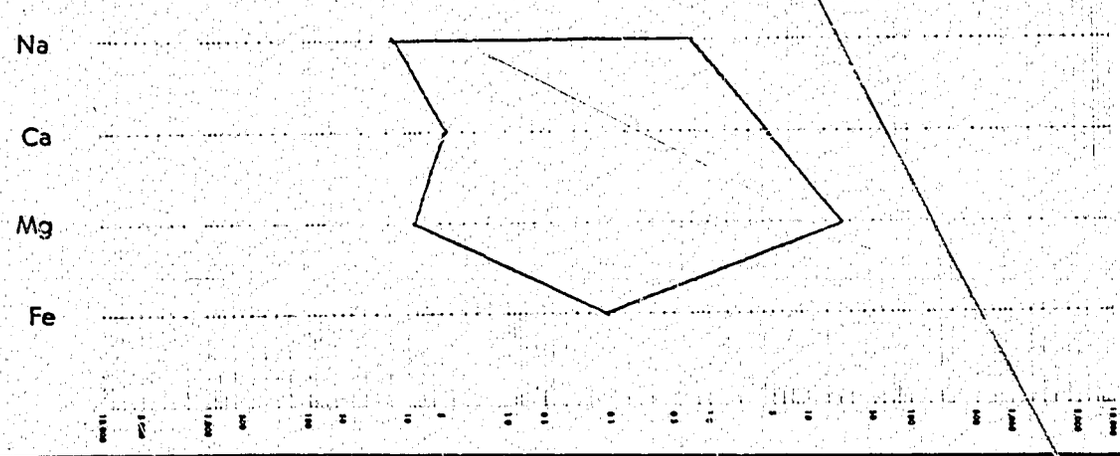
SPECIFIC GRAVITY	REFRACTIVE INDEX
1.002 @ 60°F	1.3332 @ 25°C

OBSERVED PH	RESISTIVITY (Ohm/meters)
8.3 @ 74 °F	4.62 @ 25°C

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LOGARITHMIC PATTERN MEQ PER LITER



CHEMICAL & GEOLOGICAL LABORATORIES LTD.

EDMONTON — FORT ST. JOHN — CALGARY

— WATER ANALYSIS —

CONTAINER IDENTITY

LABORATORY NUMBER
E74-1253

OPERATOR NAME AND ADDRESS
AMOCO CANADA PETROLEUM COMPANY LTD.

SAMPLE LOCATION

WELL OR SAMPLE LOCATION NAME
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ELEVATIONS KB GND

FIELD OR AREA
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TEST TYPE & NO

TEST RECOVERY
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POINT OF SAMPLE
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AMT & TYPE OF CUSHION

MUD RESISTIVITY @ °F

TYPE OF PRODUCTION
PUMPING FLOWING GAS LIFT SWAB

PRODUCTION RATES
WATER BBLS/D OIL BBLS/D GAS MCF/D

PRESSURES - PSIG

SEPARATOR	TREATER	RESERVOIR	CONTAINER WHEN SAMPLED	CONTAINER WHEN RECEIVED

TEMPERATURES (°F)

SEPARATOR	TREATER	CONTAINER WHEN SAMPLED	CONTAINER WHEN RECEIVED

DATE SAMPLED (D/M/Y)	DATE RECEIVED (D/M/Y)	DATE ANALYZED (D/M/Y)	ANALYST	REMARKS
09/04/74	29/04/74	09/05/74	R.J. MALONEY	

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Br			
I			
HCO_3	300	16.41	4.92
SO_4	999	54.65	20.78
CO_3	NIL		
OH	NIL		
H_2S	NIL		

TOTAL SOLIDS Mg/L

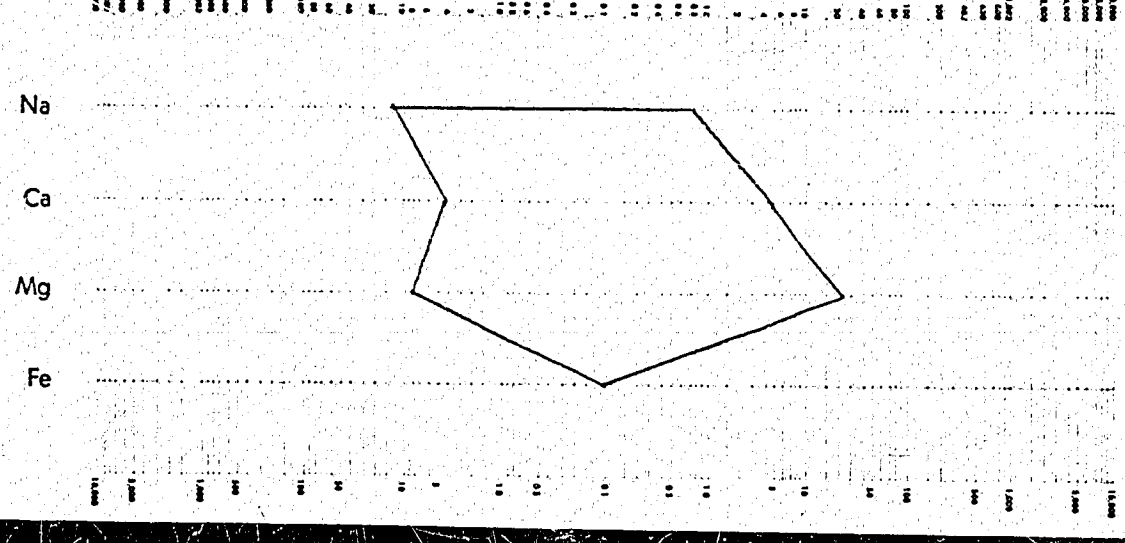
BY EVAPORATION @ 110°C	BY EVAPORATION @ 180°C
1780	
AT IGNITION	CALCULATED
1596	1828

ORGANIC MATTER: Present

SPECIFIC GRAVITY	REFRACTIVE INDEX
1.002 @ 60°F	1.3332 @ 25°C

OBSERVED PH	RESISTIVITY (Ohm/meters)
8.3 @ 74 °F	4.62 @ 25°C

LOGARITHMIC PATTERN MEQ PER LITER



Remarks and Conclusions

The sample consisted of 80% clear, colorless water, 20% sediment layer.

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

EDMONTON — FORT ST. JOHN — CALGARY

— WATER ANALYSIS —

CONTAINER IDENTITY

LABORATORY NUMBER
E74-1253

OPERATOR NAME AND ADDRESS
AMOCO CANADA PETROLEUM COMPANY LTD.

SAMPLE LOCATION

WELL OR SAMPLE LOCATION NAME
POINTED MTN. A 4

ELEVATIONS KB GRD

FIELD OR AREA
N.W.T.

POOL OR ZONE

NAME OF SAMPLER
LEN ADAIR

COMPANY

TEST TYPE & NO

TEST RECOVERY
FLUID FROM WATER FLOW

TEST INTERVAL OR PERFS

POINT OF SAMPLE
1508' KB

AMT & TYPE OF CUSHION

MUD RESISTIVITY @ °F

TYPE OF PRODUCTION
PUMPING FLOWING GAS LIFT SWAB

PRODUCTION RATES
WATER BBLS/D OIL BBLS/D GAS MCF/D

PRESSURES - PSIG
SEPARATOR TREATER RESERVOIR CONTAINER WHEN SAMPLED CONTAINER WHEN RECEIVED

TEMPERATURES (°F)
SEPARATOR TREATER CONTAINER WHEN SAMPLED CONTAINER WHEN RECEIVED

DATE SAMPLED (D/M/Y): 09/04/74
DATE RECEIVED (D/M/Y): 29/04/74
DATE ANALYZED (D/M/Y): 09/05/74
ANALYST: R.J. MALONEY
REMARKS:

ION	MG/L	MG%	MEQ/L	ION	MG/L	MG%	MEQ/L
No	312	17.07	13.56	Cl	27	1.48	0.76
K				Br			
Co	84	4.60	4.19	I			
Mg	106	5.80	8.71'	HCO_3	300	16.41	4.92
Ba				SO_4	999	54.65	20.78
Sr				CO_3	NIL		
Fe	PRESENT			OH	NIL		
				H_2S	NIL		

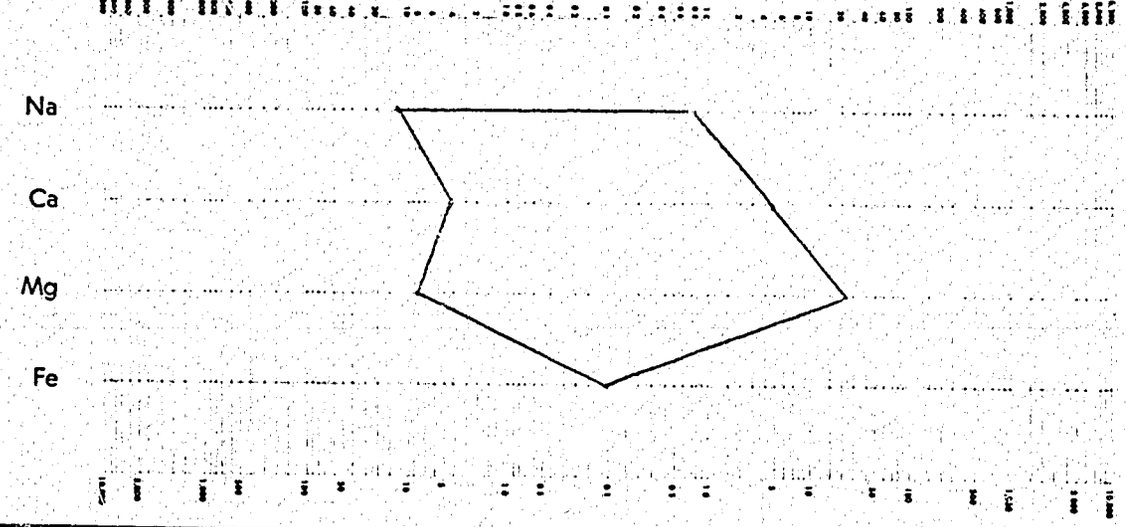
TOTAL SOLIDS Mg/L
BY EVAPORATION @ 110°C: 1780
BY EVAPORATION @ 180°C:
AT IGNITION: 1596
CALCULATED: 1828

ORGANIC MATTER: Present

SPECIFIC GRAVITY: 1.002 @ 60°F
REFRACTIVE INDEX: 1.3332 @ 25°C

OBSERVED PH: 8.3 @ 74 °F
RESISTIVITY (Ohm/meters): 4.62 @ 25°C

LOGARITHMIC PATTERN MEQ PER LITER



Remarks and Conclusions

The sample consisted of 80% clear, colorless water, 20% sediment layer.

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

EDMONTON — FORT ST. JOHN — CALGARY

— WATER ANALYSIS —

DA 746

A-55

CONTAINER IDENTITY:

LABORATORY NUMBER: E74-3327-5

OPERATOR NAME AND ADDRESS: AMOCO CANADA PETROLEUM COMPANY LTD.

SAMPLE LOCATION:

WELL OR SAMPLE LOCATION NAME: POINTED MTN A-4

ELEVATIONS: KB: GRD:

FIELD OR AREA:

POOL OR ZONE: NAHANNI

NAME OF SAMPLER: A. WOOLSEY

COMPANY:

TEST TYPE & NO.:

TEST RECOVERY: 180 BBLS. SWABBED

TEST INTERVAL OR PERFS: 11910'-11950'

POINT OF SAMPLE: FLUID LEVEL 7900'

AMT. & TYPE OF CUSHION:

MUD RESISTIVITY: @ °F

TYPE OF PRODUCTION: PUMPING | FLOWING | GAS LIFT | SWAB X

PRODUCTION RATES: WATER BBLS/D | OIL BBLS/D | GAS MCF/D

PRESSURES - PSIG: SEPARATOR | TREATER | RESERVOIR | CONTAINER: WHEN SAMPLED | WHEN RECEIVED

TEMPERATURES (°F): SEPARATOR | TREATER | CONTAINER: WHEN SAMPLED | WHEN RECEIVED

DATE SAMPLED (D/M/Y): 03/09/74 | DATE RECEIVED (D/M/Y): 06/09/74 | DATE ANALYZED (D/M/Y): 10/09/74 | ANALYST: R. J. MALONEY | REMARKS: SAMPLE #5

ION	MG/L	MG %	MEQ/L
Na	18987	31.36	825.92
K			
Ca	3724	6.15	185.83
Mg	462	0.76	37.98
Ba			
Sr			
Fe	PRESENT		

ION	MG/L	MG %	MEQ/L
Cl	37000	61.12	1043.40
Br			
I			
HCO_3	292	0.48	4.79
SO_4	74	0.12	1.54
CO_3	NIL		
OH	NIL		
H_2S	NIL		

TOTAL SOLIDS Mg/L

BY EVAPORATION @ 110°C: 66110

BY EVAPORATION @ 180°C:

AT IGNITION: 59720

CALCULATED: 60539

ORGANIC MATTER: Present

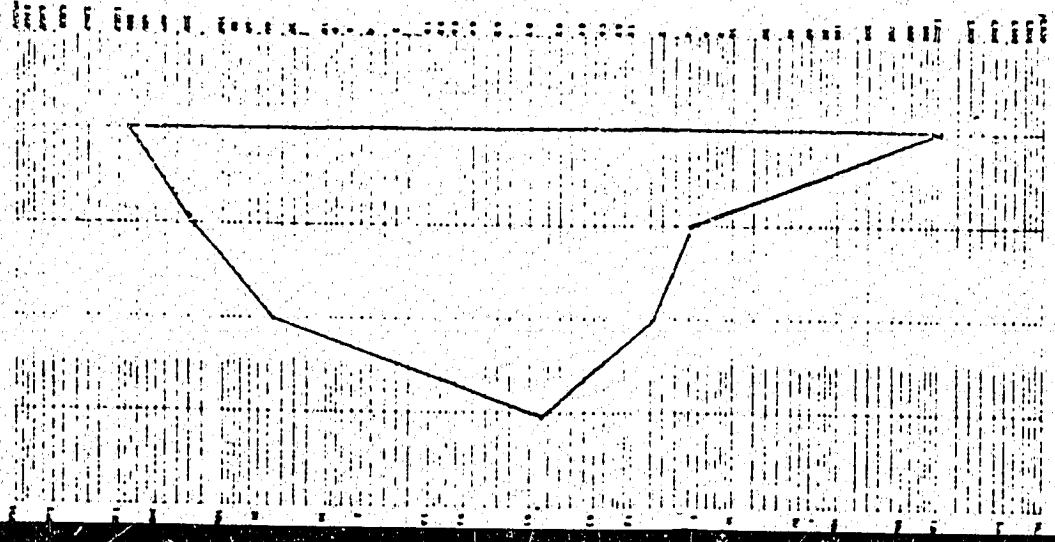
SPECIFIC GRAVITY: 1.044 @ 60°F

REFRACTIVE INDEX: 1.3434 @ 25°C

OBSERVED PH: 6.5 @ 70 °F

RESISTIVITY (Ohm/meters): 0.185 @ 25°C

LOGARITHMIC PATTERN MEQ PER LITER



Remarks and Conclusions

The sample consisted of clear, colorless water with a thin layer of sediment.

. . . Continued

AMOCO CANADA PETROLEUM COMPANY LTD. LABORATORY REPORT NUMBER: E74-3327

E74-3327-1: SAMPLE #1 - 105 bbls. Swabbed Fluid Level 5000'

pH: 7.0 @ 70°F

CHLORIDE: 42 Mg/l

RESISTIVITY: 6.44 OHM/meters @ 77°F

Clear, colorless water with a thin layer of sediment.

E74-3327-2: SAMPLE #2 - 180 bbls. Swabbed Fluid Level 6000'

pH: 6.7 @ 70°F

CHLORIDE: 13 Mg/l

RESISTIVITY: 6.64 OHM/meters @ 77°F

Clear, colorless water with a thin layer of sediment.

E74-3327-3: SAMPLE #3 - 140 bbls. Swabbed Fluid Level 6300'

pH: 6.0 @ 70°F

CHLORIDE: 30 Mg/l

RESISTIVITY: 6.99 OHM/meters @ 77°F

Clear, colorless water with a thin layer of sediment.

E74-3327-4: SAMPLE #4 - 165 bbls. Swabbed Fluid Level 7000'

pH: 6.3 @ 70°F

CHLORIDE: 328 Mg/l

RESISTIVITY: 2.16 OHM/meters @ 77°F

Clear, colorless water with a thin layer of sediment.

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

EDMONTON — FORT ST. JOHN — CALGARY

— WATER ANALYSIS —

CONTAINER IDENTITY

LABORATORY NUMBER: E74-3327-5

OPERATOR NAME AND ADDRESS: AMOCO CANADA PETROLEUM COMPANY LTD.

SAMPLE LOCATION

WELL OR SAMPLE LOCATION NAME: POINTED MTN A-4

ELEVATIONS: KB / GRD.

FIELD OR AREA

POOL OR ZONE: NAHANNI

NAME OF SAMPLER: A. WOOLSEY

COMPANY

TEST TYPE & NO.

TEST RECOVERY: 180 BBLS. SWABBED

TEST INTERVAL OR PERFS: 11910'-11950'

POINT OF SAMPLE: FLUID LEVEL 7900'

AMT. & TYPE OF CUSHION

MUD RESISTIVITY @ °F

TYPE OF PRODUCTION: PUMPING | FLOWING | GAS LIFT | SWAB X

PRODUCTION RATES: WATER BBLS/D | OIL BBLS/D | GAS MCF/D

PRESSURES - PSIG: SEPARATOR | TREATER | | RESERVOIR | CONTAINER WHEN SAMPLED | CONTAINER WHEN RECEIVED

TEMPERATURES (°F): SEPARATOR | TREATER | | CONTAINER WHEN SAMPLED | CONTAINER WHEN RECEIVED

DATE SAMPLED (D/M/Y): 03/09/74 — DATE RECEIVED (D/M/Y): 06/09/74 — DATE ANALYZED (D/M/Y): 10/09/74 — ANALYST: R. J. MALONEY — REMARKS: SAMPLE #5

ION	MG/L	MG%	MEQ/L	ION	MG/L	MG%	MEQ/L
Na	18987	31.36	825.92	Cl	37000	61.12	1043.40
K				Br			
Ca	3724	6.15	185.83	I			
Mg	462	0.76	37.98	HCO_3	292	0.48	4.79
Ba				SO_4	74	0.12	1.54
Sr				CO_3	NIL		
Fe	PRESENT			OH	NIL		
				H_2S	NIL		

TOTAL SOLIDS Mg/L

BY EVAPORATION @ 110°C: 66110 — BY EVAPORATION @ 180°C:

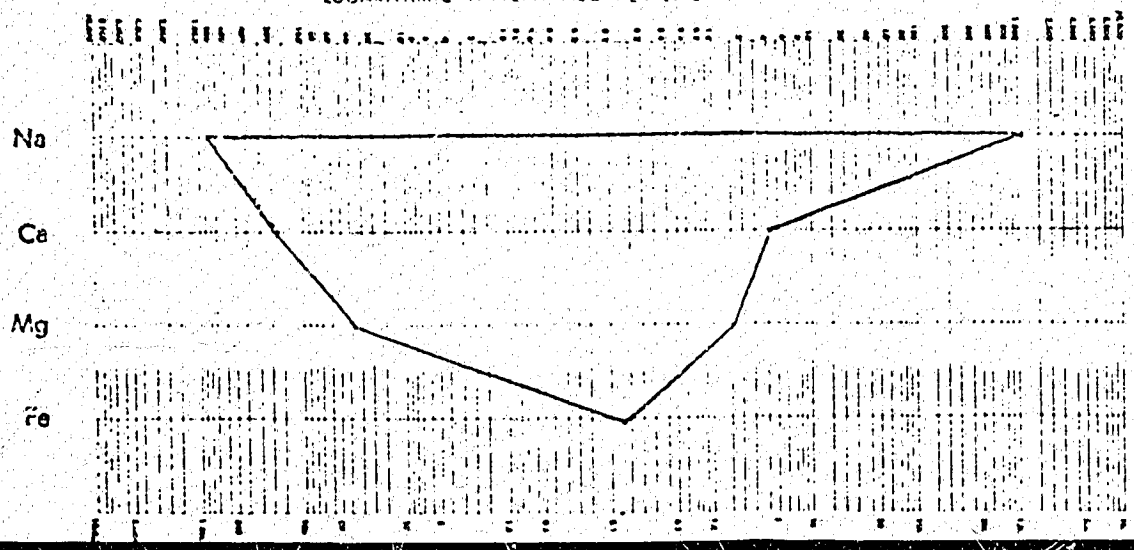
AT IGNITION: 59720 — CALCULATED: 60539

ORGANIC MATTER: Present

SPECIFIC GRAVITY: 1.044 @ 60°F — REFRACTIVE INDEX: 1.3434 @ 25°C

OBSERVED PH: 6.5 @ 70 °F — RESISTIVITY (Ohm/meters): 0.185 @ 25°C

LOGARITHMIC PATTERN MEQ PER LITER



Remarks and Conclusions

The sample consisted of clear, colorless water with a thin layer of sediment.

. . . Continued

AMOCO CANADA PETROLEUM COMPANY LTD. LABORATORY REPORT NUMBER: E74-3327

E74-3327-1: SAMPLE #1 - 105 bbls. Swabbed Fluid Level 5000'

pH: 7.0 @ 70°F

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CHLORIDE: 13 Mg/l

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E74-3327-3: SAMPLE #3 - 140 bbls. Swabbed Fluid Level 6300'

pH: 6.0 @ 70°F

CHLORIDE: 30 Mg/l

RESISTIVITY: 6.99 OHM/meters @ 77°F

Clear, colorless water with a thin layer of sediment.

E74-3327-4: SAMPLE #4 - 165 bbls. Swabbed Fluid Level 7000'

pH: 6.3 @ 70°F

CHLORIDE: 328 Mg/l

RESISTIVITY: 2.16 OHM/meters @ 77°F

Clear, colorless water with a thin layer of sediment.

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

EDMONTON — FORT ST. JOHN — CALGARY

— WATER ANALYSIS —

CONTAINER IDENTITY

LABORATORY NUMBER: E74-3327-5

OPERATOR NAME AND ADDRESS: AMOCO CANADA PETROLEUM COMPANY LTD.

SAMPLE LOCATION

WELL OR SAMPLE LOCATION NAME: POINTED MTN A-4

ELEVATIONS: KB / GRD.

FIELD OR AREA

POOL OR ZONE: NAHANNI

NAME OF SAMPLER: A. WOOLSEY

COMPANY

TEST TYPE & NO.

TEST RECOVERY: 180 BBLS. SWABBED

TEST INTERVAL OR PERFS: 11910'-11950'

POINT OF SAMPLE: FLUID LEVEL 7900'

AMT. & TYPE OF CUSHION

MUD RESISTIVITY: @ °F

TYPE OF PRODUCTION: PUMPING | FLOWING | GAS LIFT | SWAB X

PRODUCTION RATES: WATER BBLS/D | OIL BBLS/D | GAS MCF/D

PRESSURES - PSIG: SEPARATOR | TREATER | RESERVOIR | CONTAINER WHEN SAMPLED | CONTAINER WHEN RECEIVED

TEMPERATURES (°F): SEPARATOR | TREATER | CONTAINER WHEN SAMPLED | CONTAINER WHEN RECEIVED

DATE SAMPLED (D/M/Y): 03/09/74 | DATE RECEIVED (D/M/Y): 06/09/74 | DATE ANALYZED (D/M/Y): 10/09/74 | ANALYST: R. J. MALONEY | REMARKS: SAMPLE #5

ION	MG/L	MG%	MEQ/L	ION	MG/L	MG%	MEQ/L
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Sr				CO_3	NIL		
Fe	PRESENT			OH	NIL		
				H_2S	NIL		

TOTAL SOLIDS Mg/L

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BY EVAPORATION @ 180°C:

AT IGNITION: 59720

CALCULATED: 60539

ORGANIC MATTER: Present

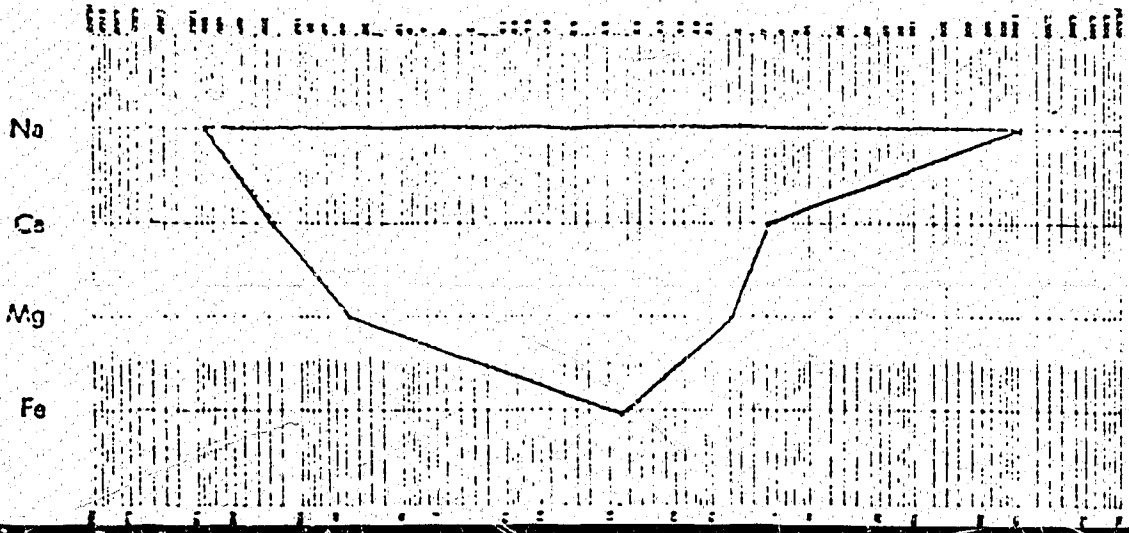
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REFRACTIVE INDEX: 1.3434 @ 25°C

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LOGARITHMIC PATTERN MEQ PER LITER



Remarks and Conclusions

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AMOCO CANADA PETROLEUM COMPANY LTD. LABORATORY REPORT NUMBER: E74-3327

E74-3327-1: SAMPLE #1 - 105 bbls. Swabbed Fluid Level 5000'

pH: 7.0 @ 70°F

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pH: 6.3 @ 70°F

CHLORIDE: 328 Mg/l

RESISTIVITY: 2.16 OHM/meters @ 77°F

Clear, colorless water with a thin layer of sediment.

CORE ANALYSIS REPORT

FOR

AMOCO CANADA PETROLEUM COMPANY LTD.

AMOCO A-4 POINTED MOUNTAIN A-55
POINTED MOUNTAIN
NORTHWEST TERRITORIES

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

CORE LABORATORIES – CANADA LTD.

COMPANY	AMOCO CANADA PETROLEUM COMPANY LTD.	FORMATION	NAHANNI	PAGE	1 of 8
WELL	AMOCO A-4 POINTED MOUNTAIN A-55	DRILLING FLUID	WATER BASE MUD	FILE	7004-4407
FIELD	POINTED MOUNTAIN, NORTHWEST TERRITORIES	ELEVATION		DATE REPORT	AUG. 1/74
LOCATION	60° 24' 05.02" N 123° 54' 39.05" W	ANALYSIS	FULL DIAMETER	ANALYSTS	BH CC NR
		REMARKS	ALL SAMPLES SANDBLASTED PRIOR TO KH ANALYSIS		

ABT = APPEARS SIMILAR TO	= = PERMEABILITY ∈	CONG = CONGLOMERATE	SHY = SHALY	A = ANHYDRITE	V = VUGULAR	I = INTERGRANULAR	SS = SMALL PLUG SAMPLE
B = BROKEN CORE (USED FOR SUMMARY PURPOSES)	FS = FINE SAND	DOL = DOLOMITE	/BA = / BREAK	FOSS = FOSSILIFEROUS	LV = LARGE VUGS	STY = STYLOLITIC	SL/ = SLIGHTLY
○ = PERMEABILITY > 3000 MD.	MS = MEDIUM SAND	SH = SHALE	BIT = PYROBITUMEN	XLN = CRYSTALLINE	SV = SMALL VUGS	HF = HORIZONTAL FRACTURE	V/ = VERY
	CS = COARSE SAND	LMY = LIMY	CARB = CARBONACEOUS	LAM = LAMINATIONS	PPV = PIN POINT VUGS	VF = VERTICAL FRACTURE	W/ = WITH

SAMPLE NUMBER	INTERVAL REPRESENTED, FEET		PERMEABILITY TO AIR, MILLIDARCYS			PERMEABILITY FEET	POROSITY, PER CENT	POROSITY FEET	DENSITY, gm./cc.		VISUAL EXAMINATION
	DEPTH	THICK	KMAX	K90°	KV				BULK	GRAIN	
	CORED INTERVAL 10296' - 11261'										
	CORE NO. 1 10296' - 10348' (REC. 52') (15 BOXES)										
1	10296.0-96.7	0.7	2.73	1.33	-0.01	1.91	3.7	2.59	2.71	2.82	FEW LV FEW SV
2	10296.7-97.4	0.7	4.29	1.96	0.67	3.00	7.5	5.25	2.61	2.82	LV FEW SV
3	10297.4-98.3	0.9	9.29	2.58	0.50	8.36	3.5	3.15	2.72	2.82	FEW LV SV
4	10298.3-99.2	0.9	0.53	0.32	-0.01	0.48	3.4	3.06	2.74	2.83	FEW LV SV PPV
5	10299.2-00.0	0.8	1.84	0.89	-0.01	1.47	2.1	1.68	2.78	2.84	FEW SV PPV
6	10300.0-00.8	0.8	0.30	0.13	-0.01	0.24	1.4	1.12	2.79	2.83	FEW SV
7	10300.8-01.6	0.8	2.90	2.11	-0.01	2.32	1.7	1.36	2.78	2.83	FEW SV PPV
8	10301.6-02.3	0.7	**	1.00	0.07	0.70	5.2	3.64	2.68	2.83	FEW LV SV PPV
9	10302.3-02.8	0.5	18.30	1.89	5.16	9.15	7.1	3.55	2.64	2.84	LV SV PPV F
10	10302.8-03.6	0.8	3.07	2.56	0.38	2.46	1.2	0.96	2.79	2.82	FEW SV PPV
11	10303.6-04.3	0.7	14.90	1.54	0.87	10.43	4.0	2.80	2.70	2.81	LV SV PPV
12	10304.3-05.4	1.1	13.60	12.70	0.58	14.96	1.0	1.10	2.80	2.83	I F
13	10305.4-06.3	0.9	6.24	3.80	0.89	5.62	0.9	0.81	2.80	2.83	I F
14	10306.3-07.2	0.9	4.14	2.09	4.19	3.73	2.0	1.80	2.76	2.82	FEW SV F
15	10307.2-08.3	1.1	9.17	4.05	0.75	10.09	2.5	2.75	2.74	2.81	FEW SV F
16	10308.3-09.5	1.2	3.77	3.10	2.40	4.52	2.0	2.40	2.77	2.83	FEW SV F
17	10309.5-10.5	1.0	34.20	21.10	10.60	34.20	3.1	3.10	2.74	2.83	SV PPV F
18	10310.5-11.7	1.2	519.00	24.20	88.40	622.80	3.3	3.96	2.73	2.83	SV PPV VF
19	10311.7-12.9	1.2	0.91	0.57	-0.01	1.09	1.2	1.44	2.78	2.81	FEW PPV F
20	10312.9-14.1	1.2	1.16	0.86	0.13	1.39	1.3	1.56	2.78	2.82	FEW PPV F
21	10314.1-14.9	0.8	83.90	0.64	11.90	67.12	1.0	0.80	2.80	2.82	FEW PPV VF
22	10314.9-16.1	1.2	2.35	1.50	0.23	2.82	3.2	3.84	2.74	2.83	SV PPV F
23	10316.1-17.4	1.3	3.30	1.63	-0.01	4.29	3.7	4.81	2.72	2.83	SV PPV
24	10317.4-18.5	1.1	7.59	5.15	1.37	8.35	5.1	5.61	2.69	2.84	FEW LV SV PPV F
25	10318.5-19.6	1.1	26.50	2.89	0.80	29.15	7.4	8.14	2.63	2.84	LV SV PPV
26	10319.6-20.4	0.8	**	21.70	0.50	17.36	6.8	5.44	2.64	2.83	LV SV PPV

COMPANY AMOCO CANADA PETROLEUM COMPANY LTD.
WELL AMOCO A-4 POINTED MOUNTAIN A-55

FILE 7004-4407

SAMPLE NUMBER	INTERVAL REPRESENTED, FEET		PERMEABILITY TO AIR, MILLIDARCYS			PERMEABILITY FEET	POROSITY, PER CENT	POROSITY FEET	DENSITY, gm./cc.		VISUAL EXAMINATION
	DEPTH	THICK	KMAX	K90°	KV				BULK	GRAIN	
	CORE NO. 1 (CONT'D)										
27	10320.4-21.6	1.2	5.72	5.31	0.34	6.86	7.2	8.64	2.63	2.83	LV SV PPV
28	10321.6-22.7	1.1	**	2.08	0.08	2.28	5.9	6.49	2.65	2.82	LV SV PPV
29	10322.7-23.5	0.8	11.20	3.37	0.68	8.96	6.3	5.04	2.65	2.83	LV SV PPV
30	10323.5-24.2	0.7	10.30	10.00	1.86	7.21	1.9	1.33	2.77	2.82	FEW SV F
31	10324.2-25.0	0.8	71.70	15.70	0.28	57.36	4.0	3.20	2.72	2.83	FEW LV SV PPV
32	10325.0-26.0	1.0	6.86	2.98	0.74	6.86	5.8	5.80	2.67	2.84	LV SV PPV
33	10326.0-27.1	1.1	**	1.81	-0.01	1.99	9.5	10.45	2.56	2.83	LV SV PPV
34	10327.1-27.9	0.8	1.82	1.53	-0.01	1.46	4.3	3.44	2.70	2.83	LV SV PPV
35	10327.9-28.8	0.9	**	1.41	-0.01	1.26	6.7	6.03	2.65	2.84	LV SV PPV
36	10328.8-29.6	0.8	1.11	1.03	-0.01	0.89	3.9	3.12	2.71	2.82	FEW LV SV PPV
37	10329.6-30.7	1.1	3.51	2.77	0.22	3.86	3.1	3.41	2.74	2.83	FEW LV SV PPV
38	10330.7-31.9	1.2	**	4.15	0.19	4.98	4.3	5.16	2.70	2.82	LV SV PPV
39	10331.9-32.8	0.9	1.34	1.28	-0.01	1.21	3.8	3.42	2.72	2.83	FEW LV SV PPV
40	10332.8-33.6	0.8	**	1.18	0.08	0.94	4.6	3.68	2.70	2.83	FEW LV SV PPV
41	10333.6-34.5	0.9	4.07	3.46	0.06	3.66	3.8	3.42	2.71	2.82	SV PPV F
42	10334.5-35.4	0.9	0.83	0.82	0.10	0.75	4.1	3.69	2.73	2.84	FEW LV SV PPV
43	10335.4-36.3	0.9	14.90	3.82	-0.01	13.41	5.4	4.86	2.67	2.82	LV SV PPV
44	10336.3-37.3	1.0	1.43	1.13	-0.01	1.43	3.9	3.90	2.71	2.82	LV SV PPV
45	10337.3-38.3	1.0	2.43	2.01	-0.01	2.43	4.2	4.20	2.70	2.82	FEW LV SV PPV
46	10338.3-39.0	0.7	0.70	0.69	0.18	0.49	6.6	4.62	2.65	2.83	LV SV PPV
47	10339.0-39.6	0.6	1.40	0.70	0.22	0.84	2.5	1.50	2.76	2.83	SV PPV
48	10339.6-40.8	1.2	5.22	2.93	-0.01	6.26	3.9	4.68	2.71	2.83	FEW LV SV PPV
49	10340.8-41.4	0.6	3.68	0.92	-0.01	2.21	2.7	1.62	2.75	2.82	FEW SV PPV
50	10341.4-42.2	0.8	1.71	1.66	0.09	1.37	4.4	3.52	2.70	2.83	LV SV PPV
51	10342.2-43.3	1.1	**	3.40	-0.01	3.74	3.6	3.96	2.70	2.81	FEW LV SV PPV F
52	10343.3-44.0	0.7	0.84	0.83	-0.01	0.59	1.8	1.26	2.78	2.83	FEW SV PPV
53	10344.0-44.7	0.7	0.95	0.92	-0.01	0.67	2.5	1.75	2.75	2.81	SV PPV F
54	10344.7-45.3	0.6	1.37	0.98	-0.01	0.82	2.4	1.44	2.74	2.81	FEW SV PPV F
55	10345.3-46.3	1.0	2.48	1.70	0.32	2.48	3.0	3.00	2.73	2.81	SV PPV F
56	10346.3-47.3	1.0	1.22	1.22	0.43	1.22	3.5	3.50	2.74	2.84	FEW LV FEW SV
57	10347.3-48.0	0.7	1.18	1.11	0.40	0.83	4.0	2.80	2.72	2.83	FEW LV FEW SV

CORE LABORATORIES – CANADA LTD.

COMPANY AMOCO CANADA PETROLEUM COMPANY LTD.
WELL AMOCO A-4 POINTED MOUNTAIN A-55

FILE 7004-4407

SAMPLE NUMBER	INTERVAL REPRESENTED, FEET		PERMEABILITY TO AIR, MILLIDARCYS			PERMEABILITY FEET	POROSITY, PER CENT	POROSITY FEET	DENSITY, gm./cc.		VISUAL EXAMINATION
	DEPTH	THICK	KMAX	K90°	KV				BULK	GRAIN	
	CORE NO. 2	10348' - 10396' (REC. 48') (14 BOXES)									
58	10348.0-48.9	0.9	1.47	1.28	0.24	1.32	2.8	2.52	2.75	2.83	SV
59	10348.9-49.9	1.0	**	0.59	0.33	0.59	4.0	4.00	2.71	2.82	FEW LV SV
60	10349.9-51.0	1.1	**	1.98	0.43	2.17	3.5	3.85	2.74	2.84	FEW LV SV
61	10351.0-52.2	1.2	1.37	1.07	0.27	1.64	1.7	2.04	2.77	2.82	FEW SV FEW PPV F
62	10352.2-53.3	1.1	**	0.38	0.14	0.41	6.0	6.60	2.66	2.83	FEW LV SV
63	10353.3-54.2	0.9	2.28	1.19	0.34	2.05	5.9	5.31	2.67	2.83	FEW LV SV
64	10354.2-55.1	0.9	1.12	0.95	0.18	1.01	1.2	1.08	2.79	2.82	FEW SV
65	10355.1-56.2	1.1	**	1.15	0.31	1.26	5.0	5.50	2.69	2.84	LV SV
66	10356.2-57.0	0.8	2.15	0.92	0.12	1.72	2.8	2.24	2.76	2.84	SV FEW PPV
67	10357.0-58.0	1.0	2.58	1.84	0.40	2.58	2.8	2.80	2.73	2.81	SV FEW PPV
68	10358.0-58.8	0.8	0.92	0.37	1.54	0.74	2.9	2.32	2.74	2.82	FEW LV FEW PPV
69	10358.8-59.7	0.9	3.35	2.98	0.78	3.02	5.0	4.50	2.69	2.83	LV SV F
70	10359.7-60.7	1.0	2.17	0.62	0.17	2.17	3.3	3.30	2.73	2.83	FEW LV SV F
71	10360.7-61.8	1.1	1.72	1.30	0.25	1.89	5.0	5.50	2.69	2.83	LV SV
72	10361.8-62.6	0.8	76.20	34.70	0.48	60.96	2.7	2.16	2.74	2.82	SV FEW PPV F
73	10362.6-63.6	1.0	3.42	3.18	0.31	3.42	3.0	3.00	2.75	2.83	SV PPV F
74	10363.6-64.5	0.9	6.97	1.63	0.29	6.27	2.5	2.25	2.75	2.82	SV PPV F
75	10364.5-65.5	1.0	1.49	0.83	0.11	1.49	3.2	3.20	2.74	2.83	FEW LV SV
76	10365.5-66.4	0.9	2220.00	2.34	0.18	1998.00	3.9	3.51	2.72	2.83	FEW LV SV
77	10366.4-67.5	1.1	2.80	2.30	0.24	3.08	1.9	2.09	2.76	2.81	FEW SV F
78	10367.5-68.6	1.1	**	12.20	0.55	13.42	7.3	8.03	2.63	2.84	LV SV F
79	10368.6-69.6	1.0	**	3.45	0.51	3.45	4.2	4.20	2.72	2.84	FEW LV SV F
80	10369.6-70.8	1.2	1.28	1.13	0.55	1.54	5.3	6.36	2.68	2.83	FEW LV SV PPV
81	10370.8-71.6	0.8	0.93	0.52	0.05	0.74	2.4	1.92	2.76	2.83	SV PPV
82	10371.6-72.7	1.1	0.75	0.51	0.14	0.83	2.9	3.19	2.74	2.83	SV PPV
83	10372.7-73.6	0.9	124.00	3.09	0.09	11.60	4.1	3.69	2.72	2.83	FEW LV SV PPV F
84	10373.6-74.6	1.0	1.90	1.64	0.30	1.90	3.2	3.20	2.75	2.84	SV PPV
85	10374.6-75.6	1.0	9.76	3.13	0.11	9.76	3.9	3.90	2.73	2.84	FEW LV SV PPV
86	10375.6-76.5	0.9	0.77	0.45	0.26	0.69	3.0	2.70	2.75	2.83	FEW LV SV PPV
87	10376.5-77.7	1.2	20.20	6.39	0.45	24.24	1.4	1.68	2.78	2.82	FEW SV F
88	10377.7-78.7	1.0	**	1.87	0.29	1.87	3.3	3.30	2.74	2.83	SV PPV F
89	10378.7-79.7	1.0	1.17	0.70	0.25	1.17	3.3	3.30	2.74	2.84	SV PPV F
90	10379.7-80.8	1.1	3.60	3.39	0.39	3.96	2.4	2.64	2.76	2.83	FEW LV SV F
91	10380.8-81.9	1.1	2.68	1.84	0.40	2.95	2.1	2.31	2.76	2.82	SV PPV F
92	10381.9-82.9	1.0	6.52	3.45	0.11	6.52	2.4	2.40	2.76	2.83	SV PPV F

CORE LABORATORIES – CANADA LTD.

COMPANY AMOCO CANADA PETROLEUM COMPANY LTD.
WELL AMOCO A-4 POINTED MOUNTAIN A-55

FILE 7004-4407

SAMPLE NUMBER	INTERVAL REPRESENTED, FEET		PERMEABILITY TO AIR, MILLIDARCYS			PERMEABILITY FEET	POROSITY, PER CENT	POROSITY FEET	DENSITY, gm/cc.		VISUAL EXAMINATION
	DEPTH	THICK	KMAX	K90°	KV				BULK	GRAIN	
	CORE NO. 2 (CONT'D)										
93	10382.9-83.9	1.0	**	4.68	0.57	4.68	4.8	4.80	2.69	2.82	FEW LV SV PPV F
94	10383.9-84.8	0.9	19.10	4.60	0.41	17.19	3.0	2.70	2.75	2.83	SV PPV F
95	10384.8-85.6	0.8	7.32	6.66	0.17	5.86	3.7	2.96	2.72	2.83	SV PPV F
96	10385.6-86.4	0.8	1.45	1.15	0.07	1.16	0.7	0.56	2.80	2.82	FEW SV F
97	10386.4-87.5	1.1	3.99	3.66	0.18	4.39	0.6	0.66	2.81	2.83	DENSE F
98	10387.5-88.3	0.8	4.41	1.78	0.11	3.53	2.0	1.60	2.78	2.84	FEW SV F
99	10388.3-89.4	1.1	2.60	2.47	0.06	2.86	0.2	0.22	2.82	2.83	DENSE F
100	10389.4-90.3	0.9	12920.00	4.41	0.06	11628.00	3.3	2.97	2.73	2.82	FEW SV F
101	10390.3-91.2	0.9	0.93	0.50	0.09	0.84	3.8	3.42	2.72	2.83	SV F
102	10391.2-92.1	0.9	2.24	1.81	0.23	2.02	6.8	6.12	2.63	2.82	FEW LV SV F
103	10392.1-93.2	1.1	11310.00	0.90	0.27	12441.00	3.0	3.30	2.74	2.83	FEW LV SV F
104	10393.2-94.1	0.9	3.01	1.29	0.33	2.71	5.4	4.86	2.68	2.83	FEW LV SV
105	10394.1-94.8	0.7	19.60	1.14	0.20	13.72	2.6	1.82	2.75	2.83	FEW LV FEW SV F
106	10394.8-96.0	1.2	22.20	17.30	0.72	26.64	1.7	2.04	2.79	2.84	FEW SV F
-	10396.0-00.0	204.00	-	-	-	-	-	-	-	-	DRILLED
	CORE NO. 3		10600' - 10658' (REC. 61') (16 BOXES)								
107	10600.0-01.3	1.3	**	195.00	0.26	253.50	4.0	5.20	2.72	2.83	FEW LV SV PPV
108	10601.3-03.0	1.7	2.31	1.99	0.21	3.93	1.0	1.70	2.80	2.83	FEW SV FEW PPV F
109	10603.0-04.0	1.0	1.55	0.31	0.04	1.55	1.7	1.70	2.75	2.80	FEW SV F
110	10604.0-05.4	1.4	9.79	8.57	0.09	13.71	1.3	1.82	2.77	2.81	FEW SV F
111	10605.4-06.6	1.2	4.27	2.87	0.39	5.12	2.4	2.88	2.76	2.83	FEW SV F
112	10606.6-07.6	1.0	2.53	1.89	0.10	2.53	1.8	1.80	2.78	2.83	FEW SV F
113	10607.6-08.6	1.0	**	309.00	0.14	309.00	5.7	5.70	2.68	2.84	FEW LV SV F
114	10608.6-09.4	0.8	92.30	0.64	0.06	73.84	2.7	2.16	2.75	2.83	FEW SV
-	10609.4-09.9	0.5	-	-	-	-	-	-	-	-	DENSE
115	10609.9-10.9	1.0	12.60	5.31	0.19	12.60	2.4	2.40	2.76	2.83	FEW SV F
116	10610.9-12.2	1.3	3.39	2.66	0.05	4.41	2.4	3.12	2.77	2.84	FEW SV F
117	10612.2-13.5	1.3	4.17	3.57	0.37	5.42	2.5	3.25	2.76	2.83	FEW SV
118	10613.5-14.7	1.2	3.44	1.44	0.27	4.13	1.8	2.16	2.79	2.84	FEW SV
119	10614.7-16.0	1.3	2.64	2.64	-0.01	3.43	1.5	1.95	2.79	2.83	FEW SV
120	10616.0-17.2	1.2	0.54	0.49	0.10	0.65	0.8	0.96	2.81	2.84	FEW SV
121	10617.2-18.4	1.2	**	6.59	0.13	7.91	11.1	13.32	2.51	2.82	LV

COMPANY AMOCO CANADA PETROLEUM COMPANY LTD.
WELL AMOCO A-4 POINTED MOUNTAIN A-55

FILE 7004-4407

SAMPLE NUMBER	INTERVAL REPRESENTED, FEET		PERMEABILITY TO AIR, MILLIDARCYS			PERMEABILITY FEET	POROSITY, PER CENT	POROSITY FEET	DENSITY, gm./cc.		VISUAL EXAMINATION
	DEPTH	THICK	KMAX	K90°	KV				BULK	GRAIN	
	CORE NO. 3 (CONT'D)										
122	10618.4-19.6	1.2	**	76.90	0.61	92.04	5.3	6.36	2.69	2.84	LV SV
123	10619.6-21.0	1.4	4.80	2.90	0.21	6.72	1.4	1.96	2.80	2.84	FEW SV F
124	10621.0-21.9	0.9	14.80	11.20	0.04	13.32	1.3	1.17	2.81	2.84	FEW SV F
-	10621.9-23.3	1.4	-	-	-	-	-	-	-	-	DENSE
125	10623.2-24.5	1.2	0.63	0.55	0.22	0.76	0.6	0.72	2.82	2.84	DENSE F
126	10624.5-25.5	1.0	8.87	5.29	0.29	8.87	5.6	5.60	2.67	2.83	LV FEW SV
127	10625.5-26.3	0.8	6.05	2.44	0.28	4.84	2.7	2.16	2.75	2.83	FEW LV FEW SV
-	10626.3-26.8	0.5	-	-	-	-	-	-	-	-	DENSE
128	10626.8-28.0	1.2	1.77	0.73	-0.01	2.12	2.7	3.24	2.76	2.84	SV
129	10628.0-29.0	1.0	20.00	1.81	0.15	20.00	4.9	4.90	2.69	2.83	LV SV
130	10629.0-30.2	1.2	2860.00	0.85	0.35	3432.00	4.7	5.64	2.71	2.84	LV SV
131	10630.2-31.2	1.0	5.57	1.79	0.27	5.57	6.9	6.90	2.63	2.83	LV SV
132	10631.2-32.3	1.1	2.65	2.58	0.23	2.92	2.7	2.97	2.75	2.83	FEW LV SV
-	10632.3-34.0	1.7	-	-	-	-	-	-	-	-	DENSE
133	10634.0-35.1	1.1	6.86	3.11	0.24	7.55	2.0	2.20	2.78	2.84	SV F
134	10635.1-36.1	1.0	0.73	0.65	0.18	0.73	1.9	1.90	2.78	2.83	FEW SV
135	10636.1-37.0	0.9	5.05	3.79	0.25	4.55	1.2	1.08	2.80	2.84	FEW SV F
136	10637.0-38.0	1.0	4.79	2.71	0.10	4.79	2.1	2.10	2.78	2.84	SV F
137	10638.0-38.8	0.8	43.70	8.39	0.20	34.96	2.8	2.24	2.76	2.84	SV F
138	10638.8-39.5	0.7	19.50	19.00	0.33	13.65	2.8	1.96	2.75	2.83	SV F
139	10639.5-40.3	0.8	6.43	3.09	0.18	5.14	2.2	1.76	2.77	2.83	SV F
140	10640.3-41.3	1.0	8.00	6.48	0.58	8.00	0.7	0.70	2.79	2.81	FEW SV F
-	10641.3-43.0	1.7	-	-	-	-	-	-	-	-	DENSE
141	10643.0-44.0	1.0	5.89	4.65	0.11	5.89	2.0	2.00	2.78	2.84	SV F
142	10644.0-45.0	1.0	9.05	7.88	0.13	9.05	0.8	0.80	2.81	2.84	FEW SV F
143	10645.0-46.0	1.0	3.83	1.52	0.40	3.83	1.2	1.20	2.81	2.84	FEW SV F
144	10646.0-47.1	1.1	48.50	13.70	0.36	53.35	4.5	4.95	2.70	2.83	FEW LV SV F
145	10647.1-48.4	1.3	31.50	6.69	0.54	40.95	1.3	1.69	2.79	2.83	FEW SV F
146	10648.4-49.4	1.0	1.43	1.16	0.10	1.43	4.1	4.10	2.72	2.83	FEW LV SV
147	10649.4-50.6	1.2	3.10	1.92	0.35	3.72	6.5	7.80	2.65	2.83	FEW LV SV
148	10650.6-52.1	1.5	2.17	1.77	-0.01	3.26	1.6	2.40	2.78	2.83	SV
149	10652.1-53.2	1.1	29.80	0.94	0.11	32.78	1.8	1.98	2.79	2.84	SV
150	10653.2-54.2	1.0	0.36	0.34	-0.01	0.36	1.3	1.30	2.79	2.83	SV
151	10654.2-55.6	1.4	0.97	0.86	0.10	1.36	1.5	2.10	2.78	2.82	SV
152	10655.6-56.6	1.0	3.15	0.86	1.54	3.15	1.4	1.40	2.79	2.83	FEW LV SV

COMPANY AMOCO CANADA PETROLEUM COMPANY LTD.
WELL AMOCO A-4 POINTED MOUNTAIN A-55

SAMPLE NUMBER	INTERVAL REPRESENTED, FEET		PERMEABILITY TO AIR, MILLIDARCYS			PERMEABILITY FEET	POROSITY, PER CENT	POROSITY FEET	DENSITY, gm./cc.		VISUAL EXAMINATION
	DEPTH	THICK	KMAX	K90°	KV				BULK	GRAIN	
	CORE NO. 3 (CONT'D)										
153	10656.6-57.8	1.2	35.00	1.81	0.86	42.00	5.3	6.36	2.68	2.83	LV SV
154	10657.8-59.0	1.2	34.90	8.63	0.16	41.88	0.7	0.84	2.80	2.82	FEW SV F
155	10659.0-60.0	1.0	4.53	3.83	1.04	4.53	1.0	1.00	2.80	2.83	SV
156	10660.0-61.0	1.0	0.92	0.52	-0.01	0.92	1.1	1.10	2.81	2.84	SV
-	10661.0-58.0	197.0	-	-	-	-	-	-	-	-	DRILLED
	CORE NO. 4	10858' - 10877' (REC. 19.5') (6 BOXES)									
-	10858.0-58.5	0.5	-	-	-	-	-	-	-	-	DENSE
157	10858.5-59.7	1.2	15.60	2.02	0.10	18.72	1.2	1.44	2.77	2.80	FEW LV F
158	10859.7-60.8	1.1	13.40	7.80	0.30	14.74	1.6	1.76	2.77	2.81	FEW SV PPV F
159	10860.8-61.9	1.1	19.80	14.60	0.26	21.78	0.8	0.88	2.80	2.83	FEW SV F
160	10861.9-63.0	1.1	16.00	11.30	0.78	17.60	2.6	2.86	2.76	2.84	FEW LV SV PPV F
161	10863.0-63.9	0.9	6.88	3.60	0.14	6.19	1.6	1.44	2.78	2.83	SV F
162	10863.9-64.7	0.8	22.70	19.90	0.10	18.16	1.4	1.12	2.79	2.83	FEW SV PPV F
163	10864.7-65.7	1.0	5.85	5.57	0.21	5.85	0.8	0.80	2.77	2.80	FEW SV F
164	10865.7-66.6	0.9	7.88	6.50	-0.01	7.09	1.4	1.26	2.79	2.83	SV PPV F
165	10866.6-67.4	0.8	13.40	13.00	0.39	10.72	1.0	0.80	2.79	2.82	FEW SV FEW PPV F
166	10867.4-68.3	0.9	13.80	12.60	1.78	12.42	1.3	1.17	2.78	2.82	SV FEW PPV F
167	10868.3-69.2	0.9	15.10	13.10	0.27	13.59	1.7	1.53	2.78	2.83	SV FEW PPV F
168	10869.2-70.2	1.0	31.40	18.80	17.80	31.40	1.0	1.00	2.79	2.82	SV FEW PPV F
169	10870.2-71.2	1.0	68.40	29.00	64.60	68.40	0.8	0.80	2.81	2.83	PPV F
170	10871.2-72.2	1.0	59.00	5.88	15.70	59.00	0.9	0.90	2.81	2.84	FEW PPV F
171	10872.2-73.2	1.0	8.07	5.50	0.18	8.07	1.2	1.20	2.79	2.83	PPV F
172	10873.2-74.2	1.0	6.02	4.07	0.10	6.02	0.9	0.90	2.80	2.83	FEW SV F
173	10874.2-75.0	0.8	4.73	4.38	0.64	3.78	0.8	0.64	2.80	2.82	FEW SV FEW PPV F
174	10875.0-76.0	1.0	0.49	0.37	-0.01	0.49	2.5	2.50	2.75	2.82	FEW SV FEW PPV F
175	10876.0-76.7	0.7	3.72	3.53	0.07	2.60	0.4	0.28	2.80	2.81	FEW SV FEW PPV F
176	10876.7-77.5	0.8	2.78	2.20	0.07	2.22	0.5	0.40	2.80	2.82	FEW SV F
-	10877.5-00.0	322.5	-	-	-	-	-	-	-	-	DRILLED
	CORE NO. 5	11200' - 11260' (REC. 61') (16 BOXES)									
-	11200.0-02.2	2.2	-	-	-	-	-	-	-	-	DENSE
177	11202.2-03.8	1.6	0.49	0.37	0.03	0.78	0.7	1.12	2.82	2.84	FEW PPV F

COMPANY AMOCO CANADA PETROLEUM COMPANY LTD.
WELL AMOCO A-4 POINTED MOUNTAIN A-55

FILE 7004-4407

SAMPLE NUMBER	INTERVAL REPRESENTED, FEET		PERMEABILITY TO AIR, MILLIDARCYS			PERMEABILITY FEET	POROSITY, PER CENT	POROSITY FEET	DENSITY, gm./cc.		VISUAL EXAMINATION
	DEPTH	THICK	KMAX	K90°	KV				BULK	GRAIN	
	CORE NO. 5 (CONT'D)										
178	11203.8-06.3	2.5	1.18	0.86	0.19	2.95	1.4	3.50	2.79	2.83	PPV F
179	11206.3-08.6	2.3	0.18	0.15	-0.01	0.41	0.9	2.07	2.80	2.83	FEW SV F
180	11208.6-10.4	1.8	1.49	0.58	-0.01	2.68	0.7	1.26	2.80	2.82	FEW PPV F
181	11210.4-12.0	1.6	7.06	1.24	-0.01	11.30	1.5	2.40	2.78	2.82	FEW SV FEW PPV F
182	11212.0-13.7	1.7	0.28	0.21	-0.01	0.48	0.5	0.85	2.81	2.83	FEW PPV F
183	11213.7-15.4	1.7	1.42	1.31	0.06	2.41	1.3	2.21	2.77	2.81	SV FEW PPV F
184	11215.4-16.4	1.0	15.50	9.96	0.05	15.50	1.1	1.10	2.80	2.83	SV FEW PPV F
185	11216.4-17.4	1.0	0.39	0.25	-0.01	0.39	2.3	2.30	2.76	2.83	SV PPV F
186	11217.4-18.4	1.0	2.80	1.54	-0.01	2.80	1.0	1.00	2.78	2.81	FEW SV FEW PPV F
187	11218.4-19.7	1.3	1.97	1.97	0.62	2.56	1.3	1.69	2.80	2.84	FEW SV FEW PPV F
-	11219.7-26.0	6.3	-	-	-	-	-	-	-	-	DENSE
188	11226.0-27.7	1.7	3.25	2.60	-0.01	5.53	0.4	0.68	2.80	2.82	FEW SV F
189	11227.7-29.8	2.1	0.68	0.49	0.26	1.43	1.0	2.10	2.80	2.83	FEW SV FEW PPV F
190	11229.8-31.6	1.8	0.75	0.55	-0.01	1.35	1.8	3.24	2.79	2.84	FEW SV PPV F
191	11231.6-33.1	1.5	0.72	0.61	-0.01	1.08	0.9	1.35	2.79	2.82	PPV F
192	11233.1-34.5	1.4	5.30	3.23	0.37	7.42	2.6	3.64	2.75	2.83	SV PPV F
193	11234.5-36.4	1.9	5.33	4.32	0.32	10.13	1.4	2.66	2.80	2.84	FEW SV FEW PPV F
194	11236.4-37.9	1.5	4.18	3.53	0.26	6.27	0.5	0.75	2.81	2.82	FEW PPV F
195	11237.9-39.4	1.5	2.23	2.03	0.08	3.35	0.8	1.20	2.82	2.84	FEW PPV F
196	11239.4-41.4	2.0	13.10	11.80	0.21	26.20	1.0	2.00	2.80	2.83	FEW SV FEW PPV F
197	11241.4-43.3	1.9	32.60	24.90	1.40	61.94	4.0	7.60	2.73	2.84	FEW LV FEW SV PPV F
198	11243.3-44.8	1.5	1040.00	24.10	1.19	1560.00	6.9	10.35	2.65	2.84	FEW LV SV PPV F
199	11244.8-46.1	1.3	3.15	2.83	0.35	4.10	2.5	3.25	2.67	2.74	SV PPV F CARB
-	11246.1-50.9	4.8	-	-	-	-	-	-	-	-	DENSE
200	11250.9-52.4	1.5	23.10	11.90	0.42	34.65	1.9	2.85	2.75	2.81	FEW SV FEW PPV F CARB
201	11252.4-54.4	2.0	25.00	17.00	0.82	50.00	1.2	2.40	2.80	2.84	PPV F
202	11254.4-55.6	1.2	33.40	30.30	0.05	40.08	1.6	1.92	2.78	2.83	FEW SV PPV F CARB
203	11255.6-56.4	0.8	49.50	37.90	1.93	39.60	2.9	2.32	2.76	2.84	FEW LV SV PPV F
204	11256.4-58.3	1.9	20.10	12.00	1.31	38.19	1.2	2.28	2.78	2.82	FEW SV FEW PPV F
205	11258.3-59.7	1.4	32.40	30.50	2.80	45.36	3.5	4.90	2.73	2.83	SV PPV F
206	11259.7-61.0	1.3	3.55	2.95	0.24	4.62	2.1	2.73	2.75	2.81	PPV F CARB

* NOTE: DUE TO THE FRACTURED NATURE OF THE CORE PERMEABILITIES REPORTED MAY NOT REPRESENT THE TRUE VALUES OF THE RESERVOIR.

CORE LABORATORIES – CANADA, LTD.

Petroleum Reservoir Engineering

WELL: AMOCO A-4 POINTED MOUNTAIN A-55

PAGE: 8 of 8

FORMATION: NAHANNI

FILE: 7004-4407

SUMMARY INTERVAL: 10296.0 - 11261.0

TOTAL FOOTAGE: 965.0

FOOTAGE ANALYZED 221.9

FOOTAGE NOT ANALYZED: TOTAL: 743.1 DENSE 19.6 LOST .0 DRILLED 723.5 *NABR .0 RUBBLE .0

SUMMARY OF ANALYZED CORE:

	FOOTAGE	% OF ANALYZED CORE	WEIGHTED AVERAGE POROS. %	POROSITY FEET	WEIGHTED AVERAGE PERM. MD.	PERM. FEET	WEIGHTED AVERAGE RESID. OIL %	WEIGHTED AVERAGE TOT. WATER %
TOTAL	221.9	100.00	2.73	606.37	154.95	34383.70	.00	.00
BY PERM RANGES:								
LESS THAN 0.10 Md.	.0	.00	.00	.00	.00	.00	.00	.00
0.10 0.49 Md.	10.5	4.73	1.70	17.86	.34	3.57	.00	.00
0.50 0.99 Md.	21.8	9.82	2.15	46.84	.77	16.75	.00	.00
1.00 9.99 Md.	127.6	57.51	2.83	360.92	3.70	472.34	.00	.00
GREATER THAN 9.99 Md.	62.0	27.94	2.92	180.75	546.63	33891.04	.00	.00

*NOT ANALYZED BY REQUEST

CORE LABORATORIES · CANADA LTD. CORE LAB *Petroleum Reservoir Engineering*

COMPANY Amoco Canada Petroleum Company Ltd. FIELD Pointed Mountain FILE 7004-4407

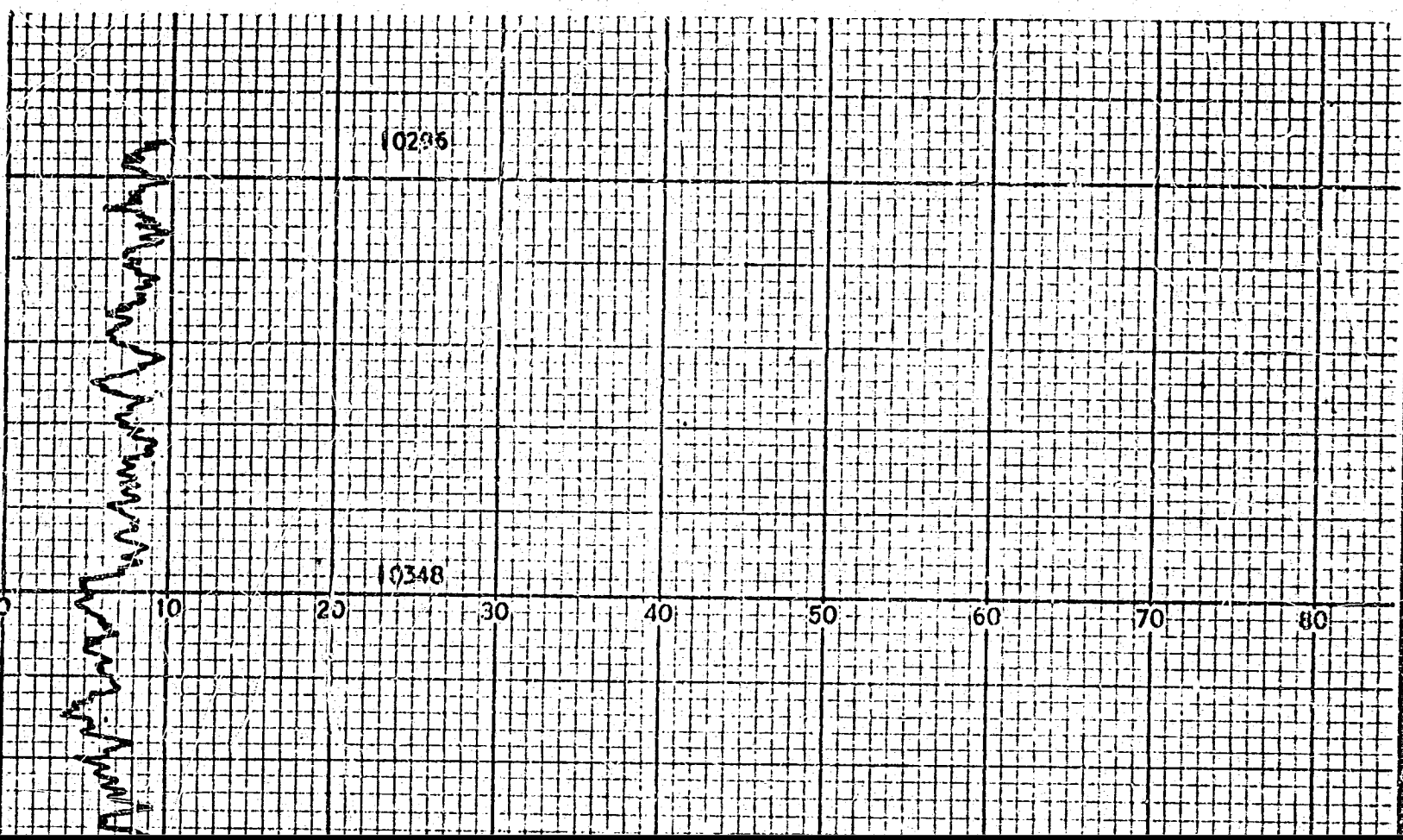
WELL Amoco A-4 Pointed Mountain A-55 DATE

LOCATION 60° 24' 05.02" N 123° 54' 39.05" W PROV Northwest Territories ELEV.

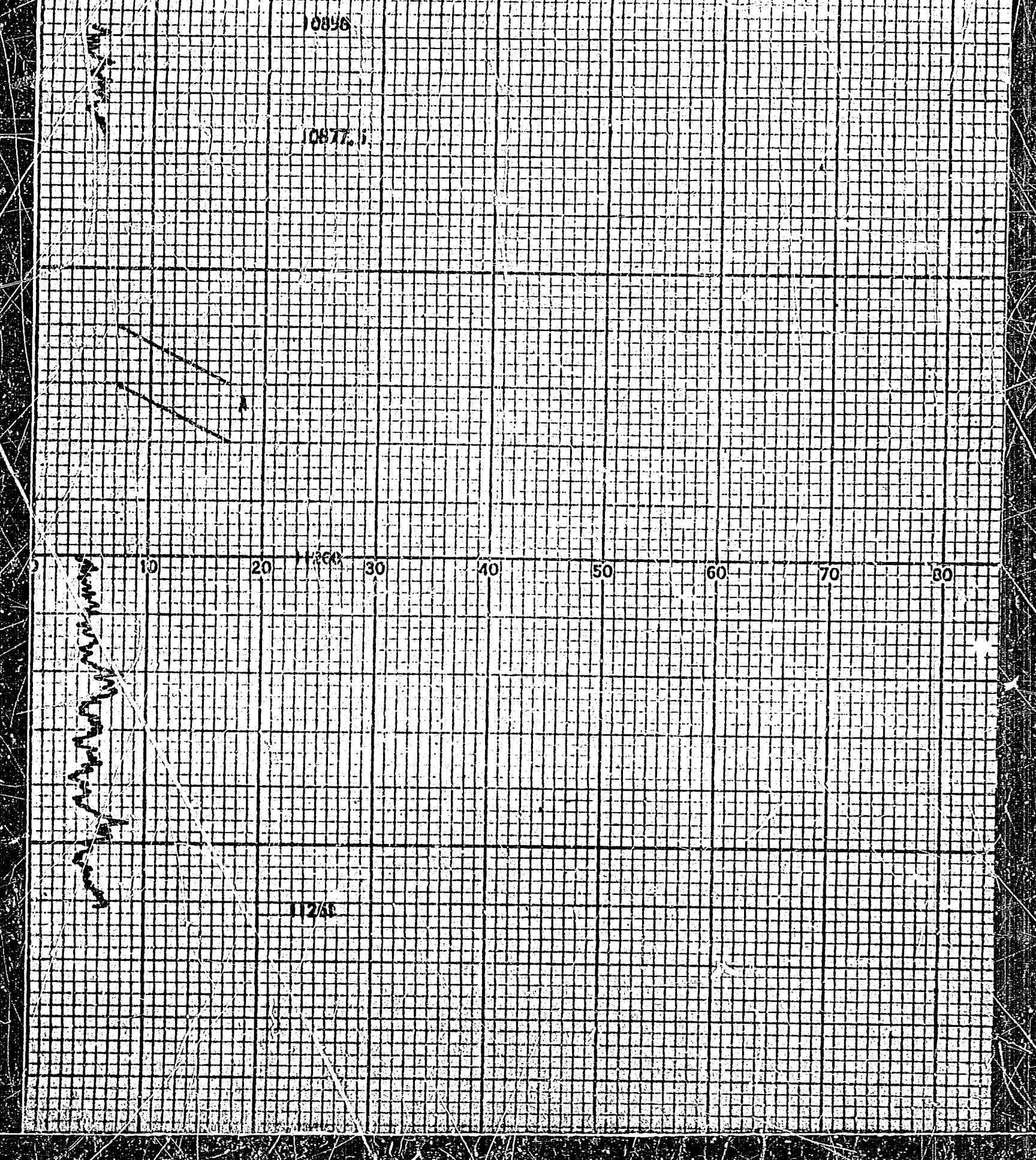
CORE-GAMMA CORRELATION

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T.C. 11 SECS. VERTICAL SCALE: 5" = 100' SENS. 5000 CPM.



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CORE ANALYSIS REPORT

FOR

AMOCO CANADA PETROLEUM COMPANY LTD.

AMOCO A-4 POINTED MOUNTAIN A-55
POINTED MOUNTAIN
NORTHWEST TERRITORIES

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

CORE LABORATORIES – CANADA LTD.

COMPANY	AMOCO CANADA PETROLEUM COMPANY LTD.	FORMATION		PAGE	1 of 3
WELL	AMOCO A-4 POINTED MOUNTAIN A-55	DRILLING FLUID	WATER BASE MUD	FILE	7002-4230
FIELD	POINTED MOUNTAIN, NORTHWEST TERRITORIES	ELEVATION		DATE REPORT	AUG. 12/74
LOCATION	60° 24' 05.02" N. LAT.	ANALYSIS	FULL DIAMETER	ANALYSTS	GM DH
	123° 54' 39.05" W. LONG.	REMARKS			

APP = APPEARS SIMILAR TO; S = SPOKEN CORE (NOT USED FOR SUMMARY PURPOSES); 0.0 = PERMEABILITY > 30000 MD.; - = PERMEABILITY < 0.01 MD.; FS = FINE SAND; MS = MEDIUM SAND; CS = COARSE SAND; CONG = CONGLOMERATE; DOL = DOLOMITE; SH = SHALE; LMY = LIMY; SHY = SHALY; /BK = BREAK; PYR = PYROBITUMEN; CARB = CARBONACEOUS; A = ANHYDRITE; FOSS = FOSSILIFEROUS; XLN = CRYSTALLINE; LAM = LAMINATIONS; V = VUGULAR; LV = LARGE VUGS; SV = SMALL VUGS; PP = PIN POINT VUGS; I = INTERGRANULAR; STY = STYLOLITIC; HF = HORIZONTAL FRACTURE; VF = VERTICAL FRACTURE; SS = SMALL PLUG SAMPLE; SL/ = SLIGHTLY; V/ = VERY; W/ = WITH

SAMPLE NUMBER	INTERVAL REPRESENTED, FEET		PERMEABILITY TO AIR, MILLIDARCYS			PERMEABILITY FEET	POROSITY, PER CENT	POROSITY FEET	DENSITY, gm./cc.		VISUAL EXAMINATION
	DEPTH	THICK	KMAX	K90°	KV				BULK	GRAIN	
	CORED INTERVAL 12,144' - 12,204'										
	CORE NO. 6 12,144' - 12,204' (REC. 55.0') (17 BOXES)										
207	12144.0-45.1	1.1	14.70	9.49	0.19	16.17	1.2	1.32	2.82	2.85	I STY HF
208	12145.1-46.5	1.4	5.58	3.50	0.78	7.81	1.3	1.82	2.82	2.86	I HF
209	12146.5-47.8	1.3	0.09	0.08	-0.01	0.12	0.7	0.91	2.83	2.85	I STY
210	12147.8-48.7	0.9	0.16	0.10	0.09	0.14	0.8	0.72	2.84	2.86	I STY
211	12148.7-49.8	1.1	2.23	0.23	0.38	2.45	1.2	1.32	2.83	2.86	I HF VF
212	12149.8-50.8	1.0	0.79	0.76	0.22	0.79	0.8	0.80	2.84	2.86	I HF
213	12150.8-51.7	0.9	0.98	0.48	0.29	0.88	1.2	1.08	2.83	2.87	I STY HF
214	12151.7-52.7	1.0	0.07	0.03	-0.01	0.07	0.9	0.90	2.83	2.86	I
215	12152.7-53.5	0.8	0.51	0.24	0.21	0.41	0.8	0.64	2.84	2.86	I
216	12153.5-54.5	1.0	0.70	0.22	0.27	0.70	1.0	1.00	2.84	2.86	I
217	12154.5-55.5	1.0	4.66	0.38	0.10	4.66	1.0	1.00	2.83	2.86	I HF
218	12155.5-56.8	1.3	12.00	11.70	0.28	15.60	2.1	2.73	2.75	2.80	I HF
219	12156.8-57.8	1.0	0.20	0.16	0.03	0.20	1.0	1.00	2.84	2.87	I
220	12157.8-58.9	1.1	0.49	0.38	0.07	0.54	0.3	0.33	2.83	2.84	I
221	12158.9-60.1	1.2	7.31	0.82	0.23	8.77	1.0	1.20	2.83	2.86	I HF
222	12160.1-61.2	1.1	1.85	0.49	0.23	2.04	1.1	1.21	2.82	2.86	I HF
223	12161.2-62.1	0.9	0.52	0.15	0.12	0.47	0.9	0.81	2.83	2.86	I
224	12162.1-63.2	1.1	2.70	0.66	0.36	2.97	0.6	0.66	2.82	2.84	I STY HF
225	12163.2-64.5	1.3	0.85	0.50	0.12	1.11	0.8	1.04	2.83	2.86	I HF
226	12164.5-65.6	1.1	0.26	0.13	0.19	0.29	0.9	0.99	2.84	2.86	I
227	12165.6-66.6	1.0	1.15	0.36	0.23	1.15	0.9	0.90	2.84	2.86	I STY HF
228	12166.6-67.9	1.3	0.49	0.16	0.08	0.64	0.2	0.26	2.84	2.85	I
229	12167.9-68.9	1.0	0.53	0.48	0.04	0.53	1.1	1.10	2.82	2.85	I
230	12168.9-70.3	1.4	2.07	0.54	0.37	2.90	1.0	1.40	2.82	2.84	I STY HF VF
231	12170.3-71.2	0.9	2.07	0.21	0.04	1.86	0.8	0.72	2.84	2.86	I
232	12171.2-72.4	1.2	0.20	0.06	-0.01	0.24	0.8	0.96	2.84	2.87	I
233	12172.4-73.2	0.8	13.10	13.10	0.25	10.48	1.1	0.88	2.83	2.86	I STY HF VF

10,650
1496
12,146

COMPANY AMOCO CANADA PETROLEUM COMPANY LTD.
WELL AMOCO A-4 POINTED MOUNTAIN A-55

SAMPLE NUMBER	INTERVAL REPRESENTED, FEET		PERMEABILITY TO AIR, MILLIDARCYS			PERMEABILITY FEET	POROSITY, PER CENT	POROSITY FEET	DENSITY, gm./cc.		VISUAL EXAMINATION
	DEPTH	THICK	KMAX	K90°	KV				BULK	GRAIN	
	CORE NO. 6 (Cont'd)										
234	12173.2-74.3	1.1	0.52	0.48	0.17	0.57	1.1	1.21	2.83	2.86	I
235	12174.3-75.3	1.0	0.34	0.32	0.14	0.34	0.9	0.90	2.82	2.85	I
236	12175.3-76.8	1.5	0.28	0.25	0.08	0.42	0.3	0.45	2.82	2.83	I
237	12176.8-78.5	1.7	0.67	0.63	0.08	1.14	0	0.51	2.83	2.84	FEW SV
238	12178.5-79.7	1.2	0.19	0.02	0.04	0.23	0.7	0.84	2.85	2.87	I
239	12179.7-80.7	1.0	0.07	0.02	0.03	0.07	0.9	0.90	2.84	2.87	I
240	12180.7-81.8	1.1	3.49	0.17	0.85	3.84	1.7	1.87	2.83	2.88	I HF VF
241	12181.8-83.2	1.4	0.10	0.09	-0.01	0.14	0.4	0.56	2.82	2.83	I STY
242	12183.2-84.7	1.5	1.74	0.29	0.57	2.61	0.1	0.15	2.83	2.84	I STY HF VF
243	12184.7-86.0	1.3	12.10	0.09	0.06	15.73	0.6	0.78	2.82	2.84	I STY HF
244	12186.0-87.4	1.4	1.07	0.11	0.58	1.50	0.6	0.84	2.83	2.84	I STY
245	12187.4-88.6	1.2	0.67	0.06	0.05	0.80	0.8	0.96	2.84	2.86	I
246	12188.6-89.7	1.1	0.50	0.23	0.03	0.55	0.9	0.99	2.83	2.86	I
247	12189.7-90.9	1.2	0.74	0.33	0.63	0.89	0.7	0.84	2.83	2.85	I STY HF VF
248	12190.9-91.7	0.8	0.31	0.13	0.04	0.25	0.7	0.56	2.83	2.85	I STY
249	12191.7-92.6	0.9	0.09	0.07	0.05	0.08	0.4	0.36	2.83	2.84	I STY
250	12192.6-93.2	0.6	0.38	0.27	0.10	0.23	1.5	0.90	2.80	2.85	I HF
251	12193.2-94.4	1.2	16.80	4.88	-0.01	20.16	1.6	1.92	2.81	2.85	I HF
252	12194.4-95.7	1.3	*	0.98	0.05	1.27	0.8	1.04	2.83	2.85	I VF
253	12195.7-97.0	1.3	0.84	0.57	0.33	1.09	0.4	0.52	2.83	2.84	I STY HF VF
254	12197.0-97.9	0.9	0.34	0.30	0.13	0.31	1.3	1.17	2.81	2.85	I HF
255	12197.9-99.0	1.1	0.27	0.24	0.03	0.30	0.4	0.44	2.82	2.84	I STY HF
-	12199.0-04.0	5.0	-	-	-	-	-	-	-	-	LOST CORE

CORE LABORATORIES – CANADA, LTD.

Petroleum Reservoir Engineering

WELL: AMOCO A-4 POINTED MOUNTAIN A-55

FORMATION:

FILE: 7002-4230

SUMMARY INTERVAL: 12144.0 - 12204.0

TOTAL FOOTAGE: 60.0

FOOTAGE ANALYZED 55.0

FOOTAGE NOT ANALYZED: TOTAL: 5.0 DENSE .0 LOST 5.0 DRILLED .0 *NABR .0 RUBBLE .0

SUMMARY OF ANALYZED CORE:	FOOTAGE	% OF ANALYZED CORE	WEIGHTED AVERAGE POROS. %	POROSITY FEET	WEIGHTED AVERAGE PERM. MD.	PERM. FEET	WEIGHTED AVERAGE RESID. OIL %	WEIGHTED AVERAGE TOT. WATER %
TOTAL	55.0	100.00	.84	46.41	2.48	136.49	.00	.00
BY PERM RANGES:								
LESS THAN 0.10 Md.	4.2	7.64	.73	3.07	.08	.34	.00	.00
0.10 0.49 Md.	15.1	27.45	.67	10.08	.28	4.25	.00	.00
0.50 0.99 Md.	15.8	28.73	.79	12.54	.71	11.20	.00	.00
1.00 9.99 Md.	14.2	25.82	.92	13.09	3.00	42.56	.00	.00
GREATER THAN 9.99 Md.	5.7	10.36	1.34	7.63	13.71	78.14	.00	.00

*NOT ANALYZED BY REQUEST

CORE LABORATORIES - CANADA LTD.

CORE LAB

Petroleum Reservoir Engineering

COMPANY AMOCO CANADA PETROLEUM COMPANY LTD. FIELD POINTED MOUNTAIN FILE 7002-4230

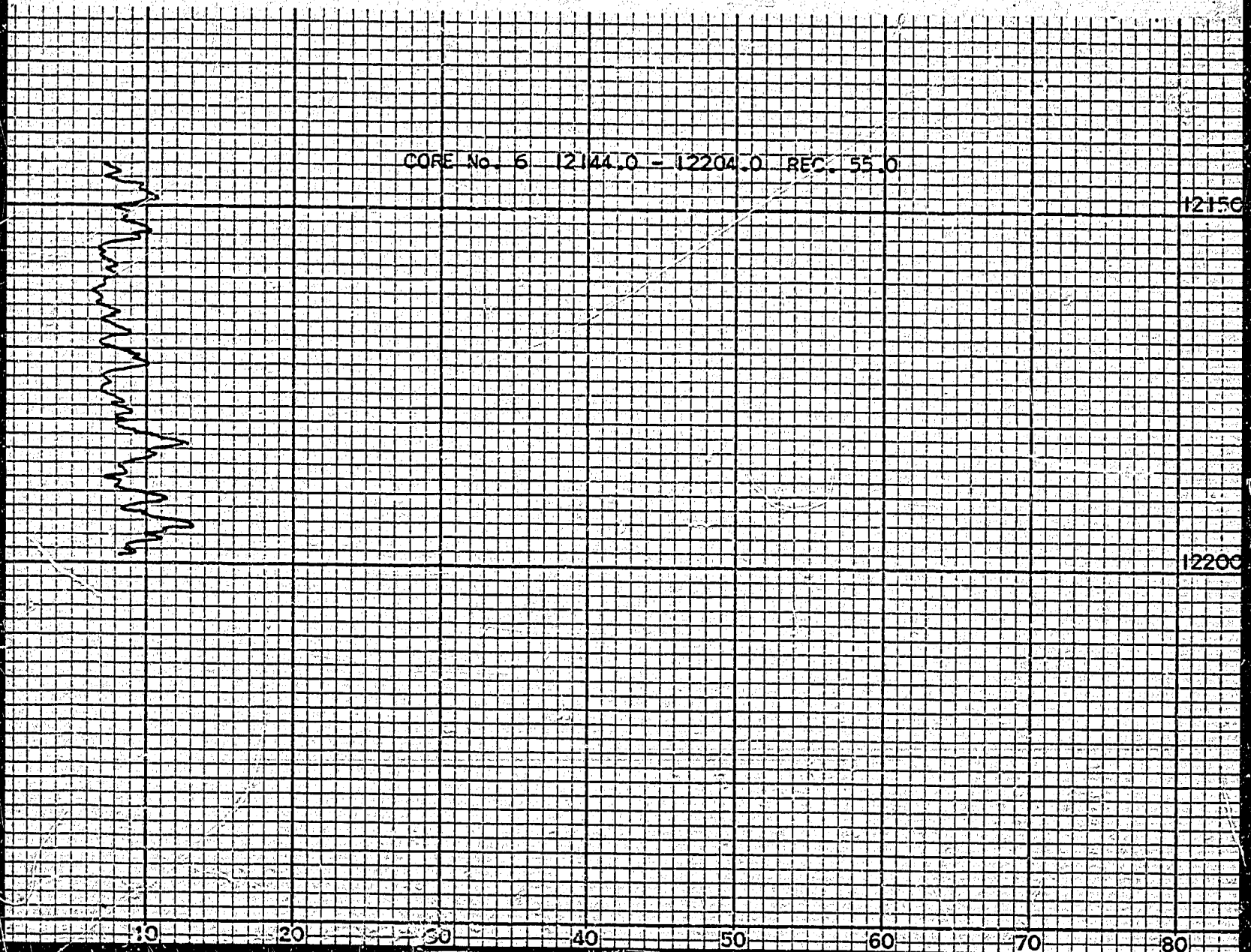
WELL AMOCO A-4 POINTED MOUNTAIN A-55 DATE JULY 27/74

LOCATION PROV N.W.T. ELEV.

CORE-GAMMA CORRELATION

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TC 11 SECS **VERTICAL SCALE: 5" = 100'** SENS 5000 CPM



CANADA

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
RESOURCE MANAGEMENT DIVISION

Drilling Authority No. 746
Date Issued Feb. 20, 1974

DEPUTY CONSERVATION ENGINEER
YELLOWKNIFE, N.W.T.

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 A-4 Pointed Mountain A-55

Permit No. ..... Lease No. 703-70

Amoco Canada Petroleum (Permittee, Licensee, Lessee) Exploratory Licence No. 2266

Amoco Canada Petroleum (Operator) Exploratory Licence No. 2266

Location: Unit A Section 55 Grid 60-30-123-45

Latitude 60 deg. 24' 05.021" Longitude 123 deg. 54' 39.056"

From Established Reference Marker .....

Universal Well Location Reference Lat. 60.40139 deg. N., Long. 123.91085 deg. W

	DATE	DEPTH
Spudded	1 Mar 74	
Suspended Operations	8 Aug 74	12326
Resumed Operations	3 Sep 74	12326
Finished Drilling	28 Jul 74	12326
Deepened		
Complete (gas/~~oil~~)	12 Oct 74	
Abandoned		
Rig released	8 Aug 74	12326

*Well is incomplete, awaiting economic decision to complete or abandon.

Pool(s) MID-Devonian Carbonate

Interval(s) open to production MID-Devonian Carbonate 11238-11318, 10265-10400, 10490-10540, 10690-10740.

Elevation: Gr. 1478.6 K.B. 1494.9

Rig No. 72

Drilling Contractor Loffland

Contractor's Business Licence No. 1-0020

CASING RECORD

Casing Size (Inches)	Grade	Weight	Amount	Set at –	Sacks of Cement and Additives
1. 20"	H-40	91.5	253'	243	820sx
2. 13 3/8"	K-55	68,61,54.5	2519.3'	2500	1145sx + 4% Gel
3. 9 5/8"	N-80 S00-95	47,43.5,40	8279.5'	8209.4	2935sx + 6% Gel + .6%HR-7 .75% HR-4
4. 7"	N-80 S00-95	26,23	12441.9'	12326	1350sx 35% Silica + 1% CFR-2 + 1% HR-12
5. 4½"	C-75	12.75	10185	10185	Tubing
6.					

GEOLOGICAL TOPS	ELEVATION Depths (KB)	Sub-Sea
Mattson	Spud	
Miss. Limestone	2326	
Miss. Lime, Shale	4578	
Miss. Limestone	4958	
Miss. Lime, Shale	5453	
Banff	5994	
1st Black	7922	
2nd Black	9370	
M.D. Carbonate	10255	
Fault in M.D.C.	11540	
Fault in M.D.C.	12240	

CORE RECORD

From	To	Rec.	From	To	Rec.
10296	10348	52			
10348	10396	48			
10600	10661	61			
10858	10878	19.5			
11200	11260	61			
12144	12204	60			

LOG RECORD

Run No.	Type of Log	From	To
1	Cement Bond	12148	7500
2	Cement Bond	8208	2504
1	Cont. Dip.	8207	2498
1	CNFD	8206	2496
*2	BHCS	8208	2499
2	CNFD	12310	8196
1	Caliper Log	2378	243
1	BHCS	2390	243
3	BHCS	12310	8198
1	DIL	2393	243
2	DIL	8204	2496
3	DIL	12306	8201
1	Dual Laterolog	12302	8203

CEMENTING RECORD (Plug, Squeeze, etc.)

Date	From	To	Remarks
9-9-74	11819	11810	Cement plug (2sx) on top of D-1 plug.

PERFORATING RECORD (Bullet, Jet)

Date	From	To	Remarks
9-11-74	11238	11318	2 JSPF
9-15-74	10265	10400	2 JSPF
9-22-74	10490	10540	2 JSPF
9-22-74	10690	10740	2 JSPF
8-7-74	11910	11950	2 JSPF Plug above these perfs

SERVICING RECORD (Acidizing, Fracing, etc.)

Date	From	To	Remarks
10-12-74	Through Perfs		24496 Gas Acid + inhibitor 34482 hygel + inhibitor Total Fluid injected = 2470 bbl. (see attached Service Report)

DRILL STEM TESTS

No.	Date	Formation	From	To	V.O. Mins.	I.S.I. Mins.	F.S.I. Mins.	I.S.I.B.H.P.	F.S.I.B.H.P.	I.F.B.H.P.	F.F.B.H.P.	I.H.P.	F.H.P.	REMARKS

ANALYSIS

Lab. No.	Sample	From	To	Source	Remarks
E74-3327-5	Water	11910	11950	Swab	
E74-3137	Gas	10490	11910	Annulus	
E74-3636	Water	8000'		Swab	

PRESENT STATUS OF WELL

Oil		(Interval.)
Gas	X	11238-10265 (Interval.)
Dry		
Susp.		

Company Amoco Canada Petroleum Co. Ltd.

Signed by [signature]

Title Area Superintendent

Date November 17, 1974

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

LOG RECORD (Continued)

Run No.	Type of Log	Form	To
	Completion Record	12159	10000
		10510	10220
		11811	11620
1	Temp. Log	12183	100
2	Temp. Log	9050	11803

Halliburton SERVICES LIMITED

FRACTURING AND CHEMICAL SERVICES
SERVICE REPORT

ATTACH TO INVOICE NO. 36414

HALLIBURTON DISTRICT: Fort St. John

JOB DATE: October 12 1974

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

CUSTOMER: AMOCO CANADA PETROLEUM COMPANY LTD.

FIELD OR AREA: Pointed Mtn.

WELL NO. AND LEASE: Pt. Mtn. A-4

CALLED OUT (DATE / TIME)	ON LOCATION (DATE / TIME)	JOB STARTED (DATE / TIME)	JOB COMPLETED (DATE / TIME)	PROVINCE	LSD	SEC	TWP	RANGE	MERIDIAN
		1:30 p.m.	3:40 p.m.	NWT.					W

WELL OR HOLE DATA

FORMATION: Nahanni — DATE CASING SET: Aug. 74

TUBING OD 4 1/2 WT 12.75 DEPTH 10,190

CASING OD 7 WT 23 & 26 DEPTH 11,810

LINER OD — FROM — TO —

PACKER TYPE: Baker Model "D" SET AT 10,260

TREAT THRU TBG ☑ ANNULUS ☐ CSG ☐ TBG/ANNULUS ☐

MAX ALLOWABLE PRESSURE TBG 8500 CSG 3500

CAPACITY TBG 155 ANNULUS — CSG 19

PERFORATIONS FROM 10,490 TO 10,540 SHOTS/FT 2

FROM 10,265 TO 10,400 SHOTS/FT 2

FROM 11,238 TO 11,318 SHOTS/FT 2

OPEN HOLE SIZE — FROM — TO —

MATERIALS USED

I		II	
FLUID TYPE: Acid		FLUID TYPE: Hygel	
GAL: 24,496		GAL: 34,482	
ADDITIVES TYPE	GAL OR LBS PER 1000 GAL	ADDITIVES TYPE	GAL OR LBS PER 1000 GAL
HAI-70	10	HYG-2	50 lbs.
FR-20	5 lbs.		

PROP AGENT (1) TYPE — MESH — LB —

(2) TYPE — MESH — LB —

PROP CONC LB/GAL (1) MAX — MIN — AVE —

(2) MAX — MIN — AVE —

DIVERTING AGENT TYPE — AMOUNT —

TREATMENT SUMMARY

HYDRAULIC HORSEPOWER AVAILABLE 8000 USED 5700

INJECTION RATES (BPM)

TREAT 27 DISPLACE 26 AVERAGE 26

PRESSURES (PSI)

BREAKDOWN FROM — TO —

MAX TREAT 8300 MIN TREAT 5200 DISP 8000

INSTANTANEOUS SHUTIN — 15 MIN —

FLUID VOLUMES (BBL)

TOTAL ON LEASE BEFORE JOB		2861
MISC.	50	
BREAKDOWN AND PAD	476	
TREATING FLUID (1)	583	
TREATING FLUID (2)	821	
FLUSH FLUID	540	
TOTAL FLUID INJECTED	2470	2470
TOTAL ON LEASE AFTER JOB		391

HALLIBURTON OPERATOR: R. J. McDonald 614

SUMMARY OF PLANNED TREATMENT: Pump 476 bbls. water with 5 lbs./m FR-20 and 50 lbs./m WAC-11. Pump 952 bbls. Hygel. (3) Pump 24 bbls. water with 5 lbs./m. FR-20. (4) Pump 595 bbls. MOD 1532 Acid with 5 lbs./m. FR-20. (5) Flush with 595 bbls. water with 5 lbs./m. FR-20.

TREATING LOG

CHART POSITION	TIME	RATE (BBL/MIN)	VOLUME (BBL) PUMPED	VOLUME (BBL) FORMATION	PRESSURES (PSI) TUBING	PRESSURES (PSI) CASING	REMARKS
1	11:30						Test POP valve and POP at 3800 psi.
2	12:45						Test lines to 9000 psi.
3	1:30				1500		Start to pump water.
4	2:09	Ave. 15 10-20	476	476	5300	950	Water in. Start Gel.
5	2:44	Ave. 27 13-30	821	1297	7000	3100	Gel in. Start water.

Drilling Authority No. 746
File No.

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
CONSERVATION ENGINEER
FEB 18 1975
YELLOWKNIFE, N.W.T.
NORTHERN ECONOMY YELLOWKNIFE BRANCH

NEW GAS WELL REPORT

Well name AMOCO A-4 POINTED MOUNTAIN A-55

Location: Unit A Section 55 Grid 60-30-123-45

Latitude 60 deg. 24' 05.021" Longitude 123 deg. 54' 39.056"

Unique Well Identifier 300 A556030123450

Elevations: Ground 1478.6 Kelly Bushing 1494.9

1. Field POINTED MOUNTAIN Crown NK Private
2. Pool MID-Devonian Carbonate Interval 11,238-11,318, 10965-10,600, 10,490-10,540, 10,690-10,740
3. Finished drilling date July 28, 1974
4. Date of initial production or back-pressure test September 19, 1974
5. Initial shut-in well-head pressure 3500 psi
6. Initial A.O.F. potential by production or back-pressure test N/A MM c.f./d.
7. Date well placed on steady production February 2, 1975
8. Production during test period:—

	DATE	FLOW RATES (MCF)	HOURS FLOWED	CONDENSATE BARRELS	GAS M.C.F.	WATER BARRELS	GAS-OIL RATIO
(a)	2/2/75	4.4	9	NIL	1650	NA	NA
(b)	2/3/75	4.95	24	NIL	4700	NA	NA
(c)	2/4/75	4.7	24	NIL	4700	NA	NA
(d)	2/5/75	4.3	24	NIL	4300	NA	NA
(e)	2/6/75	5.0	24	NIL	4400	NA	NA
(f)	2/7/75	4.8	24	NIL	4800	NA	NA
(g)	2/8/75	4.7	24	NIL	4700	NA	NA
(h)	2/9/75	4.6	24	NIL	4600	NA	NA
(i)							
(j)							
(k)							
(l)							
(m)							
(n)							
(o)							
(p)							
(q)							
(r)							
Total test production							

Submitted on behalf of AMOCO CANADA (Operator) Address 10603 - 107 Ave. Edmonton

For AMOCO CANADA

Date February 11, 1975 (Signed) ORIGINAL SIGNED BY: J. W. SAVAGE

This form shall be submitted in duplicate to the Oil Conservation Engineer, Department of Indian Affairs and Northern Development, Calgary, Alberta, within seven days following the date well placed on steady production.

IAND 5290 (22) (9-69)

Halliburton SERVICES LIMITED

ATTACH TO INVOICE NO. 36414

FRACTURING AND CHEMICAL SERVICES
SERVICE REPORT

HALLIBURTON DISTRICT: Fort St. John

JOB DATE: October 12 1974 (MONTH / DAY / YEAR)

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

CUSTOMER	FIELD OR AREA	WELL NO. AND LEASE
AMOCO CANADA PETROLEUM COMPANY LTD.	Pointed Mtn.	Pt. Mtn. A-4

CALLED OUT (DATE / TIME)	ON LOCATION (DATE / TIME)	JOB STARTED (DATE / TIME)	JOB COMPLETED (DATE / TIME)	PROVINCE	LSD	SEC	TWP	RANGE	MERIDIAN
		1:30 p.m.	3:40 p.m.	NWT.					W

WELL OR HOLE DATA

FORMATION: Nahanni — DATE CASING SET: Aug. 74

TUBING: OD 4 1/2 — WT 12.75 — DEPTH 10,190

CASING: OD 7 — WT 23 & 26 — DEPTH 11,810

LINER: OD — FROM — TO

PACKER: TYPE Baker Model "D" — SET AT 10,260

TREAT THRU: TBG ☑ — ANNULUS ☐ — CSG ☐ — TBG/ANNULUS ☐

MAX ALLOWABLE PRESSURE: TBG 8500 — CSG 3500

CAPACITY: TBG 155 — ANNULUS — CSG 19

PERFORATIONS: FROM 10,490 TO 10,540 SHOTS/FT 2

FROM 10,265 TO 10,400 SHOTS/FT 2

FROM 11,238 TO 11,318 SHOTS/FT 2

OPEN HOLE: SIZE — FROM — TO

MATERIALS USED

	I	II
FLUID: TYPE	Acid	Hygel
GAL	24,496	34,482

ADDITIVES TYPE	GAL OR LBS PER 1000 GAL	ADDITIVES TYPE	GAL OR LBS PER 1000 GAL
HAI-70	10	HYG-2	50 lbs.
FR-20	5 lbs.		

PROP AGENT (1) TYPE — MESH — LB

(2) TYPE — MESH — LB

PROP CONC. LB/GAL (1) MAX — MIN — AVE

(2) MAX — MIN — AVE

DIVERTING AGENT: TYPE — AMOUNT

TREATMENT SUMMARY

HYDRAULIC HORSEPOWER: AVAILABLE 8000 — USED 5700

INJECTION RATES (BPM): TREAT 27 — DISPLACE 26 — AVERAGE 26

PRESSURES (PSI): BREAKDOWN: FROM — TO

MAX TREAT 8300 — MIN TREAT 5200 — DISP 8000

INSTANTANEOUS SHUTIN — 15 MIN

FLUID VOLUMES (BBL):

TOTAL ON LEASE BEFORE JOB		2861
MISC.	50	
BREAKDOWN AND PAD	476	
TREATING FLUID (1)	583	
TREATING FLUID (2)	821	
FLUSH FLUID	540	
TOTAL FLUID INJECTED	2470	2470
TOTAL ON LEASE AFTER JOB		391

HALLIBURTON OPERATOR: R. J. McDonald 614

SUMMARY OF PLANNED TREATMENT: Pump 476 bbls. water with 5 lbs./m FR-20 and 50 lbs./m WAC-11. (2) Pump 952 bbls. Hygel. (3) Pump 24 bbls. water with 5 lbs./m. FR-20. (4) Pump 595 bbls. MOD 1532 Acid with 5 lbs./m. FR-20. (5) Flush with 595 bbls. water with 5 lbs./m. FR-20.

TREATING LOG

CHART POSITION	TIME	RATE (BBL./MIN.)	VOLUME (BBL.) PUMPED	VOLUME (BBL.) IN FORMATION	PRESSURE (PSI) TUBING	PRESSURE (PSI) CASING	REMARKS
1	11:30						Test POP valve and POP at 3800 psi.
2	12:45						Test lines to 9000 psi.
3	1:30				1500		Start to pump water.
4	2:09	Ave. 15 10-20	476	476	5300	950	Water in. Start Gel.
5	2:44	Ave. 27 13-30	821	1297	7000	3100	Gel in. Start water.

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

14240-115 AVENUE, EDMONTON, ALBERTA T5M 3B7

DATE REPORTED: November 15, 1974 LABORATORY REPORT NUMBER: E74-4437

AMOCO CANADA PETROLEUM COMPANY LTD.

SAMPLE LOCATION: POINTED MTN. A-4 POINT OF SAMPLE: SEPARATOR

DATE RECEIVED: November 8, 1974 DATE ANALYZED: November 15, 1974

ANALYST: R.J. Maloney

LAB# E74-4437-1 SAMPLE #31 November 4, 1974

pH = 3.6 @ 68°F

CHLORIDE = 13 Mg/l

LAB# E74-4437-2 SAMPLE #32 November 5, 1974

pH = 3.7 @ 68°F

CHLORIDE = 13 Mg/l

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

EDMONTON — FORT ST. JOHN — CALGARY

— GAS ANALYSIS —

CONTAINER IDENTITY: 6112, 6008

LABORATORY NUMBER: ETA-3569

OPERATOR NAME AND ADDRESS: AMOCO CANADA PETROLEUM COMPANY LTD.

SAMPLE LOCATION: 60-30-123-45

WELL OR SAMPLE LOCATION NAME: AMOCO A-4 POINTED MOUNTAIN A-55

ELEVATIONS: KB 1510.4 GND 1495

FIELD OR AREA:

POOL OR ZONE: NAHANNI

NAME OF SAMPLER: JIM FEENEY

COMPANY:

TEST TYPE & NO.:

TEST RECOVERY:

TEST INTERVAL OR PERFS: 11318' - 11278'

POINT OF SAMPLE: OVERNIGHT BUILD-UP

AMT & TYPE OF CUSHION:

MUD RESISTIVITY: @

TYPE OF PRODUCTION: PUMPING | FLOWING | GAS LIFT | SWAB

PRODUCTION RATES: WATER BBLS/D | OIL BBLS/D | GAS MCF/D

PRESSURES - PSIG

SEPARATOR	TREATER		RESERVOIR	CONTAINER WHEN SAMPLED	CONTAINER WHEN RECEIVED
				300	400

TEMPERATURES (°F)

SEPARATOR	TREATER		CONTAINER WHEN SAMPLED	CONTAINER WHEN RECEIV
				70

DATE SAMPLED (D/M/Y): 14/09/74

DATE RECEIVED (D/M/Y): 19/09/74

DATE ANALYZED (D/M/Y): 27/09/74

ANALYST: IRENE CZAJA

REMARKS:

COMP	MOL % AIR FREE AS REC'D	MOL % AIR FREE ACID GAS FREE	CDN GPM @ 60° F & 14.65 PSIA AIR FREE AS REC'D
H_2	0.03	0.04	
He	0.03	0.04	
N_2	1.15	1.36	
CO_2	15.26	0.	
H_2S	0.	0.	
C_1	83.52	98.55	
C_2	0.01	0.01	
C_3	0.	0.	0.
IC_4	0.	0.	0.
NC_4	0.	0.	0.
IC_5	0.	0.	0.
NC_5	0.	0.	0.
C_6	0.	0.	0.
C_7	0.	0.	0.
C_8	0.	0.	0.
C_9	0.	0.	0.
C_{10}	0.	0.	0.
TOTAL	100.00	100.00	0.

GROSS HEATING VALUE BTU/FT^3 @ 60°F AND 14.65 PSIA

MOISTURE AND ACID GAS FREE

MEASURED	CALCULATED	DETERMINED DEW POINT	VAPOUR PRESS. PENTANES PLUS
	993.		0.

SPECIFIC GRAVITY

MOISTURE FREE AS SAMPLED MEASURED	MOISTURE FREE AS SAMPLED CALCULATED	MOISTURE AND ACID GAS FREE MEASURED	MOISTURE AND ACID GAS FREE CALCULATED
0.703	0.706		0.559

PSEUDO CRITICAL PROPERTIES (CALCULATED)

AS SAMPLED pPc	AS SAMPLED pTc	ACID GAS FREE pPc	ACID GAS FREE pTc
731.4 PSIA	373.5 R	670.2 PSIA	342.1

H_2S Grains per 100 cu. ft. @ 60 F. & 14.65 p.s.i.a: 0.

MOL. WT. Total Gas: 20.44 C_7^+: 0.

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

EDMONTON — FORT ST. JOHN — CALGARY

— WATER ANALYSIS —

LABORATORY NUMBER: E74-3609-11

CONTAINER IDENTITY:

OPERATOR NAME AND ADDRESS: AMOCO CANADA PETROLEUM COMPANY LTD

SAMPLE LOCATION:

WELL OR SAMPLE LOCATION NAME: POINTED MTN A-4

ELEVATIONS: KB GRD

FIELD OR AREA:

POOL OR ZONE:

NAME OF SAMPLER:

COMPANY:

TEST TYPE & NO.:

TEST RECOVERY: 137 bbls

TEST INTERVAL OR PERFS:

POINT OF SAMPLE: SWAB #24 4200 FEET

AMT. & TYPE OF CUSHION:

MUD RESISTIVITY: @ °F

TYPE OF PRODUCTION: PUMPING | FLOWING | GAS LIFT | SWAB

PRODUCTION RATES: WATER BBLS/D | OIL BBLS/D | GAS MCF/D

PRESSURES - PSIG: SEPARATOR | TREATER | RESERVOIR | CONTAINER WHEN SAMPLED | CONTAINER WHEN RECEIVED

TEMPERATURES (°F): SEPARATOR | TREATER | CONTAINER WHEN SAMPLED | CONTAINER WHEN RECEIVED

DATE SAMPLED (D/M/Y):

DATE RECEIVED (D/M/Y): 19/09/74

DATE ANALYZED (D/M/Y): 26/09/74

ANALYST: R.J. MALONEY

REMARKS:

ION	MG/L	MG%	MEQ/L
Na	338	19.98	14.71
K			
Ca	150	8.89	7.51
Mg	4	0.22	0.32
Ba			
Sr			
Fe	Present		

ION	MG/L	MG%	MEQ/L
Cl	168	9.92	4.74
Br			
I			
HCO_3	830	49.04	13.61
SO_4	202	11.91	4.19
CO_3	NIL		
OH	NIL		
H.S	Present		

TOTAL SOLIDS Mg/L

BY EVAPORATION: 1260 @ 110°C

BY EVAPORATION: @ 180°C

AT IGNITION: 710

CALCULATED: 1692

ORGANIC MATTER: PRESENT

SPECIFIC GRAVITY: 1.002 @ 60°F

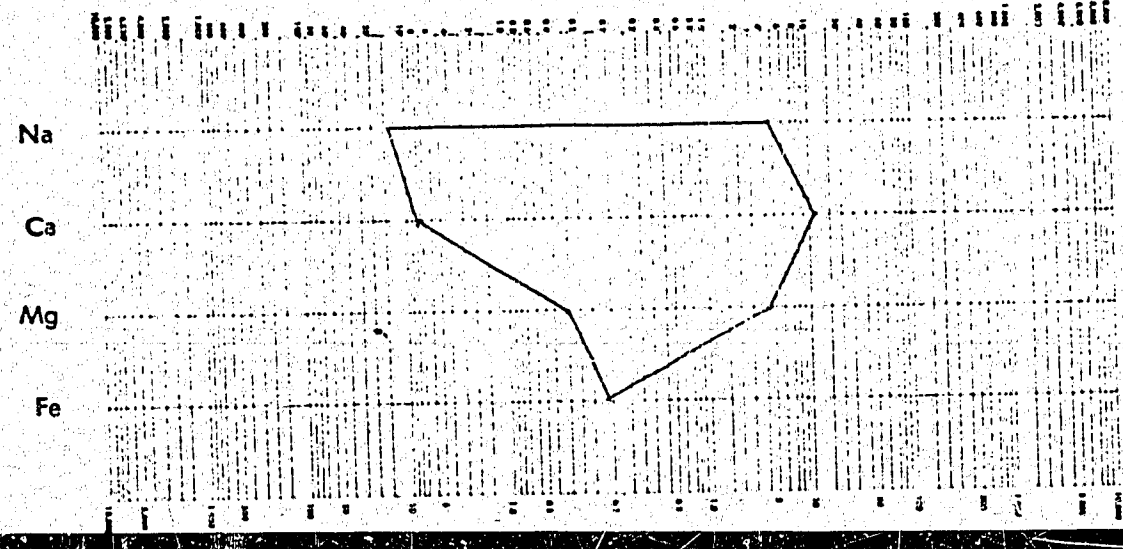
REFRACTIVE INDEX: 1.3331 @ 25°C

OBSERVED PH: 6.8 @ 75°F

RESISTIVITY (Ohm/meters): 5.74 @ 25°C

Remarks and Conclusions

LOGARITHMIC PATTERN MEQ PER LITER



THE SAMPLE CONSISTED O
WATER WITH A THIN LAYE
OF SEDIMENT.

AMOCO CANADA PETROLEUM COMPANY LTD. LABORATORY REPORT NUMBER E74-3609

LAB. NO.	SWAB NO.	BBLS	DEPTH	PH(92°)	CHLORIDE (mg/l)	RESISTIVITY (OHM-METER @ 77°F
E74-3609-1	3	114.6	8200'	6.9	726	3.87
E74-3609-2	4	115.0	8200'	6.9	616	4.24
E74-3609-3	5	116.2	8200'	7.1	466	4.76
E74-3609-4	17	107.4	7800'	7.0	298	5.00
E74-3609-5	18	112.2	7600'	7.1	317	4.88
E74-3609-6	19	113.0	7800'	7.1	505	4.24
E74-3609-7	20	99	4000'	6.7	169	6.50
E74-3609-8	21	107	4200'	7.0	354	6.97
E74-3609-9	22	115	4200'	7.2	136	6.10
E74-3609-10	23	129	4200'	7.0	159	5.74

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

EDMONTON — FORT ST. JOHN — CALGARY

— WATER ANALYSIS —

CONTAINER IDENTITY

LABORATORY NUMBER
E74-3608

OPERATOR NAME AND ADDRESS
AMOCO CANADA PETROLEUM COMPANY LTD.

SAMPLE LOCATION

WELL OR SAMPLE LOCATION NAME
POINTED MTN A-4

ELEVATIONS KB GPD.

FIELD OR AREA

POOL OR ZONE

NAME OF SAMPLER

COMPANY

TEST TYPE & NO.

TEST RECOVERY

TEST INTERVAL OR PERFS
8000'

POINT OF SAMPLE
FLARE PIT SAMPLE

AMT. & TYPE OF CUSHION

MUD RESISTIVITY @ °F

TYPE OF PRODUCTION
PUMPING | FLOWING | GAS LIFT | SWAB

PRODUCTION RATES
WATER BBLS/D | OIL BBLS/D | GAS MCF/D

PRESSURES - PSIG

SEPARATOR	TREATER		RESERVOIR	CONTAINER WHEN SAMPLED	CONTAINER WHEN RECEIVED

TEMPERATURES (°F)

SEPARATOR	TREATER		CONTAINER WHEN SAMPLED	CONTAINER WHEN RECEIVED

DATE SAMPLED (D/M/Y): 18/09/74
DATE RECEIVED (D/M/Y): 19/09/74
DATE ANALYZED (D/M/Y): 26/09/74
ANALYST: R.J. MALONEY
REMARKS:

ION	MG/L	MG%	MEQ/L	ION	MG/L	MG%	MEQ/L
Na	944	27.44	41.07	Cl	1034	30.05	29.16
K				Br			
Ca	159	4.62	7.94	I			
Mg	30	0.86	2.45	HCO_3	950	27.61	15.58
Ba				SO_4	323	9.39	6.72
Sr				CO_3	NIL		
Fe	PRESENT			OH	NIL		
				H_2S	PRESENT		

TOTAL SOLIDS Mg/L

BY EVAPORATION @ 110°C	BY EVAPORATION @ 180°C
3090	

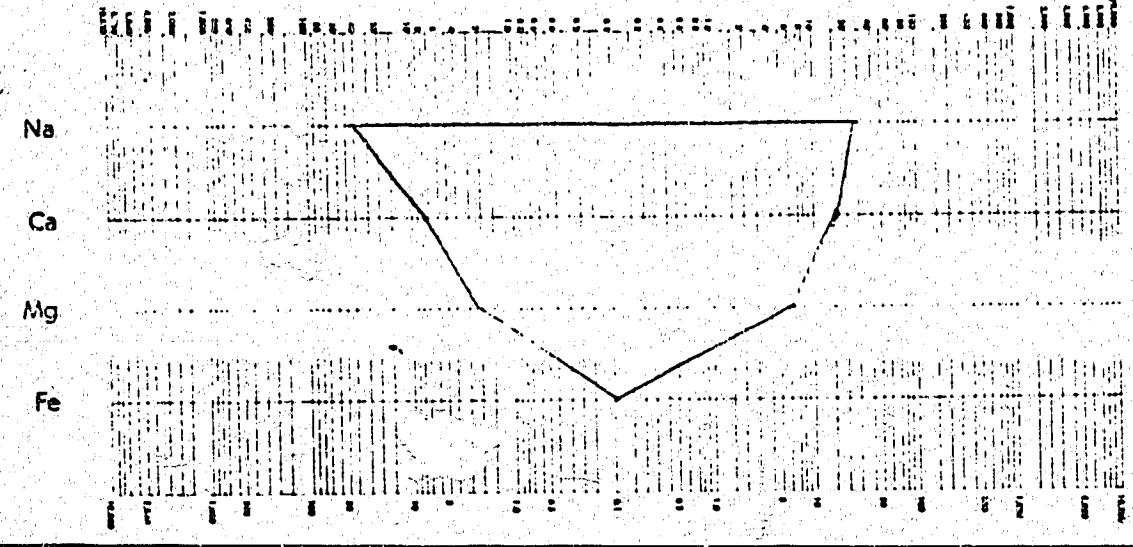
AT IGNITION	CALCULATED
2725	3440

ORGANIC MATTER: Present

SPECIFIC GRAVITY	REFRACTIVE INDEX
1.004 @ 60°F	1.3334 @ 25°C

OBSERVED PH	RESISTIVITY (Ohm/meters)
6.8 @ 75 °F	2.22 @ 25°C

LOGARITHMIC PATTERN MEQ PER LITER



Remarks and Conclusions

The sample consisted of water with a greyish colored suspension.

POINTED MOUNTAIN A-55

A - 4

BACK PRESSURE TEST

SEPTEMBER, 1976

TABLE OF CONTENTS

POINTED MOUNTAIN A-55 (A-4)

SEPTEMBER, 1976 A.O.F.

TEST

		PAGE NO.
INTRODUCTION		1
SUMMARY		1
DISCUSSION		1 & 2
	Text	
	Back Pressure Test Data Sheet	
ATTACHMENTS		
	A.O.F. Curve	No. 1
	Pressure Buildup Curves	No. 2, 3 & 4
	Chronological Plot	No. 5
	Wellhead Cooling Rates	No. 6
	Meter Building Plan	No. 7
APPENDIX A		
	Bottom Hole Pressure Calculations - Static Conditions	A-1
	Flowrate Calculations	A-2
	Bottom Hole Pressure Calculations - Flowing Conditions	A-3
	Data and Calculations	A-5
APPENDIX B		
	Gas Analysis	B-1
	Water Analysis	B-2
	Test Data Sheets	B-3

POINTED MOUNTAIN A-55 (A-4)

INTRODUCTION

The Amoco Pointed Mountain A-55 (A-4) well was drilled in 1974 to further evaluate the Nahanni formation in the Pointed Mountain Gas Field. The well was completed on October 12, 1974 in the Nahanni zone over the intervals 10,265' KB to 10,400' KB, 10,490' KB to 10,540' KB, 10,690' KB to 10,740' KB and 11,238' KB to 11,318' KB using 2 JSPF. This well was drilled to a depth of 12,326' KB and plugged back to 11,810' KB. The completion is through 7" (23# and 26#, S00-95 and N-80) casing which was landed at the TD of 12,326' KB. The producing string is 4 1/2" (12.75#, C-75) Hydril tubing with a bottom hole assembly of 3 1/2", 9.3# and 2 7/8", 6.5# pup joints and nipples. This string is landed at 10,190' KB in a Baker 84-32 Model "D" production (permanent) packer with the flapper removed.

Upon completion, an acid-frac was conducted using 24,486 gals of 29% HCL with 5 lb/1000 gal FR-20 and 10 gal/1000 gal HAl-70. Pumping at an average rate of 22 BPM through the tubing, a breakdown from 6,500 psi to 5,500 psi was achieved.

After the well was tied into the Gas Gathering System on February 4, 1975 it was flowed to cleanup and a four point A.O.F. test was conducted from March 2 through March 8, 1975. The A.O.F. calculated from the March, 1975 test was 5.66 MMCFD (n reset = 1.0, $c = 0.310 \times 10^{-6}$) at a static reservoir pressure of 4277.3 psia, calculated from wellhead data.

A single point A.O.F. test was conducted from August 31 through September 3, 1976 and this report presents the A.O.F. test data and calculation results.

SUMMARY

The A.O.F. calculated from the September, 1976 test is 4.65 MMCFD (n reset = 1.0, $c = .316 \times 10^{-6}$) at a static reservoir pressure of 3834 psia, calculated from wellhead data. A deliverability curve is not presented in this report, as wellbore cooling effects on observed shutin surface pressures cannot be accurately established.

The well produced water at a rate of 17 bbls/day for a water/gas ratio of 3.9 bbls/MMCF prior to shutin. The water analysis conducted by C & G Labs shows a chloride concentration of 31 MG/L (See Appendix B, Page B-2). The chloride concentration measured in the field was 300 MG/L.

The average production rate for Pointed Mountain A-4 is 4 MMCFD with an average water/gas ratio of 3.5 bbls/MMCF. The wellhead flowing pressure is approximately 1075 psia.

DISCUSSION

A single point modified isochronal A.O.F. test was conducted by Johnston Schlumberger and the Pointed Mountain Plant personnel from August 31, 1976 to September 3, 1976. Gas and water samples were taken by the testing

crews and forwarded to Chemical and Geological Laboratories Limited for analysis. Appendix B includes the completed gas and water analysis and the test data as recorded. The meter run flow rate was calculated using the General Electric Mark III computer program FLORATE.

Attachment No. 1, the A.O.F. Curve, determines the A.O.F. to be 4.65 MMCFD. Flowing sandface pressures were calculated from wellhead data using the General Electric Mark III computer program BACKP$ employing the Cullender and Smith method. The I.D.'s of the completion assembly and the 7" casing were taken into consideration when calculating the flowing bottom hole pressures to the mid point perforation depth of 10,791' KB. Appendix A contains these calculations. During the test, bottomhole pressure and temperature recorders were not run. Consequently, care was taken to ensure accurate measurement of surface data.

Bottomhole pressures during the shutin periods were also calculated from surface data using the General Electric Mark III Computer Program BHOLE$. Static bottom hole pressure calculations are also contained in Appendix A. Because of the large effect that ambient conditions exert on the wellhead temperature during the shutin periods, the "Annulus Cooling Curve" determined from the March, 1971 Beaver River d-A64-k (A-5) A.O.F. test was used. However, before being used, this curve was adjusted to the observed wellhead shutin temperature at the beginning of the shutin period (see Attachment No. 6). Although the use of this curve is much more accurate than using the observed shutin wellhead temperature, there may still be some deviation from the actual conditions. This error would contribute to the calculated 1.28 value of "n" indicated by the A.O.F. curve of the March, 1975 report. To correct for this, the value of "n" was restored to 1.0 for the September, 1976 A.O.F.. A line with this slope was drawn through the stabilized point to determine the A.O.F. (Reference: Oil and Gas Conservation Board Theory and Practice of the Testing of Gas Wells, pages 39 and 40, second edition July, 1965).

The well was tested through the existing production facilities with water separation performed by the permanent separator located in the meter run building at the wellsite (See Attachment No. 7). The water was measured using a Halliburton turbine water meter and a water tank, before being removed for disposal.

AMOCO CANADA PETROLEUM COMPANY LIMITED

WELL: POINTED MOUNTAIN A-55 (A-4)

SUMMARY BACK PRESSURE TEST DATA

Well Effluent: SG 0.665 pPc 713.6 pTc 364.3

	WELLHEAD DATA			METER DATA			
Run	Time hrs	Temp °F	Pw (Pwf) psia	Plate Size in.	Static Press psia	Diff H_2O in's	Mr Temp °F
ISI	120	50	2974	-	-	-	-
IA		101	1106	2.00	1086	25	98

Run	Flow Rate mmcfd	B.H.P. Pf (Ps) psia	Pf^2-Ps^2 $\times 10^{-6}$ psia	W.H.P. Pw^2-Pwf^2 $\times 10^{-6}$ psia	Cond Prod bbls	Water Prod bbls	W.G.R. bbls/mmcf
ISI		3751.4					
		3834					
IA	4.088	(1337.8)	12.9098	-	0	17	3.9

A.O.F. 4.65 MMCFD

'n' 1.0 (reset)

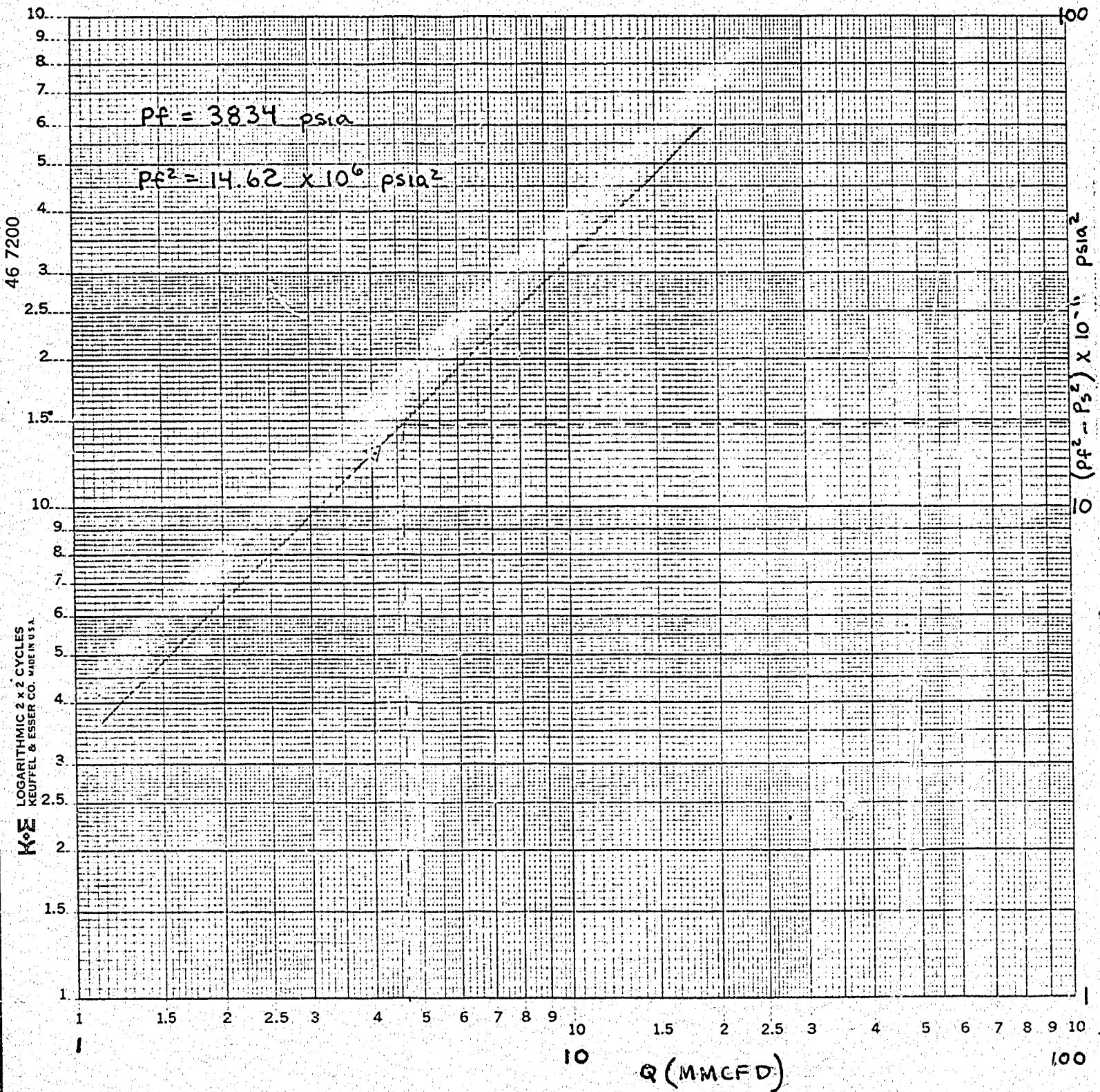
C .316 x 10^{-6}

Bottom Hole Pressure 3834 psia

Bottom Hole Temperature 320 °F

Attachment No. 1

POINTED MOUNTAIN A-55(A-4)
SEPTEMBER, 1976 AOF TEST
AOF CURVE



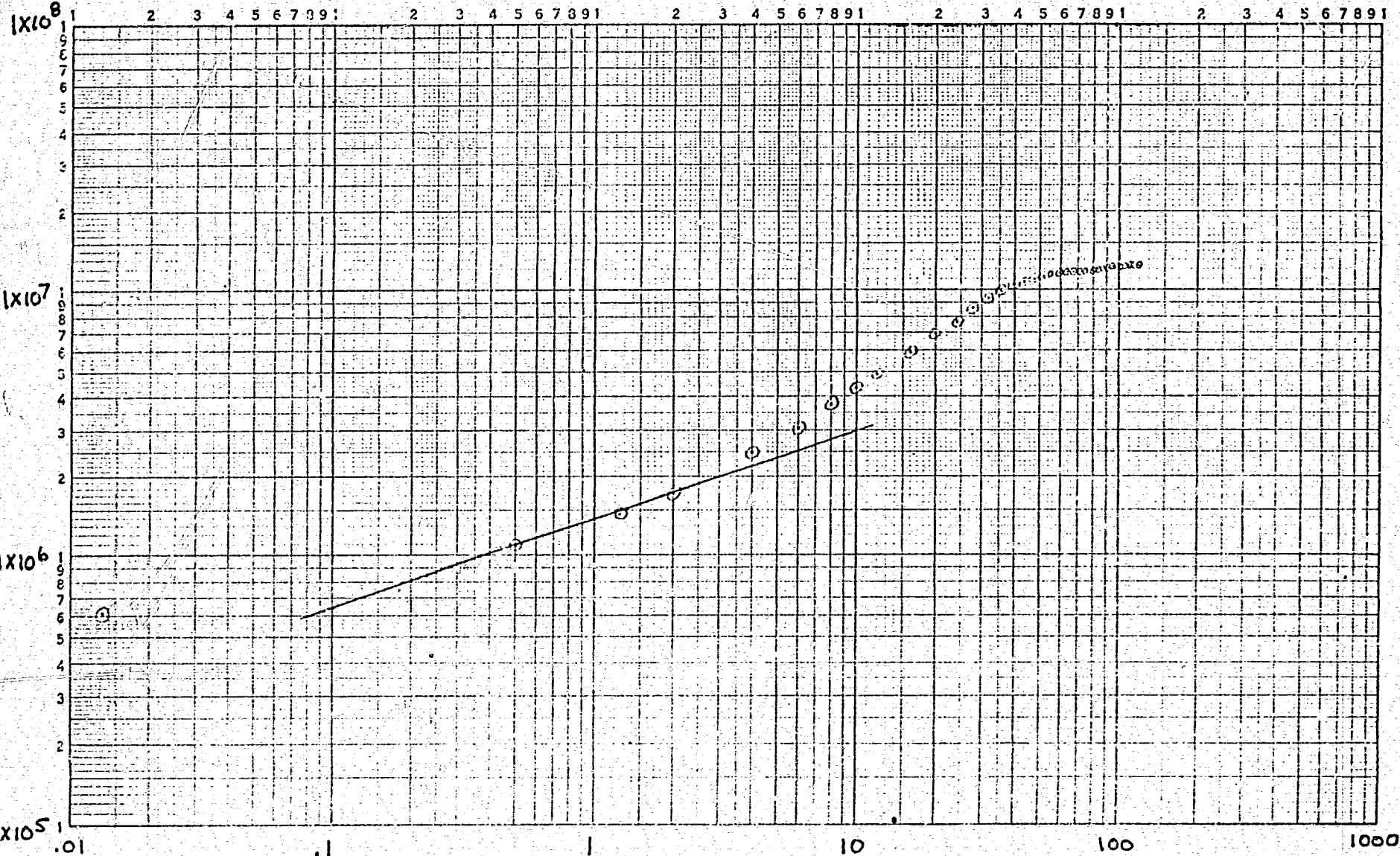
n reset = 1.0

C = .316 x 10^{-6}

A.O.F. = 4.65 mmcfd

K&E LOGARITHMIC 3 X 5 CYCLES 46 7520 MADE IN U.S.A.
KEUFFEL & ESSER CO.

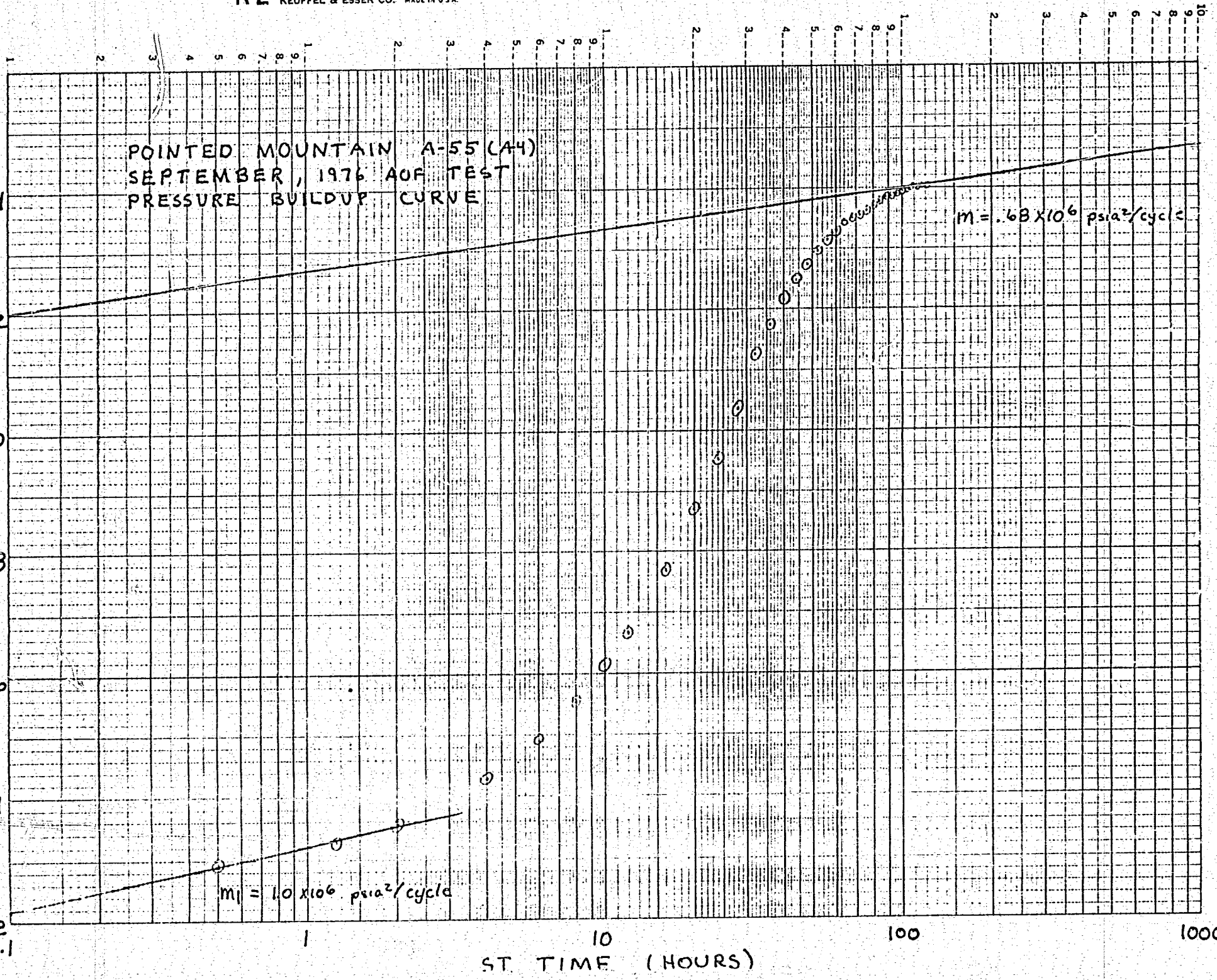
POINTED MOUNTAIN A-55 (A-4)
SEPTEMBER, 1976 AOF TEST
PRESSURE BUILDUP CURVE



ATTACHMENT NO. 2

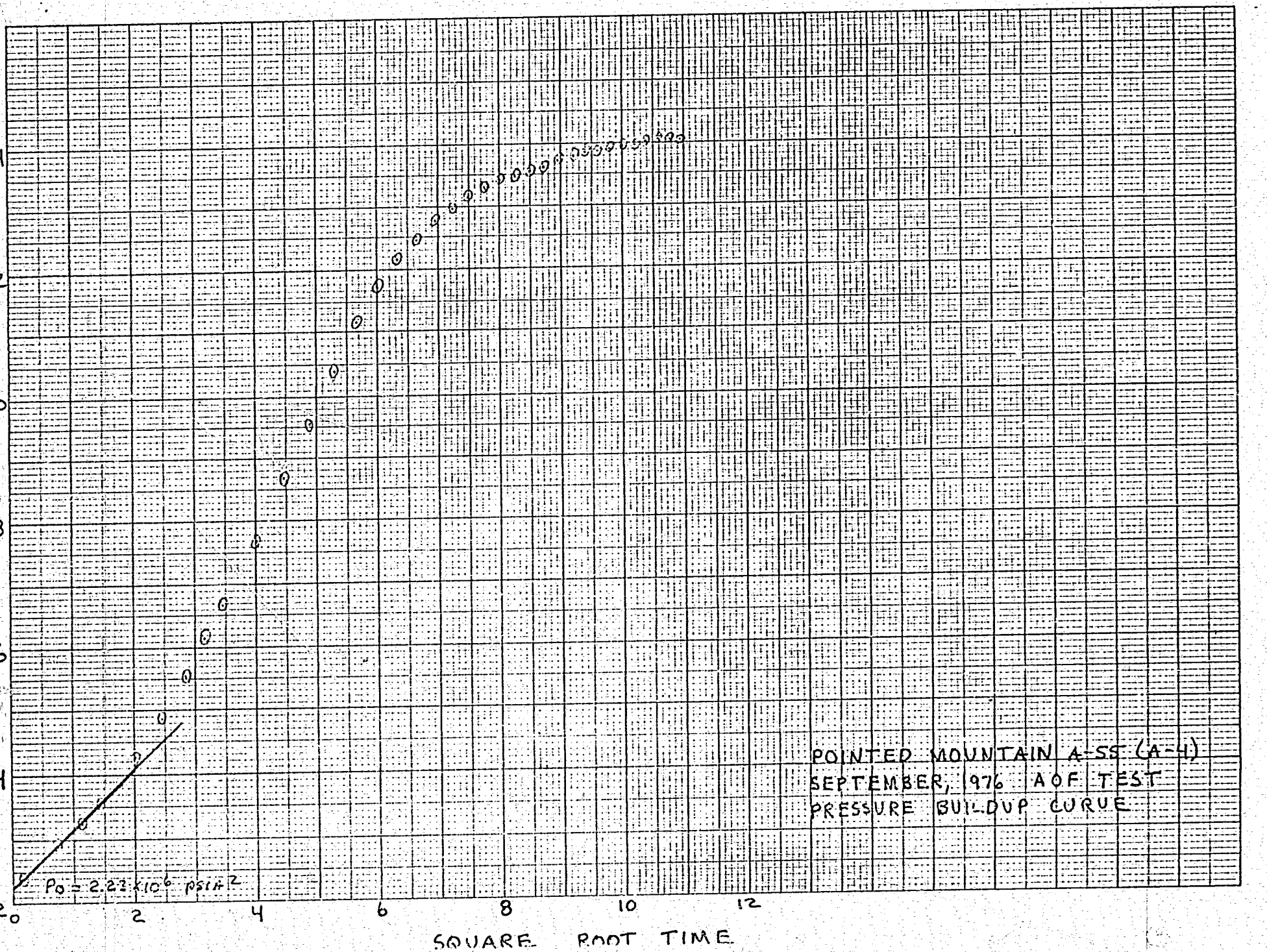
K&E SEMI-LOGARITHMIC 4 CYCLES X 70 DIVISIONS
KEUFFEL & ESSER CO. MADE IN U.S.A.

46 6010



ATTACHMENT NO. 3

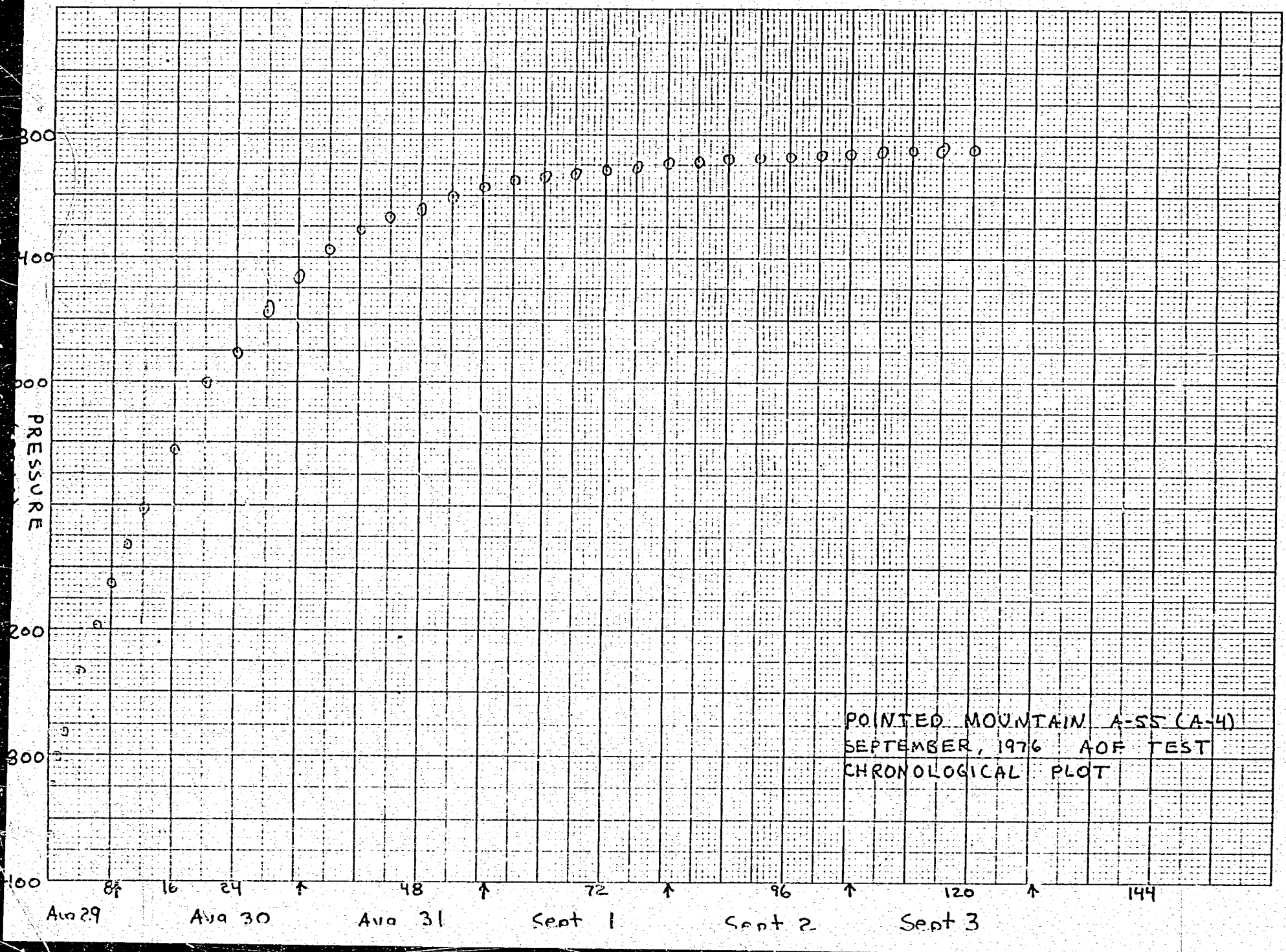
K&E 10 X 10 TO ½ INCH 46 1320
7 X 10 INCHES MADE IN U. S. A.
KEUFFEL & ESSER CO.



POINTED MOUNTAIN A-55 (A-4)
SEPTEMBER, 1976 AOF TEST
PRESSURE BUILDUP CURVE

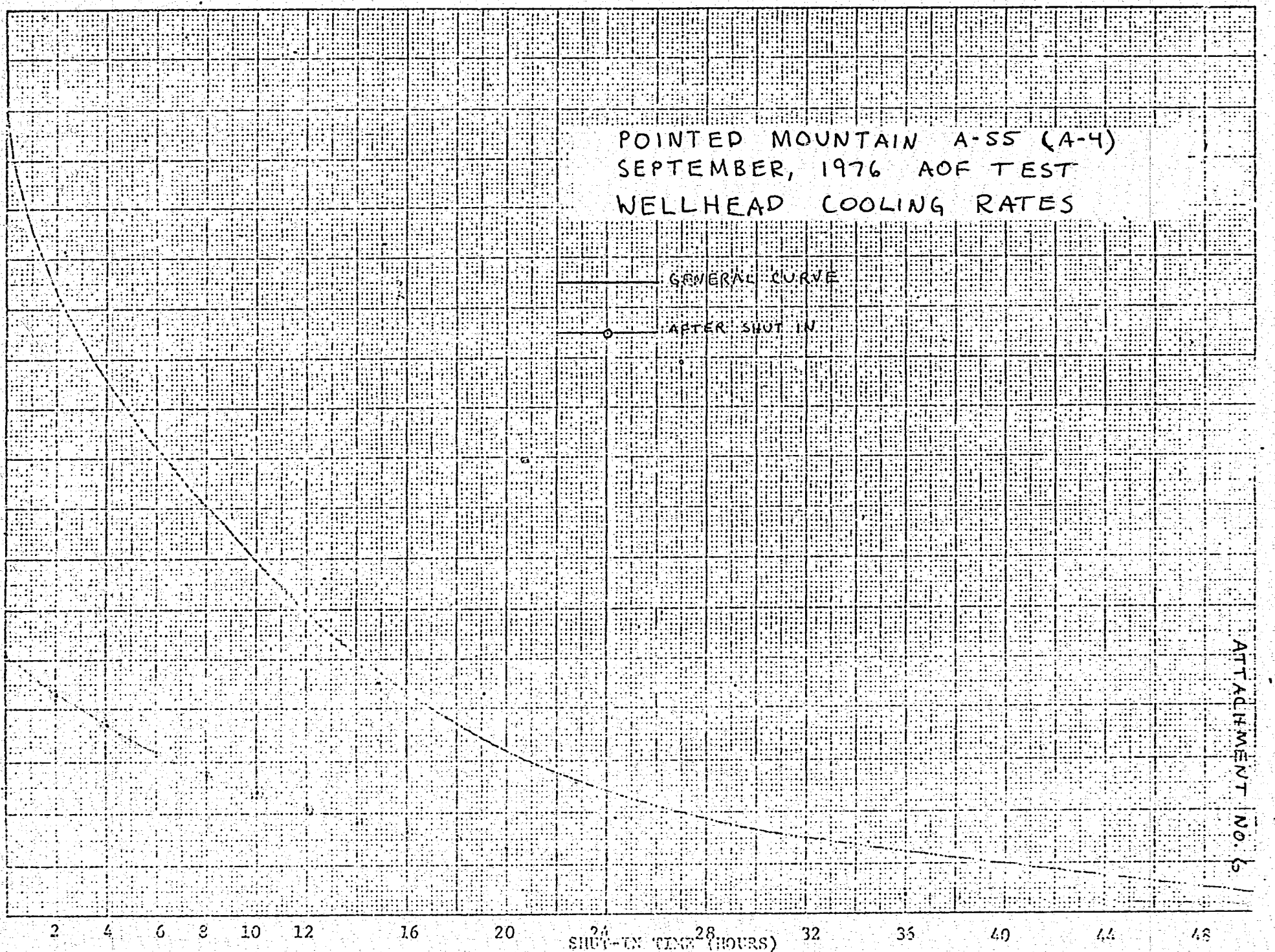
ATTACHMENT NO. 4

K·E 10 X 10 TO ½ INCH 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

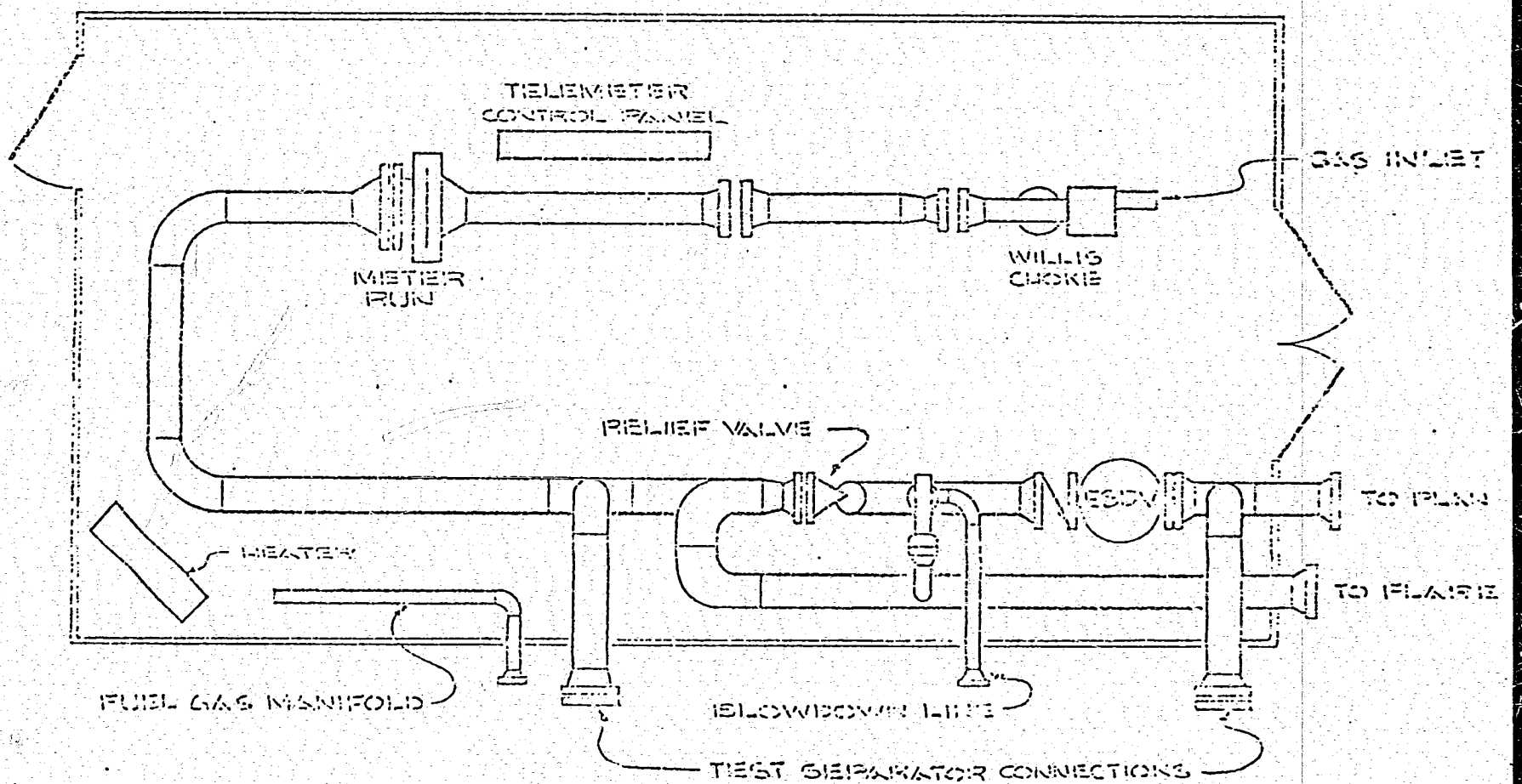


ATTACHMENT NO. 5

KEUFFEL & ESSER CO.



ATTACHMENT NO. 6



POINTED MOUNTAIN
WELL METER BUILDING

ATTACHMENT NO. 7

WELL : POINTED MOUNTAIN A-55(A-4)

BOTTOM HOLE PRESSURE CALCULATIONS
STATIC CONDITIONS

SPECIFIC GAS GRAVITY	.6650	
DEPTH	10721.	FEET
FORMATION TEMPERATURE	320.	DF
CRITICAL PRESSURE	714.	PSIA
CRITICAL TEMPERATURE	364.	DR
CO2 AND H2S CONTENT	10.63	MOL PC

WELL HEAD TEMP (DF)	WELL HEAD PRESSURE (PSIA)	BOTTOM HOLE PRESSURE (PSIA)
PSEUDO REDUCED TEMP > CORRECTION LIMITS; VALUE RESET TO 2		
101.0	1248.0	1549.4
99.0	1370.0	1703.5
96.0	1445.0	1799.2
93.0	1507.0	1878.6
87.0	1655.0	2068.1
82.0	1765.0	2210.0
78.0	1879.0	2356.4
74.0	1972.0	2476.8
71.0	2055.0	2584.0
66.0	2203.0	2775.5
63.0	2337.0	2947.8
61.0	2448.0	3089.6
58.0	2553.0	3224.1
56.0	2644.0	3339.3
54.0	2715.0	3429.4
54.0	2764.0	3489.7
53.0	2795.0	3528.9
52.0	2830.0	3573.1
52.0	2852.0	3600.0
52.0	2875.0	3628.2
52.0	2890.0	3646.5
52.0	2904.0	3663.6
52.0	2909.0	3669.7
52.0	2918.0	3680.7
52.0	2926.0	3690.5
52.0	2937.0	3703.9
51.0	2944.0	3713.7
51.0	2950.0	3721.0
51.0	2950.0	3721.0
51.0	2955.0	3727.1
51.0	2960.0	3733.2
51.0	2964.0	3738.0
51.0	2969.0	3744.1
51.0	2973.0	3749.0
51.0	2974.0	3750.2
50.0	2974.0	3751.4

POINTED MOUNTAIN A-4

BOTTOMHOLE PRESSURE (PSIA)	BOTTOMHOLE PRESSURE x 10^6 ($PSIA^2$)	(Pf^2-Ps^2) x 10^6 ($PSIA^2$)	SHUT IN TIME ΔT (HOURS)	$\sqrt{\text{SHUT IN TIME}}$
1549.4	2.40	0.61	0.033	0.18
1703.5	2.90	1.11	0.5	0.71
1799.2	3.24	1.45	1.25	1.12
1878.6	3.53	1.74	2.0	1.41
2068.1	4.28	2.49	4.0	2.00
2210.0	4.88	3.09	6.0	2.45
2356.4	5.55	3.76	8.0	2.83
2476.8	6.13	4.34	10.0	3.16
2584.0	6.68	4.89	12.0	3.46
2775.5	7.70	5.91	16.0	4.00
2947.8	8.69	6.90	20.0	4.47
3089.6	9.55	7.76	24.0	4.90
3224.1	10.39	8.60	28.0	5.29
3339.3	11.15	9.36	32.0	5.66
3429.4	11.76	9.97	36.0	6.00
3489.7	12.18	10.39	40.0	6.32
3528.9	12.45	10.66	44.0	6.63
3573.1	12.77	10.98	48.0	6.93
3600.0	12.96	11.17	52.0	7.21
3628.2	13.16	11.37	56.0	7.48
3646.5	13.30	11.51	60.0	7.75
3663.6	13.42	11.63	64.0	8.00
3669.7	13.47	11.68	68.0	8.25
3680.7	13.55	11.76	72.0	8.49
3690.5	13.62	11.83	76.0	8.72
3703.9	13.72	11.93	80.0	8.94
3713.7	13.79	12.00	84.0	9.17
3721.0	13.85	12.06	88.0	9.38
3721.0	13.85	12.06	92.0	9.59
3727.1	13.89	12.10	96.0	9.80
3733.2	13.94	12.15	100.0	10.00
3738.0	13.97	12.18	104.0	10.20
3744.1	14.02	12.23	108.0	10.39
3749.0	14.05	12.26	112.0	10.58
3750.2	14.06	12.27	116.0	10.77
3751.4	14.07	12.28	120.0	10.95

WELL NAME: POINTED MOUNTAIN A-55(A-4)
LOCATION: NAVAJO FORMATION

ORIFICE
FLOW RATE CALCULATION

FLOW PERIOD	1
DIAMETER IN	7.625
ORIFICE IN	2.0000
TEMP F	93.0
PRES. PSIA	1100.7
DIFF IN	25.0

GAS FLOW RATES

BASIC ORIF FACTOR	813.42
TEMP BASE FACTOR	1.0000
SPEC GRAV FACTOR	1.2263
PRES BASE FACTOR	1.0020
FLOW TEMP FACTOR	0.9653
SUPER COMP FACTOR	1.0640
REYNOLDS NO FACTOR	1.0002
EXPANSION FACTOR	1.0001

DAILY GAS RATE-MCF 4.036

WELL : POINTED A-55(A-4) 4-1/2"TUBING,0'-10045',SEPTEMBER 1976

BOTTOM HOLE PRESSURE CALCULATIONS
FLOWING CONDITIONS

SPECIFIC GAS GRAVITY	.6650	
DEPTH	10045.	FEET
FORMATION TEMPERATURE	320.	DF
CRITICAL PRESSURE	714.	PSIA
CRITICAL TEMPERATURE	364.	DR
CO2 AND H2S CONTENT	10.63	MOL PC
INT. PIPE DIAMETER	3.958	INCH

GAS FLOW (MMCFD)	WELLH. TEMP. (DF)	WELLH. PRESS. (PSIA)	SANDF. PRESS. (PSIA)	FORM. PRESS. (PSIA)	$2 \quad 2 \quad -6$ $(PF - PS)*10$ (PSIA2)
PSEUDO REDUCED TEMP > CORRECTION LIMITS; VALUE RESET TO 2					
4.0880	98.0	1086.0	1337.8	0.	-1.7897

WELL : POINTED A-55(A-4) 3-1/2"TUBING,10045'-10120' SEPTEMBER 1976

BOTTOM HOLE PRESSURE CALCULATIONS
FLOWING CONDITIONS

SPECIFIC GAS GRAVITY	.6650	
DEPTH	145.	FEET
FORMATION TEMPERATURE	320.	DF
CRITICAL PRESSURE	714.	PSIA
CRITICAL TEMPERATURE	364.	DR
CO2 AND H2S CONTENT	10.63	MOL PC
INT. PIPE DIAMETER	2.992	INCH

GAS FLOW (MMCFD)	WELLH. TEMP. (DF)	WELLH. PRESS. (PSIA)	SANDF. PRESS. (PSIA)	FORM. PRESS. (PSIA)	$2 \quad 2 \quad -6$ $(PF - PS)*10$ (PSIA2)
PSEUDO REDUCED TEMP > CORRECTION LIMITS; VALUE RESET TO 2					
4.0880	304.7	1337.8	1341.7	0.	-1.0000

WELL : POINTED A-55(A-4) 2-7/8"TUBING,10190'-10219' SEPTEMBER 1976

BOTTOM HOLE PRESSURE CALCULATIONS
FLOWING CONDITIONS

SPECIFIC GAS GRAVITY	.6650	
DEPTH	29.	FEET
FORMATION TEMPERATURE	320.	DF
CRITICAL PRESSURE	714.	PSIA
CRITICAL TEMPERATURE	364.	DR
CO2 AND H2S CONTENT	10.63	MOL PC
INT. PIPE DIAMETER	2.441	INCH

GAS FLOW (MMCFD)	WELLH. TEMP. (DF)	WELLH. PRESS. (PSIA)	SANDF. PRESS. (PSIA)	FORM. PRESS. (PSIA)	$2 \quad 2 \quad -6$ $(PF - PS)*10$ (PSIA2)
PSEUDO REDUCED TEMP > CORRECTION LIMITS; VALUE RESET TO 2					
4.0880	307.6	1341.7	1342.7	0.	-1.8029

WELL : POINTED A-55(A-4) 7"CASING,10219'-10791' SEPTEMBER 1976

BOTTOM HOLE PRESSURE CALCULATIONS
FLOWING CONDITIONS

SPECIFIC GAS GRAVITY	.6650	
DEPTH	572.	FEET
FORMATION TEMPERATURE	320.	DF
CRITICAL PRESSURE	714.	PSIA
CRITICAL TEMPERATURE	364.	DR
CO2 AND H2S CONTENT	10.63	MOL PC
INT. PIPE DIAMETER	6.276	INCH

GAS FLOW (MMCFD)	WELLH. TEMP. (DF)	WELLH. PRESS. (PSIA)	SANDF. PRESS. (PSIA)	FORM. PRESS. (PSIA)	$2 \quad 2 \quad -6$ $(PF - PS)*10$ (PSIA2)
PSEUDO REDUCED TEMP > CORRECTION LIMITS; VALUE RESET TO 2					
4.0880	309.2	1342.7	1355.5	3834.0	12.9098

POINTED MOUNTAIN A-55 (A-4)

SEPTEMBER, 1976 A.O.F. TEST

CALCULATIONS AND RESULTS

PRODUCTION DATA

Cumulative Production - 2,530,300 MCF
Producing Rates Prior to Shut-in - Gas - 4088 MCF
Water - 17 STBO

WELL DATA

re - Drainage Radius - 2979 ft.
rw - Well Bore Radius - 0.19 ft.
h - Pay Zone Thickness - 1053 ft.
ϕ - Porosity - .01
sw - Water Saturation - .30
μ - Viscosity - Gas - .017 cp
Water - .7 cp
Pwf - Flowing Pressure Prior to Shut-in - 1337.8 psia
T - Reservoir Temperature - 780°R
Z - Gas Compressibility Factor - .90
t - Test Length - 120 hours
Ct - System Compressibility
$Ct = swcw + sgcw + cr$
$Ct = (.30)(5 \times 10^{-6}) + (.70)(3.4 \times 10^{-4}) + 10 \times 10^{-6}$
$Ct = 1.5 \times 10^{-6} + 2.38 \times 10^{-4} + 10 \times 10^{-6}$
$Ct = 2.495 \times 10^{-4}$ psia^{-1}

DIMENSIONLESS FLOWING TIME

assume k = .1

$$t_1 = \frac{2,530,300}{4088} \times 24$$

$$T_{De} = \frac{.000264\, Kt1}{\phi \mu\, ct\, re^2}$$

$$T_{De} = \frac{(.000264)(.1)(14.855)}{(.01)(.017)(2.495 \times 10^{-4})(2979)^2} = 1.04 \therefore \text{Old Well}$$

INTERWELL kh

$$P(ave) = \frac{3751.4 + 1337.8}{2} = 2545 \text{ psia}$$

$$kwh = \frac{325.2\, q\mu P(ave)}{m}$$

$$kwh = \frac{(325.2)(17)(.7)(2545)}{(.68 \times 10^6)} = 14.48$$

$$kw = \frac{kwh}{h}$$

$$kw = \frac{14.48}{1053} = .0138$$

$$kgh = \frac{1637\ q\ \mu\ z\ T}{m}$$

$$kgh = \frac{(1637)(4088)(.017)(.90)(780)}{(.68 \times 10^6)} = 117.45$$

$$kg = \frac{kgh}{h}$$

$$kg = \frac{117.45}{1053} = .1115$$

$$\frac{kg}{ug} = \frac{.1115}{.017} = 6.56$$

LATERAL EXTEND OF RESERVOIR TEST COVERED

rinv = Radius of Investigation

$$rinv = .0328\sqrt{\frac{kt}{\mu\ \phi\ ct}}$$

$$rinv = .0328\sqrt{\frac{(6.25)(120)}{(.01)(2.495 \times 10^{-4}}} = 583 \text{ ft.}$$

SKIN FACTOR AND PRESSURE LOSS DUE TO SKIN

s - Skin Factor

$$s = 1.151\left[\frac{P^2 1hr - P^2 wf}{m} - \log\frac{k}{\mu\ \phi\ ctrw^2} + 3.23\right]$$

$$s = 1.151\left[\frac{12.63 \times 10^6 - 1.79 \times 10^6}{(.68 \times 10^6)} - \log\frac{6.56}{(.01)(2.495 \times 10^{-4})(.19)^2} + 3.23\right]$$

$$s = 1.151\ (15.94 - 7.86 + 3.23) = 13.02$$

$$\Delta Pskin = \sqrt{.87\ ms + (P^2 wf - Pwf)}$$

$$\Delta Pskin = \sqrt{(.87)(.68 \times 10^6)(13.02) + (1.79 \times 10^6 - 1337.8)} = 3081 \text{ psia}$$

AVERAGE RESERVOIR PRESSURE

No Flow Boundary

$$\text{Extrapolation Time (hrs)} = \frac{379\ \phi\ \mu\ ct\ re^2}{k}$$

Extrapolation Time (hrs) = $\frac{(379)(.01)(2.495 \times 10^{-4})(2979)^2}{6.56}$ = 1279 hrs.

Ps^2 from extrapolation = 14.7×10^6

Ps = Static Bottomhole Pressure

Ps = 3834 psia

PRODUCTIVITY INDEX

$PI = \frac{q}{Ps-Pwf}$

$PI = \frac{4088}{3834-1337.8}$ = 1.64 MCF/D/psi

FLOW EFFICIENCY

$FE = \frac{P^2s - P^2wf - .87\ ms}{P^2s - P^2wf}$

$FE = \frac{14.70 \times 10^6 - 1.79 \times 10^6 - (.87)(.68 \times 10^6)(13.02)}{14.70 \times 10^6 - 1.79 \times 10^6}$ = .40

CONDITION RATIO

$CR = \frac{2m \log (re/rw)}{P^2s - P^2wf}$

$CR = \frac{(2)(.68 \times 10^6) \log (2979/.19)}{14.70 \times 10^6 - 1.79 \times 10^6}$ = .44

VERTICAL FRACTURE LENGTH

$Lf = \frac{2.023}{ml} \sqrt{\frac{qzTm}{\phi hct}}$

$Lf = \frac{2.023}{1 \times 10^6} \sqrt{\frac{(4088)(.90)(780)(.68 \times 10^6)}{(.01)(1053)(2.495 \times 10^{-4})}}$ = 61 ft.

PSEUDO SKIN

Pseudo Skin = Po - Pwf

Pseudo Skin = 1493 - 1337.8 = 155 psia

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

EDMONTON — FORT ST. JOHN — CALGARY

— GAS ANALYSIS —

CONTAINER IDENTITY: 3708,3245

LABORATORY NUMBER: 576-7095

OPERATOR NAME AND ADDRESS: AMOCO CANADA PETROLEUM COMPANY LTD.

SAMPLE LOCATION:

WELL OR SAMPLE LOCATION NAME: POINTED MTN A-4

ELEVATIONS: KB / GRD

FIELD OR AREA: POINTED MOUNTAIN

POOL OR ZONE: NAHANEE

NAME OF SAMPLER:

COMPANY: JOHNSTON TESTE

TEST TYPE & NO.:

TEST RECOVERY:

TEST INTERVAL OR DEPTH:

POINT OF SAMPLE: METER RUN

AMT & TYPE OF CUSHION:

MUD RESISTIVITY: @

TYPE OF PRODUCTION: PUMPING | FLOWING | GAS LIFT | SWAB

PRODUCTION RATE: WATER BBLS/D | OIL BBLS/D | GAS MCF/D

PRESSURES - PSIG				CONTAINER		TEMPERATURES (°F)			CONTAINER	
SEPARATOR	TREATER		RESERVOIR	WHEN SAMPLED	WHEN RECEIVED	SEPARATOR	TREATER		WHEN SAMPLED	WHEN RECEIVED
1081					150	98				70

DATE SAMPLED (D/M/Y): 29/08/76

DATE RECEIVED (D/M/Y): 02/09/76

DATE ANALYZED (D/M/Y): 13/09/76

ANALYST: W. ALEXANDER

REMARKS:

COMP	MOL % AIR FREE AS REC'D	MOL % AIR FREE ACID GAS FREE	CON GPM @ 60° F & 14.65 PSIA AIR FREE AS REC'D
H_2	0.	0.	
He	0.	0.	
N_2	1.30	1.45	
CO_2	10.41	0.	
H_2S	0.22	0.	
C_1	88.05	98.53	
C_2	0.02	0.02	
C_3	0.	0.	0.
IC_4	0.	0.	0.
NC_4	0.	0.	0.
IC_5	0.	0.	0.
NC_5	0.	0.	0.
C_6	0.	0.	0.
C_7	0.	0.	0.
C_8	0.	0.	0.
C_9	0.	0.	0.
C_{10}	0.	0.	0.
TOTAL	100.00	100.00	0.

GROSS HEATING VALUE BTU/FT^3. @ 60°F AND 14.65 PSIA

MOISTURE AND ACID GAS FREE

MEASURED	CALCULATED	DETERMINED DEW POINT	VAPOUR PRESS. PENTANES PLUS
	992.		0.

SPECIFIC GRAVITY

MOISTURE FREE AS SAMPLED		MOISTURE AND ACID GAS FREE	
MEASURED	CALCULATED	MEASURED	CALCULATED
0.665	0.661		0.560

PSEUDO CRITICAL PROPERTIES (CALCULATED)

AS SAMPLED		ACID GAS FREE	
pPc	pTc	pPc	pTc
713.6 psia	354.3 °R	670.5 psia	342.2

H_2S Grains per 100 cu. ft. @ 60°F. & 14.65 p.s.i.a: 137.8

MOL. WT. Total Gas: 19.15 C_{7+}: 0.

EDMONTON NORTHERN AREA SEP 17 1976

AS / AF-1 / AF-2 / AF / BI / AAS

File No.

ACTION REQUIRED

Assigned to:

Assignment No.:

Date Answered:

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

EDMONTON — FORT ST. JOHN — CALGARY

— WATER ANALYSIS —

CONTAINER IDENTITY

LABORATORY NUMBER: E76-8010

OPERATOR NAME AND ADDRESS: AMOCO CANADA PETROLEUM COMPANY LTD.

SAMPLE LOCATION

WELL OR SAMPLE LOCATION NAME: POINTED MTN A-4

ELEVATIONS: KB GRD.

FIELD OR AREA: POINTED MTN.

POOL OR ZONE: NAHANEE

NAME OF SAMPLER

COMPANY: JOHNSTON TESTER

TEST TYPE & NO

TEST RECOVERY

TEST INTERVAL OR PERFS

POINT OF SAMPLE: SEPARATOR

AMT & TYPE OF CUSHION

MUD RESISTIVITY @ °F

TYPE OF PRODUCTION: PUMPING FLOWING GAS LIFT SWAB

PRODUCTION RATES: WATER BBLS/D OIL BBLS/D GAS MCF/D

PRESSURES - PSIG: SEPARATOR TREATER RESERVOIR CONTAINER WHEN SAMPLED WHEN RECEIVED

TEMPERATURES (°F): SEPARATOR TREATER CONTAINER WHEN SAMPLED WHEN RECEIVED

DATE SAMPLED (D/M/Y): 29/08/76 DATE RECEIVED (D/M/Y): 03/09/76 DATE ANALYZED (D/M/Y): 09/09/76 ANALYST: J. RIDDELL REMARKS

ION	MG/L	MG%	MEQ/L	ION	MG/L	MG%	MEQ/L
Na	43	27.92	1.87	Cl	31	20.13	0.87
K				Br			
Ca	4	2.60	0.20	I			
Mg	1	0.65	0.08	HCO_3	59	38.31	0.96
Ba				SO_4	16	10.39	0.34
Sr				CO_3	NIL		
Fe	PRESENT			OH	NIL		
				H_2S	MUCH		

TOTAL SOLIDS Mg/L

BY EVAPORATION @ 110°C: 180

BY EVAPORATION @ 180°C:

AT IGNITION: 90

CALCULATED: 154

ORGANIC MATTER: PRESENT

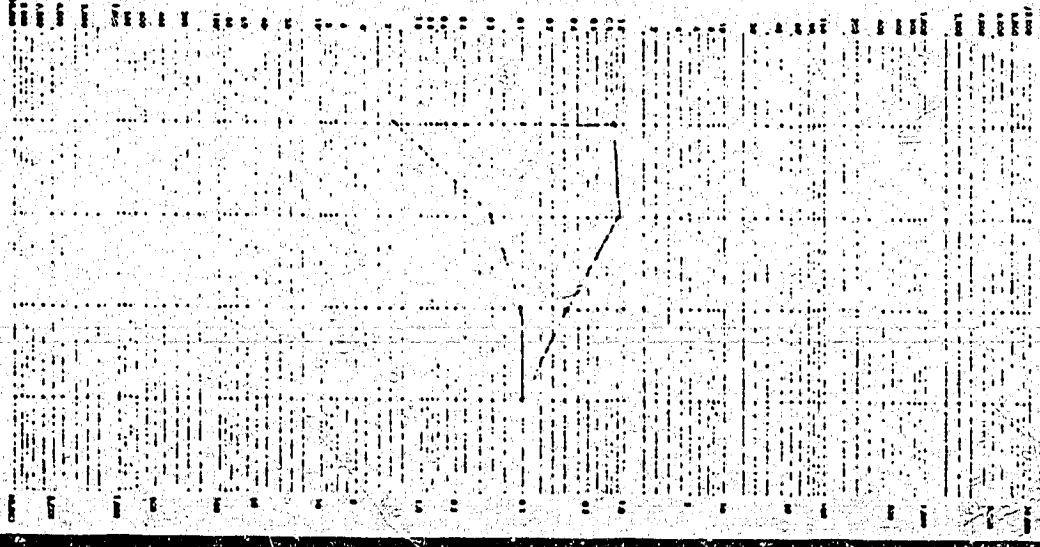
SPECIFIC GRAVITY: 1.001 @ 60°F

REFRACTIVE INDEX: 1.3331 @ 25°C

OBSERVED PH: 6.5 @ 75 °F

RESISTIVITY (Ohm/meter) @ 25°C: 33.59

LOGARITHMIC PATTERN MEQ PER LITER



Remarks and Conclusions

The water had a black suspension of iron sulfide.

JOHNSTON
Schlumberger

Well: A-4 Pointed Mountain Date: August 29, 1976 Page no. 1 of 6

Rate of flow no: Build-up Choke size: _____

Time	Well head cond.			Heater	High stage separator			Low stage separator			Liquid Production			
					Meter run ____ x Orifice ____			Meter run ____ x Orifice ____			Water		Condensate	
	Tbg press. psig	Temp. °F	Recorded press. psig	Ambient Temp. °F	static psig	diff. H_2O	flowing temp. °F	static psig	diff. H_2O	flowing temp. °F	bbls.	Prod. bbls.	ft. in.	Prod. bbls.
1420	1125	101	1130	58	1120	21	98				40.52	0		
1435	1124	101	1130	57	1120	21	98				40.77	.25		
1450	1109	101	1100	62	1095	26	98				41.05	.28		
1505	1106	101	1100	68	1086	25	98				41.31	.26		
1520	1106	101	1100	72	1086	25	98				41.54	.23		
1530	1106	101	1100	75	Shut well in.									
1532	1248	99	1240	76										
1534	1273	99	1280	74										
1538	1286	99	1290	72										
1546	1322	98	1320	80										
1600	1370	98	1370	86										
1645	1445	85	1450	66	Reading late due to installation of thermowell flange.									
1700	1462	83	1460	63										
1730	1507	81	1500	70										
1800	1549	80	1540	78										
1830	1588	80	1590	62										

JOHNSTON Schlumberger

Well: A-4 Pointed Mountain Date: August 29, 1976 Page no. 2 of 6

Rate of flow no: Build-up Choke size: _____

Time	Well head cond.			Heater	High stage separator			Low stage separator			Liquid Production			
					Meter run ____ x Orifice ____			Meter run ____ x Orifice ____			Water		Condensate	
	Tbg press. psig	Temp. °F	Recorded press. psig	Ambient Temp. °F	static psig	diff. H_2O	flowing temp. °F	static psig	diff. H_2O	flowing temp. °F	ft. in.	Prod. bbls.	ft. in.	Prod. bbls.
1900	1624	76	1600	59										
1930	1655	75	1630	58										
2000	1685	73	1670	58										
2030	1722	70	1700	56										
2100	1742	70	1710	52										
2130	1765	68	1740	49										
2200		66		48	Deadweight and recorder lines froze off.									
2230	1830	64	1800	48										
2300	1854	62	1880	46										
2330	1879	61	1840	46										
0030	1927	59	1880	42										
0130	1972	56	1910	42										
0230	2019	54	1980	41										
0330	2055	52	2000	40										
0430	2095	51	2070	40										
0530	2135	50	2100	40										

JOHNSTON
Schlumberger

Well: A-4 Pointed Mountain Date: August 30/76 Page no. 3 of 6

Rate of flow no: Build-up Choke size: _____

Time	Well head cond.			Heater	High stage separator			Low stage separator			Liquid Production			
					Meter run _____ x Orifice _____			Meter run _____ x Orifice _____			Water		Condensate	
	Tbg press. psig	Temp. °F	Recorded press. psig	Ambient Temp. °F	static psig	diff. H_2O	flowing temp. °F	static psig	diff. H_2O	flowing temp. °F	ft. in.	Prod. bbls.	ft. in.	Prod. bbls.
0630	2168	49	2140	39										
0730	2203	48	2190	38										
0830	2237	46	2200	40										
0930	2274	46	2240	46										
1030	2308	47	2280	51										
1130	2337	47	2280	53										
1230	2370	49	2310	56										
1330	2402	51	2360	69										
1430	2427	52	2400	67										
1530	2448	52	2410	62										
1730	2502	54	2470	62										
1930	2553	53	2520	59										
2130	2596	50	2540	52										
2330	2644	50	2540	50										
0130	2685	49	2600	49										
0330	2715	49	2620	49										

JOHNSTON
Schlumberger

Well: A-4 Pointed Mountain Date: August 31/76 Page no. 4 of 6

Rate of flow no: Build-up Choke size: _____

Time	Well head cond.			Heater	High stage separator			Low stage separator			Liquid Production			
					Meter run ____ x Orifice ____			Meter run ____ x Orifice ____			Water		Condensate	
	Tbg press. psig	Temp. °F	Recorded press. psig	Ambient Temp. °F	static psig	diff. H_2O	flowing temp. °F	static psig	diff. H_2O	flowing temp. °F	ft. in.	Prod. bbls.	ft. in.	Prod. bbls.
0530	2740	50	2680	48										
0730	2764	48	2700	47										
0930	2781	47	2710	53										
1130	2795	48	2710	55										
1330	2813	48	2790	60										
1530	2830	50	2800	64										
1730	2843	50	2820	72										
1930	2852	50	2840	53										
2130	2867	49	2840	50										
2330	2875	46	2840	49										
0130	2884	43	2840	42										
0330	2890	43	2860	43										
0530	2895	45	2880	45										
0730	2904	45	2900	43										
0930	2907	44	2900	45										
1130	2909	44	2900	45										

JOHNSTON Schlumberger

Well: A-4 Pointed Mountain Date: September 1/76 Page no. 5 of 6

Rate of flow no: Build-up Choke size: _____

Time	Well head cond.			Heater	High stage separator			Low stage separator			Liquid Production			
					Meter run ____ x Orifice ____			Meter run ____ x Orifice ____			Water		Condensate	
	Tbg press. psig	Temp. °F	Recorded press. psig	Ambient Temp. °F	static psig	diff. H_2O	flowing temp. °F	static psig	diff. H_2O	flowing temp. °F	ft. in.	Prod. bbls.	ft. in.	Prod. bbls.
1330	2913	43	2900	51										
1530	2918	43	2910	51										
1730	2923	43	2920	47										
1930	2926	45	2920	43										
2130	2935	45	2920	43										
2330	2937	44	2920	43										
0130	2940	44	2920	42										
0330	2944	44	2920	42										
0530	2945	43	2940	41										
0730	2950	43	2950	41										
0930	2950	50	2940	50										
1130	2950	50	2940	50										
1330	2954	47	2940	60										
1530	2955	48	2950	51										
1730	2956	48	2950	59										
1930	2960	48	2930	50										

JOHNSTON
Schlumberger

Well: A-4 Pointed Mountain Date: September 2/76 Page no. 6 of 6

Rate of flow no: Build-up Choke size: _____

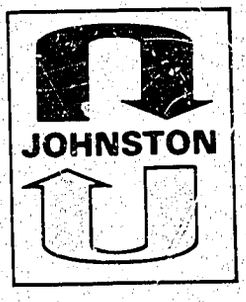
Time	Well head cond.		Heater	High stage separator			Low stage separator			Liquid Production			
				Meter run _____ x Orifice _____			Meter run _____ x Orifice _____			Water		Condensate	
	Tbg press. psig	Temp. °F	Recorded press. psig	Ambient Temp. °F	static psig	diff. H_2O	flowing temp. °F	static psig	diff. H_2O	flowing temp. °F	ft. in.	Prod. bbls.	ft. in.	Prod. bbls.
1230	2960	48	2920	49										
2330	2964	46	2920	44										
0130	2968	44	2920	44										
0330	2969	41	2930	42										
0530	2970	40	2930	39										
0730	2973	40	2930	37										
0930	2973	40	2930	48										
1130	2974	41	2930	48										
1330	2974	46	2970	69										
1530	2974	51	2970	79										

A-4

JOHNSTON

Schlumberger

technical report



SUB-SURFACE

PRESSURE SURVEY

COMPANY: AMOCO CANADA PETROLEUM

FIELD: POINTED MOUNTAIN

TYPES OF TESTS: 3-TEMPERATURE GRADIENTS

1-STATIC GRADIENT

DATES OF TESTS: 80-06-04

WELL NAME:	WELL NUMBER:
Amoco Pointed Mountain	A-4
Amoco Pointed Mountain	A-4
Amoco Pointed Mountain	A-4
Amoco Pointed Mountain	A-4

JOHNSTON Schlumberger

JOHNSTON TESTERS

1223 DOME TOWER
333 - 7 AVENUE S.W., CALGARY, ALBERTA T2P 2Z1

SUBSURFACE PRESSURE MEASUREMENTS

PAGE ____ OF ____

1. BASIC DATA

COMPANY: AMOCO CANADA PETROLEUM
ADDRESS: 444 - 7 Avenue, South-West
FIELD and POOL: Pointed Mountain
TYPE OF TEST: Temperature Gradient
PRODUCING INTERVAL (KB): 3128 - 3449.7 m.
ELEVATION (CF): 455.7 (KB): 460.4 m.
POOL DATUM: ____ m. (SUBSEA)
Temperature Element#21081 Range-15 to 123°C

WELL NAME: Amoco Pointed Mountain
WELL IDENTIFIER: A-4
STATUS: OIL ____ GAS X OTHER: SPECIFY ____
DATE OF TEST: 80-06-04
PRODUCING THROUGH: ____ TUBING ____ CASING
MID-POINT OF PRODUCING INTERVAL (CF): ____ m.
DATUM DEPTH OF WELL (FROM CF): ____ m.
CLOCK RANGE: 6 hours s ☒ D ☐ # 14364 IH # 38363

AMOCO CANADA PETROLEUM COMPANY

2. STATIC TEST

PRESSURE TUBING ☐ CASING ☐ DWG ____ kpa
RUN DEPTH (FROM CF): 3000 m.
TEMPERATURE AT RUN DEPTH: ____ °C
GRADIENT AT RUN DEPTH: ____ kpa/m.
PRESSURE AT RUN DEPTH: ____ kpa

SHUT-IN DATE: ____ DURATION: ____ hrs.
DATE ON BOTT.: 04-12:53 DATE OFF BOTT.: 04-13:06
SURFACE TEMPERATURE: 9.2 °C
PRESSURE AT M.P.P.: ____ kpa
DATUM DEPTH PRESSURE: ____ kpa

3. ACOUSTIC WELL SOUNDER TEST

DEPTH OF TUBING: ____ m.
AVERAGE TUBING JOINT LENGTH: ____ m.
NO. OF JOINTS TO LIQUID: ____
LENGTH OF GAS COLUMN: ____ m.
LENGTH OF LIQUID COLUMN: ____ m.
GAS DENSITY ____ kg/m³ GAS GRADIENT ____ kpa/m.
OIL DENSITY ____ kg/m³ OIL GRADIENT ____ kpa/m.

SHUT-IN TIME: ____ hrs.
CURRENT WATER CUT: ____ %
CASING PRESSURE: ____ kpa
GAS COLUMN PRESSURE: ____ kpa
LIQUID COLUMN PRESSURE: ____ kpa
PRESSURE AT MPP: ____ kpa
DATUM DEPTH PRESSURE: ____ kpa

4. BUILD UP OR DRAWDOWN TEST (Attach Forms 0-12A)

RESERVOIR/WALL PARAMETERS: POROSITY ____ % WELL RADIUS ____ m THICKNESS ____ m
WATER SATURATION ____ % COMPRESSIBILITY ____ kPa VISCOSITY ____ mpa.s B.H. TEMP. ____ °C
GAS WELLS ONLY: Z ____ DENSITY ____ kg/m³ OIL WELLS ONLY: BUBBLE POINT PRESSURE ____ kpa Bo ____
DATE AND DESCRIPTION OF LAST WELLBORE TREATMENT: ____
CASING I.D. ____ mm. TUBING I.D. ____ mm. TUBING LINEAL MASS ____ kg/m
WELL PRODUCING RATE, DURING/PRIOR TO TEST: OIL ____ m³/day GAS ____ m³/day WATER ____ m³/day
TOTAL PRODUCTION—DURING/PRIOR TO TEST: OIL ____ m³ GAS ____ m³ WATER ____ m³

Amoco Pointed Mountain A-4 WELL NAME AND NUMBER

5. CHART READINGS AND CALCULATIONS FOR STATIC TEST

DATE	DEPTH BELOW CF m.	TIME HRS.	D DEFLECTION in/mm.	Temp. °C			
80-06-04	Surf.	10:45-10:55	2.67	9.2			
	300	10:58-11:08	2.00	3.7			
	600	11:10-11:20	3.73	16.6			
	900	11:23-11:35	7.36	37.6			
	1200	11:38-11:48	10.98	52.1			
	1500	11:51-12:01	15.88	67.2			
	1800	12:04-12:14	22.92	82.1			
	2100	12:18-12:28	34.81	101.1			
	2400	12:31-12:39	48.46	120.3			
	2700	12:41-12:51	N/A	N/A			
80-06-04	3000	12:53-13:06	N/A	N/A			

REMARKS: All Pressures are (gauge) kpa Over ranged temperature recorder during last two stops. Temperature did not stabilize on ten minute stops.

DISTRICT 6085 TEST BY Neitz COMPUTED BY Muirhead CHECKED BY ____

INSTRUCTIONS: The original of this report shall be filed with the Oil and Gas Conservation Board, 603 - 6th Avenue S.W., Calgary, Alberta within thirty days of completion of the survey (if applicable).

0-12-2-70 REV. 78

JOHNSTON Schlumberger

JOHNSTON TESTERS

1223 DOME TOWER
333 - 7 AVENUE S.W., CALGARY, ALBERTA T2P 2Z1

SUBSURFACE PRESSURE MEASUREMENTS

PAGE ____ OF ____

1. BASIC DATA

COMPANY AMOCO CANADA PETROLEUM
ADDRESS 444 - 7 Avenue, South-West
FIELD and POOL Pointed Mountain
TYPE OF TEST Static Gradient
PRODUCING INTERVAL (KB) 3128 - 3449.7 m.
ELEVATION (CF) 455.7 (KB) 460.4 m.
POOL DATUM ____ m. (SUBSEA)
TOP ELEMENT SERIAL NO. 2746N RANGE 33094 kpa
BOTTOM ELEMENT SERIAL NO. 5657N RANGE 36197 kpa
CALIBRATION EQUATIONS: TOP 658.6D - 112.7 DATE 80-05-21 BOTTOM 718.4D-98.1 DATE 80-02-05

WELL NAME Amoco Pointed Mountain
WELL IDENTIFIER A-4
STATUS: OIL ____ GAS X OTHER: SPECIFY ____
DATE OF TEST 80-06-04
PRODUCING THROUGH: ____ TUBING ____ CASING
MID-POINT OF PRODUCING INTERVAL (KB) 3288.9 m.
DATUM DEPTH OF WELL (FROM CF) ____ m.
CLOCK RANGE 12 hours s ☐ D ☒ # 6214 IH # 32179
CLOCK RANGE 12 hours s ☐ D ☒ # 13085 IH # 1678

AMOCO CANADA PETROLEUM COMPANY

2. STATIC TEST

PRESSURE TUBING ☒ CASING ☐ DWG 15343 kpa
RUN DEPTH (FROM CF) 3266 m.
TEMPERATURE AT RUN DEPTH -- °C
GRADIENT AT RUN DEPTH 0.909 kpa/m.
PRESSURE AT RUN DEPTH 19754 kpa

SHUT-IN DATE ____ DURATION: ____ hrs.
DATE ON BOTT. 04-18:45 DATE OFF BOTT. 04-19:05
SURFACE TEMPERATURE ____ °C
PRESSURE AT M.P.P. 19770 kpa
DATUM DEPTH PRESSURE ____ kpa

3. ACOUSTIC WELL SOUNDER TEST

DEPTH OF TUBING ____ m.
AVERAGE TUBING JOINT LENGTH ____ m.
NO. OF JOINTS TO LIQUID ____
LENGTH OF GAS COLUMN ____ m.
LENGTH OF LIQUID COLUMN ____ m.
GAS DENSITY ____ kg/m³ GAS GRADIENT ____ kpa/m.
OIL DENSITY ____ kg/m³ OIL GRADIENT ____ kpa/m.

SHUT-IN TIME ____ hrs.
CURRENT WATER CUT ____ %
CASING PRESSURE ____ kpa
GAS COLUMN PRESSURE ____ kpa
LIQUID COLUMN PRESSURE ____ kpa
PRESSURE AT MPP ____ kpa
DATUM DEPTH PRESSURE ____ kpa

4. BUILD UP OR DRAWDOWN TEST (Attach Forms 0-12A)

RESERVOIR/WALL PARAMETERS: POROSITY ____ % WELL RADIUS ____ m THICKNESS ____ m
WATER SATURATION ____ % COMPRESSIBILITY ____ kPa VISCOSITY ____ mpa.s B.H. TEMP. ____ °C
GAS WELLS ONLY: Z ____ DENSITY ____ kg/m³ OIL WELLS ONLY: BUBBLE POINT PRESSURE ____ kpa Bo ____
DATE AND DESCRIPTION OF LAST WELLBORE TREATMENT: ____
CASING I.D. ____ mm. TUBING I.D. ____ mm. TUBING LINEAL MASS ____ kg/m
WELL PRODUCING RATE, DURING/PRIOR TO TEST: OIL ____ m³/day GAS ____ m³/day WATER ____ m³/day
TOTAL PRODUCTION—DURING/PRIOR TO TEST: OIL ____ m³ GAS ____ m³ WATER ____ m³

Amoco Pointed Mountain A-4 WELL NAME AND NUMBER

5. CHART READINGS AND CALCULATIONS FOR STATIC TEST

DATE	DEPTH BELOW CF m.	TIME HRS.	D DEFLECTION in/mm.	P CALCULATED PRESSURE kpa	DEVIATION CORRECTION kpa	CORRECTED PRESSURE kpa	GRADIENT kpa/m.
80-06-04	Surf.	14:04-14:14	23.64			15384	------
	300	14:17-14:27	24.46			15927	1.808
	600	14:30-14:40	25.25			16449	1.742
	900	14:43-14:53	25.96			16919	1.565
	1200	14:55-15:05	26.61			17349	1.433
	1500	15:07-15:22	27.27			17785	1.455
	1800	15:24-15:38	27.86			18175	1.301
	2100	15:41-16:01	28.36			18506	1.102
	2400	16:04-16:24	28.81			18804	0.992
	2700	16:27-16:47	29.31			19134	1.102
	3000	16:49-17:09	29.84			19487	1.175
	3050	17:12-17:32	29.92			19540	1.067
	--TOP RECORDER No. 2746N CONTINUED ON NEXT PAGE--						

REMARKS: All Pressures are (gauge) kpa High temperature recorder ran with pressure recorder.

DISTRICT 6085 TEST BY Neitz COMPUTED BY Muirhead CHECKED BY ____

INSTRUCTIONS: The original of this report shall be filed with the Oil and Gas Conservation Board, 603 - 6th Avenue S.W., Calgary, Alberta within thirty days of completion of the survey (if applicable).

0-12-2-70 REV. 78

JOHNSTON
Schlumberger

1229 DOME TOWER 333 7th AVENUE S.W. T2P 2Z1
A DIVISION OF SCHLUMBERGER OF CANADA LIMITED

FIELD Pointed Mountain DATE 80-06-04 PAGE

WELL Amoco Pointed Mountain A-4 STATUS Gas

PURPOSE AND PROCEDURE TO OBTAIN STATIC GRADIENT PRESSURES

Top recorder# 2746N kpa 0 - 33094 calibration equation P = 658.6D - 112.7 DATE 80/05/21

AMOCO CANADA PETROLEUM — COMPANY

Amoco Pointed Mountain A-4 — WELL NAME AND NUMBER

CALCULATIONS

DATE	BELOW DEPTH CFm.	TIME HOURS	D DEFLECTION mm	P CALCULATED PRESSURE kpa	DEVIATION CORRECTION kpa	CORRECTED PRESSURE kpa	GRADIENT kpa/m.
	3100	17:34-17:59	29.98			19580	0.800
	3150	18:00-18:20	30.04			19620	0.800
	3200	18:21-18:41	30.15			19694	1.467
80-06-04	3266	18:45-19:05	30.24			19754	0.909

Form 1012C

SUB SURFACE PRESSURE SURVEY

Rev. 2/79

JOHNSTON
Schlumberger

1223 - DOME TOWER 333 - 7th AVENUE S.W. T2P 2Z1
A DIVISION OF SCHLUMBERGER OF CANADA LIMITED

FIELD Pointed Mountain DATE 80-06-04 PAGE

WELL Amoco Pointed Mountain A-4 STATUS Gas

PURPOSE AND PROCEDURE TO OBTAIN STATIC GRADIENT PRESSURES

BOTTOM RECORDER # 5657N kpa 0 - 36197 calibration equation P = 718.4D - 98.1 DATE 8|0|0|2|0|5

AMOCO CANADA PETROLEUM — COMPANY

Amoco Pointed Mountain A-4 — WELL NAME AND NUMBER

CALCULATIONS

DATE	BELOW DEPTH CFm.	TIME HOURS	D DEFLECTION mm	P CALCULATED PRESSURE kpa	DEVIATION CORRECTION kpa	CORRECTED PRESSURE kpa	GRADIENT kpa/m.
80-06-04	Surf.	14:04-14:14	21.70			15413	------
	300	14:17-14:27	22.43			15935	1.740
	600	14:30-14:40	23.14			16442	1.692
	900	14:43-14:53	23.80			16919	1.590
	1200	14:55-15:05	24.44			17382	1.542
	1500	15:07-15:22	25.04			17816	1.446
	1800	15:24-15:38	25.60			18220	1.349
	2100	15:41-16:01	26.06			18553	1.108
	2400	16:04-16:24	26.57			18922	1.229
	2700	16:27-16:47	27.06			19276	1.181
	3000	16:49-17:09	27.58			19652	1.253
	3050	17:12-17:32	27.65			19702	1.012
	3100	17:34-17:59	27.72			19753	1.012
	3150	18:00-18:20	27.78			19796	0.867
	3200	18:21-18:41	27.88			19869	1.446
80-06-04	3266	18:45-19:05	27.98			19941	1.095
		MPP 19961 kPa					

Form 1012C

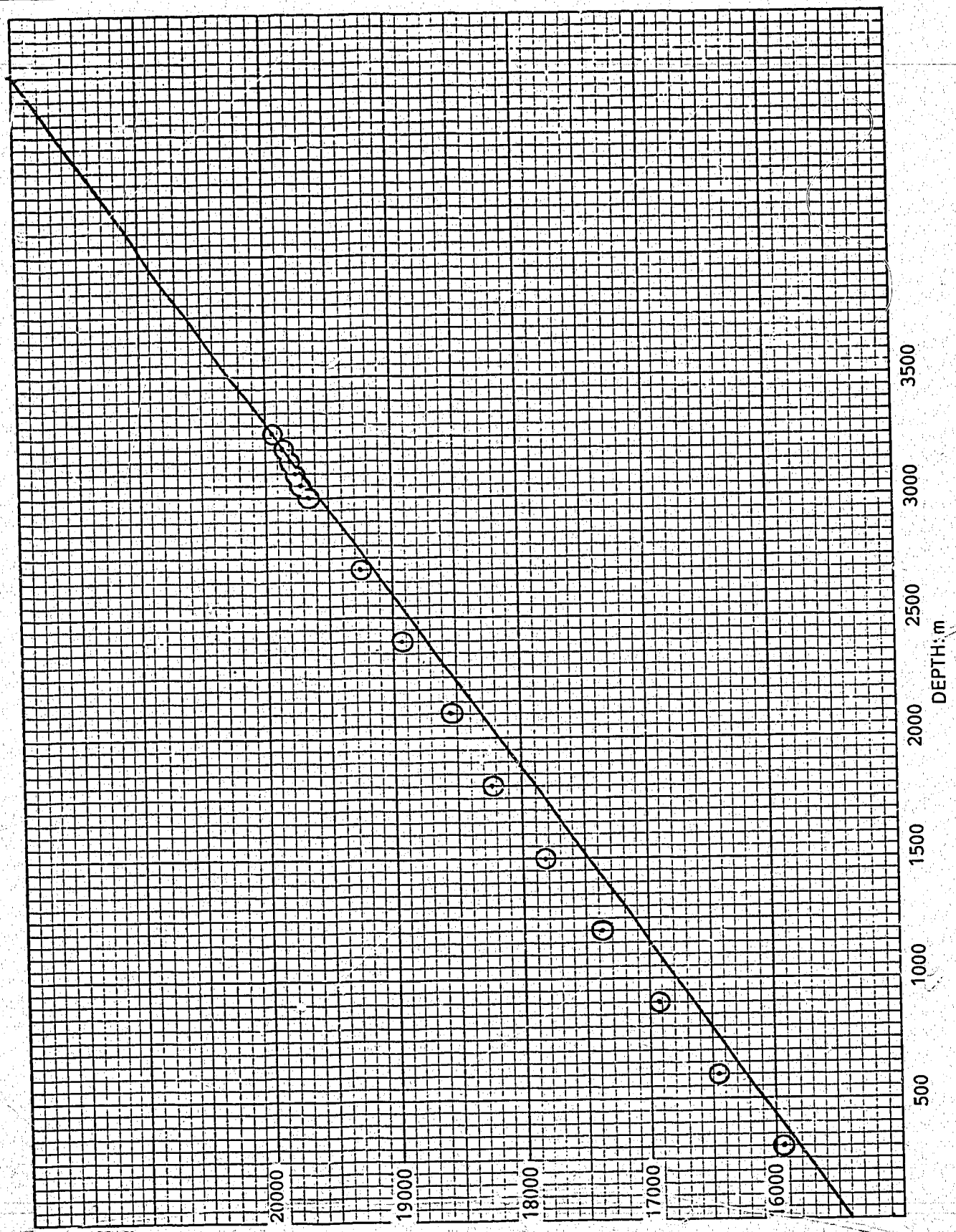
SUB SURFACE PRESSURE SURVEY

Rev. 2/79

JOHNSTON
Schlumberger

WELL NAME: Amoco Pointed Mountain WELL NUMBER: A-4

DATE: 80-06-04 RECORDER: # 5657N PAGE ___ OF ___



FORM 1015 REV. 79

JOHNSTON Schlumberger

JOHNSTON TESTERS

1223 DOME TOWER
333 - 7 AVENUE S.W., CALGARY, ALBERTA T2P 2Z1

SUBSURFACE PRESSURE MEASUREMENTS

PAGE ____ OF ____

1. BASIC DATA

COMPANY AMOCO CANADA PETROLEUM
ADDRESS 444 - 7 Avenue, South-West
FIELD and POOL Pointed Mountain
TYPE OF TEST Temperature Gradient
PRODUCING INTERVAL (KB) 3128 - 3449.7 m.
ELEVATION (CF) 455.7 (KB) 460.4 m.
POOL DATUM ____ m. (SUBSEA)
Temperature Element#16295 Range 75-226°C

WELL NAME Amoco Pointed Mountain
WELL IDENTIFIER A-4
STATUS: OIL ____ GAS X OTHER: SPECIFY ____
DATE OF TEST 80-06-04
PRODUCING THROUGH: ____ TUBING ____ CASING
MID-POINT OF PRODUCING INTERVAL (KB) 3288.9 m.
DATUM DEPTH OF WELL (FROM CF) ____ m.
CLOCK RANGE 6 hours s ☒ D ☐ # 14362 IH # ____

AMOCO CANADA PETROLEUM COMPANY

2. STATIC TEST

PRESSURE TUBING ☐ CASING ☐ DWG ____ kpa
RUN DEPTH (FROM CF) 3266 m.
TEMPERATURE AT RUN DEPTH ____ °C
GRADIENT AT RUN DEPTH ____ kpa/m.
PRESSURE AT RUN DEPTH ____ kpa

SHUT-IN DATE ____ DURATION: ____ hrs.
DATE ON BOTT. 04-18:45 DATE OFF BOTT. 04-19:05
SURFACE TEMPERATURE ____ °C
PRESSURE AT M.P.P. ____ kpa
DATUM DEPTH PRESSURE ____ kpa

3. ACOUSTIC WELL SOUNDER TEST

DEPTH OF TUBING ____ m.
AVERAGE TUBING JOINT LENGTH ____ m.
NO. OF JOINTS TO LIQUID ____
LENGTH OF GAS COLUMN ____ m.
LENGTH OF LIQUID COLUMN ____ m.
GAS DENSITY ____ kg/m³ GAS GRADIENT ____ kpa/m.
OIL DENSITY ____ kg/m³ OIL GRADIENT ____ kpa/m.

SHUT-IN TIME ____ hrs.
CURRENT WATER CUT ____ %
CASING PRESSURE ____ kpa
GAS COLUMN PRESSURE ____ kpa
LIQUID COLUMN PRESSURE ____ kpa
PRESSURE AT MPP ____ kpa
DATUM DEPTH PRESSURE ____ kpa

4. BUILD UP OR DRAWDOWN TEST (Attach Forms 0-12A)

RESERVOIR/WALL PARAMETERS: POROSITY ____ % WELL RADIUS ____ m THICKNESS ____ m
WATER SATURATION ____ % COMPRESSIBILITY ____ kPa VISCOSITY ____ mpa.s B.H. TEMP. ____ °C
GAS WELLS ONLY: Z ____ DENSITY ____ kg/m³ OIL WELLS ONLY: BUBBLE POINT PRESSURE ____ kpa Bo ____
DATE AND DESCRIPTION OF LAST WELLBORE TREATMENT: ____
CASING I.D. ____ mm. TUBING I.D. ____ mm. TUBING LINEAL MASS ____ kg/m
WELL PRODUCING RATE, DURING/PRIOR TO TEST: OIL ____ m³/day GAS ____ m³/day WATER ____ m³/day
TOTAL PRODUCTION—DURING/PRIOR TO TEST: OIL ____ m³ GAS ____ m³ WATER ____ m³

Amoco Pointed Mountain A-4
WELL NAME AND NUMBER

5. CHART READINGS AND CALCULATIONS FOR STATIC TEST

DATE	DEPTH BELOW CF m.	TIME HRS.	D DEFLECTION in/mm.				

REMARKS: All Pressures are (gauge) kpa Temperature recorder was ran with two pressure recorders.

DISTRICT 6085 TEST BY Neitz COMPUTED BY Muirhead CHECKED BY ____

INSTRUCTIONS: The original of this report shall be filed with the Oil and Gas Conservation Board, 603 - 6th Avenue S.W., Calgary, Alberta within thirty days of completion of the survey (if applicable).

0-12-2-70 REV. 78

JOHNSTON
Schlumberger

1210 · DOME TOWER, 333 - 7th AVENUE S.W. T2P 2Z1
A DIVISION OF SCHLUMBERGER OF CANADA LIMITED

FIELD Pointed Mountain DATE 80-06-04 PAGE

WELL Amoco Pointed Mountain A-4

PURPOSE AND PROCEDURE to obtain temperatures.

CALCULATIONS

DATE	DEPTH BELOW	TIME HOURS	D DEFLECTION mm.	TEMP. °C			
80-06-04	Surf.	14:04-14:14	0.00	75.0			
	300	14:17-14:27	0.00	75.0			
	600	14:30-14:40	0.00	75.0			
	900	14:43-14:53	0.00	75.0			
	1200	14:55-15:05	0.24	76.2			
	1500	15:07-15:22	1.10	81.2			
	1800	15:24-15:38	2.33	88.7			
	2100	15:41-16:01	5.00	103.4			
	2400	16:04-16:24	8.40	119.4			
	2700	16:27-16:47	11.97	133.5			
	3000	16:49-17:09	16.20	148.2			
	3050	17:12-17:32	16.76	150.0			
	3100	17:34-17:59	17.39	152.1			
	3150	18:00-18:20	16.53	149.3			
	3200	18:21-18:41	18.48	155.5			
80-06-04	3266	18:45-19:05	18.80	156.4			

AMOCO CANADA PETROLEUM
COMPANY

Amoco Pointed Mountain A-4
WELL NAME AND NUMBER

JOHNSTON Schlumberger

JOHNSTON TESTERS

1223 DOME TOWER
333 - 7 AVENUE S.W., CALGARY, ALBERTA T2P 2Z1

SUBSURFACE PRESSURE MEASUREMENTS

PAGE ____ OF ____

1. BASIC DATA

COMPANY AMOCO CANADA PETROLEUM
ADDRESS 444 - 7 Avenue, South-West
FIELD and POOL Pointed Mountain
TYPE OF TEST Temperature Gradient
PRODUCING INTERVAL (KB) 3128 - 3449.7 m.
ELEVATION (CF) 455.7 (KB) 460.4 m.
POOL DATUM ____ m. (SUBSEA)
Temperature Element#21081 Range -15 to 123°C

WELL NAME Amoco Pointed Mountain
WELL IDENTIFIER A-4
STATUS: OIL ____ GAS X OTHER: SPECIFY ____
DATE OF TEST 80-06-04
PRODUCING THROUGH: ____ TUBING ____ CASING
MID-POINT OF PRODUCING INTERVAL (CF) ____ m.
DATUM DEPTH OF WELL (FROM CF) ____ m.
CLOCK RANGE 6 hours s ☒ D ☐ # 14364 IH # 38363

AMOCO CANADA PETROLEUM COMPANY

2. STATIC TEST

PRESSURE TUBING ☐ CASING ☐ DWG ____ kpa
RUN DEPTH (FROM CF) 1800 m.
TEMPERATURE AT RUN DEPTH 82.6 °C
GRADIENT AT RUN DEPTH ____ kpa/m.
PRESSURE AT RUN DEPTH ____ kpa

SHUT-IN DATE ____ DURATION: ____ hrs.
DATE ON BOTT. 04-22:34 DATE OFF BOTT. 04-22:49
SURFACE TEMPERATURE 10.3 °C
PRESSURE AT M.P.P. ____ kpa
DATUM DEPTH PRESSURE ____ kpa

3. ACOUSTIC WELL SOUNDER TEST

DEPTH OF TUBING ____ m.
AVERAGE TUBING JOINT LENGTH ____ m.
NO. OF JOINTS TO LIQUID ____
LENGTH OF GAS COLUMN ____ m.
LENGTH OF LIQUID COLUMN ____ m.
GAS DENSITY ____ kg/m³ GAS GRADIENT ____ kpa/m.
OIL DENSITY ____ kg/m³ OIL GRADIENT ____ kpa/m.

SHUT-IN TIME ____ hrs.
CURRENT WATER CUT ____ %
CASING PRESSURE ____ kpa
GAS COLUMN PRESSURE ____ kpa
LIQUID COLUMN PRESSURE ____ kpa
PRESSURE AT MPP. ____ kpa
DATUM DEPTH PRESSURE ____ kpa

4. BUILD UP OR DRAWDOWN TEST (Attach Forms 0-12A)

RESERVOIR/WALL PARAMETERS: POROSITY ____ % WELL RADIUS ____ m THICKNESS ____ m
WATER SATURATION ____ % COMPRESSIBILITY ____ kPa VISCOSITY ____ mpa.s B.H. TEMP. ____ °C
GAS WELLS ONLY: Z ____ DENSITY ____ kg/m³ OIL WELLS ONLY: BUBBLE POINT PRESSURE ____ kpa Bo ____
DATE AND DESCRIPTION OF LAST WELLBORE TREATMENT: ____
CASING I.D. ____ mm. TUBING I.D. ____ mm. TUBING LINEAL MASS ____ kg/m
WELL PRODUCING RATE, DURING/PRIOR TO TEST: OIL ____ m³/day GAS ____ m³/day WATER ____ m³/day
TOTAL PRODUCTION—DURING/PRIOR TO TEST: OIL ____ m³ GAS ____ m³ WATER ____ m³

Amoco Pointed Mountain A-4

WELL NAME AND NUMBER

5. CHART READINGS AND CALCULATIONS FOR STATIC TEST

DATE	DEPTH BELOW CF m.	TIME HRS.	D DEFLECTION in./mm.	Temp. °C			
80-06-04	Surf.	20:44-21:07	2.81	10.3			
	300	21:08-21:23	2.25	5.9			
	600	21:25-21:40	4.05	18.7			
	900	21:42-21:57	7.73	39.3			
	1200	21:59-22:15	11.32	53.4			
	1500	22:17-22:32	16.29	68.2			
80-06-04	1800	22:34-22:49	23.22	82.6			

REMARKS: All Pressures are (gauge) kpa ____

DISTRICT 6085 TEST BY Neitz COMPUTED BY Muirhead CHECKED BY ____

INSTRUCTIONS: The original of this report shall be filed with the Oil and Gas Conservation Board, 603 - 6th Avenue S.W., Calgary, Alberta within thirty days of completion of the survey (if applicable).

0-12-2-70 REV. 78

CORE ANALYSIS REPORT

FOR

AMOCO CANADA PETROLEUM COMPANY LTD.

AMOCO A-4 POINTED MOUNTAIN A-55
POINTED MOUNTAIN
NORTHWEST TERRITORIES

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

CORE LABORATORIES – CANADA LTD.

COMPANY AMOCO CANADA PETROLEUM COMPANY LTD.
WELL AMOCO A-4 POINTED MOUNTAIN A-55
FIELD POINTED MOUNTAIN, NORTHWEST TERRITORIES
LOCATION 60° 24' 05.02" N. LAT.
123° 54' 39.05" W. LONG.

FORMATION
DRILLING FLUID WATER BASE MUD
ELEVATION
ANALYSIS FULL DIAMETER
REMARKS

FILE 7002-4230
DATE REPORT AUG. 12/74
ANALYSTS GM DH

SAMPLE NUMBER	INTERVAL REPRESENTED, FEET		PERMEABILITY TO AIR, MILLIDARCYS			PERMEABILITY FEET	POROSITY, PER CENT	POROSITY FEET	DENSITY, gm./cc.		VISUAL EXAMINATION
	DEPTH	THICK	KMAX	K90°	KV				BULK	GRAIN	
	CORED INTERVAL 12,144' - 12,204'										
	CORE NO. 6 12,144' - 12,204' (REC. 55.0') (17 BOXES)										
207	12144.0-45.1	1.1	14.70	9.49	0.19	16.17	1.2	1.32	2.82	2.85	I STY HF
208	12145.1-46.5	1.4	5.58	3.50	0.78	7.81	1.3	1.82	2.82	2.86	I HF
209	12146.5-47.8	1.3	0.09	0.08	-0.01	0.12	0.7	0.91	2.83	2.85	I STY
210	12147.8-48.7	0.9	0.16	0.10	0.09	0.14	0.8	0.72	2.84	2.86	I STY
211	12148.7-49.8	1.1	2.23	0.23	0.38	2.45	1.2	1.32	2.83	2.86	I HF VF
212	12149.8-50.8	1.0	0.79	0.76	0.22	0.79	0.8	0.80	2.84	2.86	I HF
213	12150.8-51.7	0.9	0.98	0.48	0.29	0.88	1.2	1.08	2.83	2.87	I STY HF
214	12151.7-52.7	1.0	0.07	0.03	-0.01	0.07	0.9	0.90	2.83	2.86	I
215	12152.7-53.5	0.8	0.51	0.24	0.21	0.41	0.8	0.64	2.84	2.86	I
216	12153.5-54.5	1.0	0.70	0.22	0.27	0.70	1.0	1.00	2.84	2.86	I
217	12154.5-55.5	1.0	4.66	0.38	0.10	4.66	1.0	1.00	2.83	2.86	I HF
218	12155.5-56.8	1.3	12.00	11.70	0.28	15.60	2.1	2.73	2.75	2.80	I HF
219	12156.8-57.8	1.0	0.20	0.16	0.03	0.20	1.0	1.00	2.84	2.87	I
220	12157.8-58.9	1.1	0.49	0.38	0.07	0.54	0.3	0.33	2.83	2.84	I
221	12158.9-60.1	1.2	7.31	0.82	0.23	8.77	1.0	1.20	2.83	2.86	I HF
222	12160.1-61.2	1.1	1.85	0.49	0.23	2.04	1.1	1.21	2.82	2.86	I HF
223	12161.2-62.1	0.9	0.52	0.15	0.12	0.47	0.9	0.81	2.83	2.86	I
224	12162.1-63.2	1.1	2.70	0.66	0.36	2.97	0.6	0.66	2.82	2.84	I STY HF
225	12163.2-64.5	1.3	0.85	0.50	0.12	1.11	0.8	1.04	2.83	2.86	I HF
226	12164.5-65.6	1.1	0.26	0.13	0.19	0.29	0.9	0.99	2.84	2.86	I
227	12165.6-66.6	1.0	1.15	0.36	0.23	1.15	0.9	0.90	2.84	2.86	I STY HF
228	12166.6-67.9	1.3	0.49	0.16	0.08	0.64	0.2	0.26	2.84	2.85	I
229	12167.9-68.9	1.0	0.53	0.48	0.04	0.53	1.1	1.10	2.82	2.85	I
230	12168.9-70.3	1.4	2.07	0.54	0.37	2.90	1.0	1.40	2.82	2.84	I STY HF VF
231	12170.3-71.2	0.9	2.07	0.21	0.04	1.86	0.8	0.72	2.84	2.86	I
232	12171.2-72.4	1.2	0.20	0.06	-0.01	0.24	0.8	0.96	2.84	2.87	I
233	12172.4-73.2	0.8	13.10	13.10	0.25	10.48	1.1	0.88	2.83	2.86	I STY HF VF

COMPANY AMOCO CANADA PETROLEUM COMPANY LTD.
WELL AMOCO A-4 POINTED MOUNTAIN A-55

SAMPLE NUMBER	INTERVAL REPRESENTED, FEET		PERMEABILITY TO AIR, MILLIDARCYS			PERMEABILITY FEET	POROSITY, PER CENT	POROSITY FEET	DENSITY, gm./cc.		VISUAL EXAMINATION
	DEPTH	THICK	KMAX	K90°	KV				BULK	GRAIN	
	CORE NO. 6 (Cont'd)										
234	12173.2-74.3	1.1	0.52	0.48	0.17	0.57	1.1	1.21	2.83	2.86	I
235	12174.3-75.3	1.0	0.34	0.32	0.14	0.34	0.9	0.90	2.82	2.85	I
236	12175.3-76.8	1.5	0.28	0.25	0.08	0.42	0.3	0.45	2.82	2.83	I
237	12176.8-78.5	1.7	0.67	0.63	0.08	1.14	0.3	0.51	2.83	2.84	FEW SV
238	12178.5-79.7	1.2	0.19	0.02	0.04	0.23	0.7	0.84	2.85	2.87	I
239	12179.7-80.7	1.0	0.07	0.02	0.03	0.07	0.9	0.90	2.84	2.87	I
240	12180.7-81.8	1.1	3.49	0.17	0.85	3.84	1.7	1.87	2.83	2.88	I HF VF
241	12181.8-83.2	1.4	0.10	0.09	-0.01	0.14	0.4	0.56	2.82	2.83	I STY
242	12183.2-84.7	1.5	1.74	0.29	0.57	2.61	0.1	0.15	2.83	2.84	I STY HF VF
243	12184.7-86.0	1.3	12.10	0.09	0.06	15.73	0.6	0.78	2.82	2.84	I STY HF
244	12186.0-87.4	1.4	1.07	0.11	0.58	1.50	0.6	0.84	2.83	2.84	I STY
245	12187.4-88.6	1.2	0.67	0.06	0.05	0.80	0.8	0.96	2.84	2.86	I
246	12188.6-89.7	1.1	0.50	0.23	0.03	0.55	0.9	0.99	2.83	2.86	I
247	12189.7-90.9	1.2	0.74	0.33	0.63	0.89	0.7	0.84	2.83	2.85	I STY HF VF
248	12190.9-91.7	0.8	0.31	0.13	0.04	0.25	0.7	0.56	2.83	2.85	I STY
249	12191.7-92.6	0.9	0.09	0.07	0.05	0.08	0.4	0.36	2.83	2.84	I STY
250	12192.6-93.2	0.6	0.38	0.27	0.10	0.23	1.5	0.90	2.80	2.85	I HF
251	12193.2-94.4	1.2	16.80	4.88	-0.01	20.16	1.6	1.92	2.81	2.85	I HF
252	12194.4-95.7	1.3	*	0.98	0.05	1.27	0.8	1.04	2.83	2.85	I VF
253	12195.7-97.0	1.3	0.84	0.57	0.32	1.09	0.4	0.52	2.83	2.84	I STY HF VF
254	12197.0-97.9	0.9	0.34	0.30	0.13	0.31	1.3	1.17	2.81	2.85	I HF
255	12197.9-99.0	1.1	0.27	0.24	0.03	0.30	0.4	0.44	2.82	2.84	I STY HF
-	12199.0-04.0	5.0	-	-	-	-	-	-	-	-	LOST CORE

CORE LABORATORIES – CANADA, LTD.

Petroleum Reservoir Engineering

WELL: AMOCO A-4 POINTED MOUNTAIN A-55

PAGE: 3 of 3

FORMATION:

FILE: 7002-4230

SUMMARY INTERVAL: 12144.0 - 12204.0

TOTAL FOOTAGE: 60.0

FOOTAGE ANALYZED 55.0

FOOTAGE NOT ANALYZED: TOTAL: 5.0 DENSE .0 LOST 5.0 DRILLED .0 *NABR .0 RUBBLE .0

SUMMARY OF ANALYZED CORE:

	FOOTAGE	% OF ANALYZED CORE	WEIGHTED AVERAGE POROS. %	POROSITY FEET	WEIGHTED AVERAGE PERM. MD.	PERM. FEET	WEIGHTED AVERAGE RESID. OIL %	WEIGHTED AVERAGE TOT. WATER %
TOTAL	55.0	100.00	.84	46.41	2.48	136.49	.00	.00
BY PERM RANGES:								
LESS THAN 0.10 Md.	4.2	7.64	.73	3.07	.08	.34	.00	.00
0.10 0.49 Md.	15.1	27.45	.67	10.08	.28	4.25	.00	.00
0.50 0.99 Md.	15.8	28.73	.79	12.54	.71	11.20	.00	.00
1.00 9.99 Md.	14.2	25.82	.92	13.09	3.00	42.56	.00	.00
GREATER THAN 9.99 Md.	5.7	10.36	1.34	7.63	13.71	78.14	.00	.00

*NOT ANALYZED BY REQUEST

CORE LABORATORIES · CANADA LTD. *Petroleum Reservoir Engineering*

COMPANY AMOCO CANADA PETROLEUM COMPANY LTD. FIELD POINTED MOUNTAIN FILE 7002-4230

WELL AMOCO A-4 POINTED MOUNTAIN A-55 DATE JULY 27/74

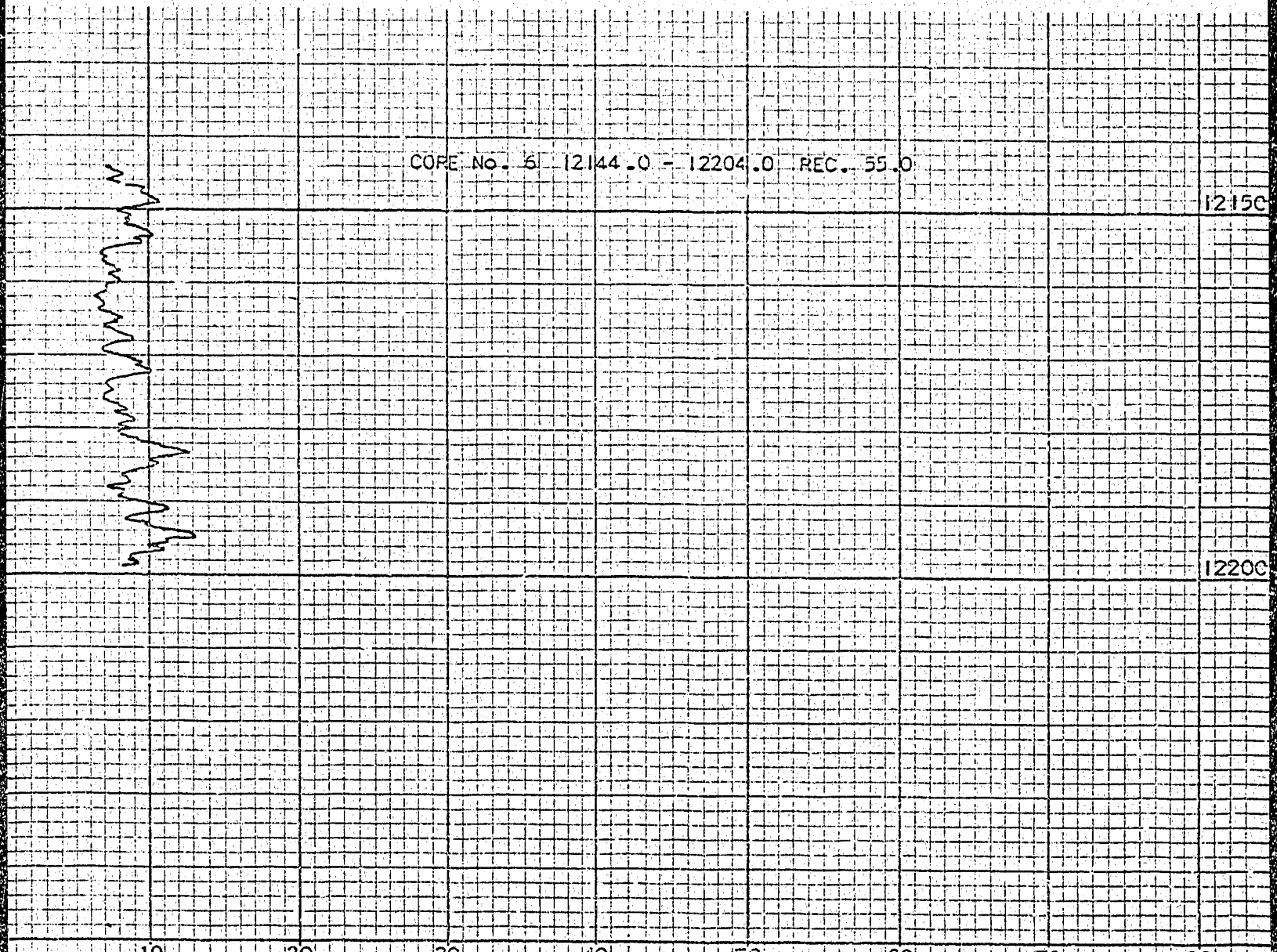
LOCATION PROV N.W.T. ELEV.

CORE-GAMMA CORRELATION

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TC 11 SECS VERTICAL SCALE: 5" = 100' SENS 5000 CPM

CORE No. 6 12144.0 - 12204.0 REC. 55.0



C 23635

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
POINTE PEN	A-4		08-20-74

OPERATOR	CONTRACTOR	RIG NO.
AMOCO CANADA	LOFFLAND BROTHERS COMPANY	11

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

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

LEGAL LAND DESCRIPTION

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

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED

FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION - HOURS

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

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

MORNING TOUR

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

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

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
2400				LEAVE WALL IN 5.M MANLAND
				EAM & FLOW TANK #1 (MORE UNIT
				TEST CAT BUILDING AT AIR STRIP
				WAIT & STAND BY VEHICLE FOR CREW
	100	1.0	1	TRAVEL

DRILLER

DAY TOUR

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

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

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

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

DRILLER

EVENING TOUR

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

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

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

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

DRILLER

Form 3T6

APPROVED APPROVED

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

C 23634

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
POINTED [illegible]	A-4		[illegible]

OPERATOR	CONTRACTOR	RIG NO.
[illegible] LTD.	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
[illegible]	

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

LEGAL LAND DESCRIPTION

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

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED

FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

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

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

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

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

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

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
DRLG	15.0	10	1	TEAR UP AND

DRILLER

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			
JET 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.

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

DEVIATION RECORD

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

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

DRILLER

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 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.

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

DEVIATION RECORD

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

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

DRILLER

EVENING TOUR

Form 3T6 APPROVED APPROVED

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

C 23633

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	
SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER	

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

LEGAL LAND DESCRIPTION

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. 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'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS				

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

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

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

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

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

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

DRILLER

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	
JET 1 32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1 8's T B GAGE	
GPM PD-PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

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

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

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

DRILLER

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 32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1 8's T B GAGE	
GPM PD-PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

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

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

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

DRILLER

C 23632

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Pratt-1 Mtn.	A-4		04-11-74

OPERATOR	CONTRACTOR	RIG NO.
AMOCO CANADA LTD.	LOFFLAND BROTHERS COMPANY	12

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

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

LEGAL LAND DESCRIPTION

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. 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'T'N			
COMPLETION B. TBG TRIPS			
COMPLETION C. TREATING			
COMPLETION D. SWABBING			
COMPLETION E. TESTING			
COMPLETION F. ADDIT'N'L			
COMPLETION G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
	BIT	FT.	BIT NO.	
			SIZE	
	STB RMR OD	FT.	MFG.	
	D.C. ID OD	FT.	TYPE	
	STB RMR OD	FT.	JETS 1/32"	
	D.C. ID OD	FT.	SER. NO.	
	STB RMR OD	FT.	DEPTH OUT	
			DEPTH IN	
			TOTAL FTG.	
			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 RECORD				
TIME				
WEIGHT				
PRESSURE GRADIENT				
VISC.-SEC.				
PV YP	/	/	/	
GELS	/	/	/	
WL -CC'S				
pH				
SOLIDS %				

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	FOOTAGE 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 SCHLUM PARFL-P COMP'L-C

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
07:30			1	LOAD OUT RIG'S WITH CANADIAN MATTING
				LOWARD FROM SWACO CONTROL TOOL PUSHER'S
				TRAILER. MOVING & RIGGING WITH FULL CREWS
	10			& TIE IN FURNITURE IN REC. HALL

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.	JET 1/32"	
	D.C. ID OD	FT.	SER. NO.	
	STB RMR OD	FT.	DEPTH OUT	
			DEPTH IN	
			TOTAL FTG.	
			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 RECORD				
TIME				
WEIGHT				
PRESSURE GRADIENT				
VISC.-SEC.				
PV YP	/	/	/	
GELS	/	/	/	
WL -CC'S.				
pH				
SOLIDS %				

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	FOOTAGE 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 SCHLUM PARFL-P COMP'L-C

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
				DIL
				TAKE INVENTORY OF FULL SEALED BARRELS
				AT TIME OF LOADING
				DUTCH OIL 42.00 USED AT 42
				MAIN CAMP 42 AT
				42 4
				0 TOTAL 42

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 1/32"	
	D.C. ID OD	FT.	SER. NO.	
	STB RMR OD	FT.	DEPTH OUT	
			DEPTH IN	
			TOTAL FTG.	
			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 RECORD				
TIME				
WEIGHT				
PRESSURE GRADIENT				
VISC.-SEC.				
PV/YP	/	/	/	
GELS	/	/	/	
WL -CC'S.				
pH				
SOLIDS %				

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	FOOTAGE 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 SCHLUM PARFL-P COMP'L-C

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

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

DRILLER

C 23631

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
	1-4		5-16-74

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

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

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION

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

LAST CASING TUBING OR LINER

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

TIME DISTRIBUTION — HOURS

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

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

MORNING TOUR

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

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

DEVIATION RECORD

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

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

DRILLER

DAY TOUR

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

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

DEVIATION RECORD

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

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

DRILLER

EVENING TOUR

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

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

DEVIATION RECORD

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

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

DRILLER

FORM 3T6 APPROVED APPROVED

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

C 23630

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	

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

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

LEGAL LAND DESCRIPTION

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

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

TIME DISTRIBUTION — HOURS

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

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

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

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

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	
JET 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T.B. GAGE	
GPM. PD.-PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

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

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

MORNING TOUR

FOOTAGE: FROM | TO — DR.,D RM.,R CORE.,C — CORE NO. — FORMATION (SHOW CORE RECOVERY) — ROTARY RPM — WT. ON BIT 1000# — PUMP PRESS — PUMP NO. LINER SIZE / S.P.M. — PUMP NO. LINER SIZE / S.P.M. — METHOD RUN (SCL, PARTIAL OR COMPLETE)

FROM	TO													

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
0600	2400	18	1	

DRILLER

DAY TOUR

FOOTAGE: FROM | TO — DR.,D RM.,R CORE.,C — CORE NO. — FORMATION (SHOW CORE RECOVERY) — ROTARY RPM — WT. ON BIT 1000# — PUMP PRESS — PUMP NO. LINER SIZE / S.P.M. — PUMP NO. LINER SIZE / S.P.M. — METHOD RUN (SCL, PARTIAL OR COMPLETE)

FROM	TO													

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
0600	2400	18	1	

DRILLER

EVENING TOUR

FOOTAGE: FROM | TO — DR.,D RM.,R CORE.,C — CORE NO. — FORMATION (SHOW CORE RECOVERY) — ROTARY RPM — WT. ON BIT 1000# — PUMP PRESS — PUMP NO. LINER SIZE / S.P.M. — PUMP NO. LINER SIZE / S.P.M. — METHOD RUN (SCL, PARTIAL OR COMPLETE)

FROM	TO													

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

DRILLER

FORM 3T6

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

KODAK SAFETY ▲ FILM +●

C 23629

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
OPERATOR		**CONTRACTOR** LOFFLAND BROTHERS COMPANY	RIG NO.
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	

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

LEGAL LAND DESCRIPTION

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

WIRE LINE RECORD REEL NO.

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

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'R'T'N			
B. TSG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)			BIT RECORD	
	BIT		FT.	BIT NO.	
				SIZE	
	STB RMR	OD	FT.	MFG.	
	D.C. ID	OD	FT.	TYPE	
	STB RMR	OD	FT.	JETS 1/32"	
	D.C. ID	OD	FT.	SER. NO.	
	STB RMR	OD	FT.	DEPTH OUT	
				DEPTH IN	
				TOTAL FTG.	
				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 RECORD				
TIME				
WEIGHT				
PRESSURE GRADIENT				
VISC.-SEC.				
PV YP				
GELS.				
WL -CC'S.				
pH				
SOLIDS %				
MUD & CHEMICALS ADDED				
TYPE	AMT.	TYPE	AMT.	

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

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

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

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 1/32"	
	D.C. ID	OD	FT.	SER. NO.	
	STB RMR	OD	FT.	DEPTH OUT	
				DEPTH IN	
				TOTAL FTG.	
				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 RECORD				
TIME				
WEIGHT				
PRESSURE GRADIENT				
VISC.-SEC.				
PV YP				
GELS.				
WL -CC'S.				
pH				
SOLIDS %				
MUD & CHEMICALS ADDED				
TYPE	AMT.	TYPE	AMT.	

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

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

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

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 1/32"	
	D.C. ID	OD	FT.	SER. NO.	
	STB RMR	OD	FT.	DEPTH OUT	
				DEPTH IN	
				TOTAL FTG.	
				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 RECORD				
TIME				
WEIGHT				
PRESSURE GRADIENT				
VISC.-SEC.				
PV YP				
GELS.				
WL -CC'S.				
pH				
SOLIDS %				
MUD & CHEMICALS ADDED				
TYPE	AMT.	TYPE	AMT.	

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

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

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

DRILLER

FORM ST6

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APPROVED

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

C 23628

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Pinto Fed	1-11	30-015-[illegible]-00	8-13-71

OPERATOR	CONTRACTOR	RIG NO.
Mid-Cont. Energy Corp.	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
[illegible]	

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

LEGAL LAND DESCRIPTION

WIRE LINE RECORD REEL NO.

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

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

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

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	FOOTAGE 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 SCHL'S PAT'D COMP'SC

DEVIATION RECORD

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
2100	2600	12	1	Tank [illegible] Rig up Rotary
				Work Deviation
				Lines & Light Plant & Set Pressure
				2 Pumps

DRILLER

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	
JET 1 32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B GAGE	
GPM. PD-PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	FOOTAGE 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 SCHL'S PAT'D COMP'SC

DEVIATION RECORD

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0700	1000	12	1	Tst BOP & Kelly Bit Pumps &
				Lines to 1500 psi Held OK

DRILLER

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 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	FOOTAGE 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 SCHL'S PAT'D COMP'SC
				[illegible]								

DEVIATION RECORD

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
[illegible]				
2 Mud	Tanks	Cut Tank	D-Gas	Mud Pump

DRILLER

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

C 23627

DAILY DRILLING REPORT REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
OPERATOR		CONTRACTOR LOFFLAND BROTHERS COMPANY	RIG NO.
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	

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

LEGAL LAND DESCRIPTION

WIRE LINE RECORD REEL NO.

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

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

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

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

MORNING TOUR

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

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

DEVIATION RECORD

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

TIME LOG FROM | TO | ELAPSED TIME | CODE NO. | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

0700 1000 12 1

DRILLER

DAY TOUR

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

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

DEVIATION RECORD

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

TIME LOG FROM | TO | ELAPSED TIME | CODE NO. | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

0700 1000 12 1

DRILLER

EVENING TOUR

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

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

DEVIATION RECORD

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

TIME LOG FROM | TO | ELAPSED TIME | CODE NO. | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

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

C 23626

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
PT 112	1-4	[illegible]	7-11-71

OPERATOR	CONTRACTOR	RIG NO.
[illegible]	LOFFLAND BROTHERS COMPANY	7

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

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

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO.

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

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

MORNING TOUR

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

FOOTAGE FROM	TO	DR.–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCI–S PART'L–P COMP'D–C

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0500				DRILL OUT FLOOR + CSG WORKED OVER
				MECHANICAL DIFFICULTIES
	1000	12	1	

DRILLER [signature]

DAY TOUR

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

FOOTAGE FROM	TO	DR.–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCI–S PART'L–P COMP'D–C

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1500				HOT CUT CASE NUMBERS FOR THANKS
				GIVEN TANK + INSPECTED.
	2000	13	1	TAKE VISUAL ELECTRICAL LOGS

DRILLER [signature]

EVENING TOUR

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

FOOTAGE FROM	TO	DR.–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCI–S PART'L–P COMP'D–C

DEVIATION RECORD

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

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

DRILLER

EVENING TOUR

Form 3T6 — APPROVED — APPROVED

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

C 23625

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
CANTON UNIT	A-4	35-047-20-0-1-1-0-0	4-10-74

OPERATOR	CONTRACTOR	RIG NO.
CANADIAN RIVER GAS CO.	LOFFLAND BROTHERS COMPANY	7

SIGNATURE OF OPERATOR'S REPRESENTATIVE: H. Hurst

SIGNATURE OF CONTRACTOR'S TOOL PUSHER:

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	CASING NO.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO.

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

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	MORN.	DAY	EVE.
1.	RIG UP AND TEAR DOWN			
2.	DRILL ACTUAL			
3.	REAMING			
4.	CORING			
5.	CONDITION MUD & CIRCULATE			
6.	TRIPS			
7.	LUBRICATE RIG			
8.	REPAIR RIG			
9.	CUT OFF DRILLING LINE			
10.	DEVIATION SURVEY			
11.	WIRE LINE LOGS			
12.	RUN CASING & CEMENT			
13.	WAIT ON CEMENT			
14.	NIPPLE UP B.O.P.			
15.	TEST B.O.P.			
16.	DRILL STEM TEST			
17.	PLUG BACK			
18.	SQUEEZE CEMENT			
19.	FISHING			
20.	DIR. WORK			
21.				
22.				
23.				
COMPLETION	A. PERF'R'T'H			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS				

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

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

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM-R CORE-C	CORE NO.

FORMATION (SHOW CORE RECOVERY)

ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PAR-FL-P COM-D-C

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0600				[illegible]
	1000	12	1	[illegible]

DRILLER

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			
JET 1/32"			
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8's T.B. GAGE			
GPM/ PD-PSI	/	/	/

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM-R CORE-C	CORE NO.

FORMATION (SHOW CORE RECOVERY)

ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PAR-FL-P COM-D-C

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1800				[illegible]
	2400	12	1	[illegible]

DRILLER

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 1/32"			
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8's T.B. GAGE			
GPM/ PD-PSI	/	/	/

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM-R CORE-C	CORE NO.

FORMATION (SHOW CORE RECOVERY)

ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PAR-FL-P COM-D-C

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

FORM 3T6

APPROVED

APPROVED

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

C 23624

DAILY DRILLING REPORT REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
CLINTON CLAY	A-1	A-55-16-1-153-3146	2-9-79

OPERATOR	CONTRACTOR	RIG NO.
HIGH PLAINS OIL CO.	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
W. Shuff	J. A. Fisher

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

LECAL LAND DESCRIPTION

WIRE LINE RECORD REEL NO.

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

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		8	4
2. DRILL ACTUAL			
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS		8	4

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

MORNING TOUR

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

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

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

MORNING TOUR

FOOTAGE FROM	FOOTAGE 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 SCHLUM'S PARTEE-P CAMCO-C

DEVIATION RECORD

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0500	1700	7		RIG UP & TEAR OUT MUD LINES.
1700	1100	3		RIGGING OUT MUD LINES & FLOW LINES.
				DAYLIGHT.

DRILLER

DAY TOUR

FOOTAGE FROM	FOOTAGE 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 SCHLUM'S PARTEE-P CAMCO-C

DEVIATION RECORD

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0500	1700	12		RIG OUT MUD LINES & SUCTION LINES

DRILLER

EVENING TOUR

FOOTAGE FROM	FOOTAGE 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 SCHLUM'S PARTEE-P CAMCO-C

DEVIATION RECORD

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

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

DRILLER

FORM 3T6 APPROVED APPROVED

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

C 23628

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
[illegible]	[illegible]	[illegible]	[illegible]

OPERATOR	CONTRACTOR	RIG NO.
[illegible]	LOFFLAND BROTHERS COMPANY	7

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
[illegible]	[illegible]

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

LEGAL LAND DESCRIPTION [illegible]

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	LKG. TO CSG. HD.	SET AT
				10	12		

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		1	2
2. DRILL ACTUAL			
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

NO. — DRILLING ASSEMBLY (At end of tour) | BIT RECORD | MUD RECORD

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

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

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

MORNING TOUR

FOOTAGE FROM	FOOTAGE 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

DEVIATION RECORD

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	0200	2	F	Fish Well.
0200	0400	2	F	Start Fish Wireline (Top of Fish @ 10,100') (Top of Tool @ 10,185')

DRILLER [illegible]

NO. — DRILLING ASSEMBLY (At end of tour) | BIT RECORD | MUD RECORD

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

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

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

DAY TOUR

FOOTAGE FROM	FOOTAGE 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

DEVIATION RECORD

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0700	1000	3	F	Finish Fishing Job. Pull out of hole. Find top of fish @ 10,185'.
1000	1100	1	F	Circulate. Work on pump.
1100	1600	5	1	Training out Pump Hse. Prepare
				to Start [illegible]
				[illegible]
				[illegible]

DRILLER [illegible]

NO. — DRILLING ASSEMBLY (At end of tour) | BIT RECORD | MUD RECORD

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

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

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

EVENING TOUR

FOOTAGE FROM	FOOTAGE 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

DEVIATION RECORD

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1600	2000	4	1	Finish Training out Pump Hse. Prepare
2000	[illegible]	2	1	Dump & Clean Mud Tanks
				[illegible]
				[illegible]
				[illegible]
				[illegible]

DRILLER

FORM 3T6 — APPROVED — APPROVED

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

C 23623

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
OPERATOR		CONTRACTOR LOFFLAND BROTHERS COMPANY	RIG NO.
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	

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

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	7						

WIRE LINE RECORD REEL NO.

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1.	RIG UP AND TEAR DOWN			
2.	DRILL ACTUAL			
3.	REAMING			
4.	CORING			
5.	CONDITION MUD & CIRCULATE			
6.	TRIPS			
7.	LUBRICATE RIG			
8.	REPAIR RIG			
9.	CUT OFF DRILLING LINE			
10.	DEVIATION SURVEY			
11.	WIRE LINE LOGS			
12.	RUN CASING & CEMENT			
13.	WAIT ON CEMENT			
14.	NIPPLE UP B.O.P.			
15.	TEST B.O.P.			
16.	DRILL STEM TEST			
17.	PLUG BACK			
18.	SQUEEZE CEMENT			
19.	FISHING			
20.	DIR. WORK			
21.				
22.				
23.				
COMPLETION	A. PERF'R'T'N	2		
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L	3	8	8
	G. T Equip	3		
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 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 32"			
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8's T.B. GAGE			
GPM/ PD-PSI			

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

MORNING TOUR

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			
JET 1/32"			
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8's T.B. GAGE			
GPM/ PD-PSI			

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

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 1/32"			
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8's T/B/ GAGE			
GPM/ PD-PSI			

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE

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

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
		2	G	
			G	
			A	
			F	

DRILLER

FOOTAGE

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

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1200	1400	2	F	SHUT IN & RECORD SURFACE PRESSURE @
			F	175 P.S.I.
1400	1600	2	F	FLOW WELL P.S.I. NIL"

DRILLER

FOOTAGE

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

DEVIATION RECORD

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

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

DRILLER

FORM 3T6 APPROVED APPROVED

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

C 23621.

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	

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

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

LEGAL LAND DESCRIPTION

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. 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'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

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

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

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

DEVIATION RECORD

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

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

DRILLER

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			
JET 1 32"	/	/	/
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8's T B GAGE			
GPM. PD-PSI	/		

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

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

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
	1100	½		Lay down cutoff jts.
1100	1630	5½		Move 1" tubing & fishing tools & equipment
	1730	1		Wait on
1730	1800	½		Lay down cutoff jts. Finish loading equipment
				DRILLER

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 1/32"	/	/	/
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1 8's T.B. GAGE			
GPM. PD-PSI	/		

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR.-P CON.-C
1730												

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
1600	1700	1		Finish lay down testing Equipment.
1700	1930	1½		R.U. W/L Schlumberger + Ranco To
				Pressure Test.
1930				Pressure Tubing to 4000
	2000	1½		Pressure Tubing + Wireline
2000				Watson - Schlumberger Tools.
				DRILLER

C 24130

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Pennzoil Unit	W-4	[illegible]	[illegible]
OPERATOR		**CONTRACTOR**	**RIG NO.**
[illegible]		LOFFLAND BROTHERS COMPANY	
SIGNATURE OF OPERATOR'S REPRESENTATIVE		**SIGNATURE OF CONTRACTOR'S TOOL PUSHER**	
[illegible]		[illegible]	

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

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION [illegible]

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. 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		
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
COMPLETION B. TBG TRIPS	8½	X	9
COMPLETION C. TREATING			
COMPLETION D. SWABBING			
COMPLETION E. TESTING			
COMPLETION F. ADDIT'N'L			
16 cont. 5¾			
TOTALS	5	7½	7

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
	BIT	FT.	BIT NO.	
			SIZE	
	STB RMR OD	FT.	MFG.	
	D.C. ID OD	FT.	TYPE	
	STB RMR OD	FT.	JETS 1 32"	
	D.C. ID OD	FT.	SER. NO.	
	STB RMR OD	FT.	DEPTH OUT	
			DEPTH IN	
			TOTAL FTG.	
			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 RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

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

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
[illegible]	[illegible]	4½		[illegible]
[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	2½		[illegible]
[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	6:15	3½		[illegible]
1:15	6:15	1 3/4		[illegible]

DRILLER [illegible]

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.	JET 1 32"	
	D.C. ID OD	FT.	SER. NO.	
	STB RMR OD	FT.	DEPTH OUT	
			DEPTH IN	
			TOTAL FTG.	
			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 RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

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

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

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 1/32"	
	D.C. ID OD	FT.	SER. NO.	
	STB RMR OD	FT.	DEPTH OUT	
			DEPTH IN	
			TOTAL FTG.	
			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 RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

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

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
				[illegible]
				[illegible]
				[illegible]

C 24129

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Powell Ltd	4-4		6-4-54

OPERATOR	CONTRACTOR	RIG NO.
Mike Cudahy Jr.	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

Bill Cudahy

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

LEGAL LAND DESCRIPTION Powell Ltd 4-35

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

LAST CASING TUBING OR LINER

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

TIME DISTRIBUTION – HOURS

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

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

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 1/32"	
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

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

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	0130	1½		Lost circulation at 10 Mile Ranch Pit
0130	1200	2½		Lost circulation
1330	1500	1½		Both pumps & lines full of Mud
0500	0800	3		Attempt to circulate out Tight

DRILLER

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	
JET 1 32"	
SER. NO.	
DEPTH CUT	
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

FOOTAGE

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

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	0130	1½		Lost circulation at 10 Mile Ranch Pit
0130	1200	2½		Lost circulation
1330	1500	1½		Both pumps & lines full of Mud
0500	0800	3		Attempt to circulate out Tight
5	50	3 3		
50				

DRILLER

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 1/32"	
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.

EVENING TOUR

FOOTAGE

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

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1600	2400	8		Run Bond Log
0001	0245	4/4		Pull out of hole
0245	0345	1/2		Perforate 4 Holes 5 per Hole 3rd Zone 4254 PSI
0345	0330	1 3/4		Run Tubing Packer & Check Run Size 5.719
0330	0400	1 1/2		Run in w/ Baker Production Packer

DRILLER

FORM 3T6 APPROVED APPROVED

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

C 24128

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
P [illegible]	[illegible]	[illegible]	[illegible]

OPERATOR	CONTRACTOR	RIG NO.
[illegible]	LOFFLAND BROTHERS COMPANY	

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
[illegible]	[illegible]

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

LEGAL LAND DESCRIPTION [illegible]

WIRE LINE RECORD REEL NO.

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

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	5	2	14½
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT	3		
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.			½
22.			
23.			
COMPLETION A. PERF'R'T'N			
COMPLETION B. TBG TRIPS			
COMPLETION C. TREATING			
COMPLETION D. SWABBING			
COMPLETION E. TESTING			
COMPLETION F. ADDIT'N'L			
COMPLETION G.			
TOTALS	[illegible]	[illegible]	[illegible]

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	

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 32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T B GAGE	
GPM PD–PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

MORNING TOUR

FOOTAGE

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

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
[illegible]	[illegible]	5	13	[illegible]
[illegible]	[illegible]	5		[illegible]

DRILLER

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	
JET 1 32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T B GAGE	
GPM PD–PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

FOOTAGE

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

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
[illegible]	[illegible]	6	11	[illegible]
[illegible]	[illegible]			[illegible]

DRILLER [illegible]

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 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T B GAGE	
GPM PD–PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE

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

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1630	1730	2	1	[illegible]
1800	2000	2	11	Run Temperature Log
2000	2100	1	11	Run Temperature Log
2100	0330	2½	11	Run Correlation Log
0330	0400	½	21	[illegible]

DRILLER [illegible]

C 24127

DAILY DRILLING REPORT REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Fuston UB-1	A-4	A-35-1 3 102-1 HS	6-1-14

OPERATOR: Apex Energy, LLC

CONTRACTOR: LOFFLAND BROTHERS COMPANY

RIG NO.: 73

SIGNATURE OF OPERATOR'S REPRESENTATIVE: Kyle Fulton

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Al Lunsford

LEGAL LAND DESCRIPTION: Reno Co., Kansas 10-25S-5W

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

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Ellis	D-11	11"
2	Ellis	D-700	7"

LAST CASING TUBING OR LINER

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

WIRE LINE RECORD REEL NO.

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE	2½	1½	
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT	5	2	
13. WAIT ON CEMENT			11
14. NIPPLE UP B.O.P.			5½
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD		
	BIT	FT.	BIT NO.		TIME	6:30	
			SIZE		WEIGHT	11	
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT	.572	
	D.C. ID OD	FT.	TYPE		VISC.-SEC.	28	27
	STB RMR OD	FT.	JETS 1 32"		PV YP	1 1	2 3
	D.C. ID OD	FT.	SER. NO.		GELS	1 1	2 4
	STB RMR OD	FT.	DEPTH OUT		WL -CC'S		6.4
			DEPTH IN		pH		9
			TOTAL FTG.		SOLIDS %		2.5
			TOTAL HRS. RUN				2
	STANDS DP	FT.	COND. T.B.'s T.B. GAGE		MUD & CHEMICALS ADDED		
	SINGLES DP	FT.	GPM PD-PSI	/ /	TYPE	AMT.	TYPE AMT.
	KELLY DOWN	FT.					
	TOTAL	FT.					
WT. OF STRING		LBS.					

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

DAY TOUR

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

EVENING TOUR

MORNING TOUR

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

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
6:00	6:30	½		Rig up
6:30	7:30	1	2	Drill 11" hole to 40'
7:30	8:00	½		Rig down
8:00	9:30	1½	5	Circulate hole clean
9:30	10:00	½		Run 1 jt 8 5/8" 23# surface casing
10:00	10:30	½		Cement with 35 sx Class A

DRILLER: Tyler

DAY TOUR

FOOTAGE FROM	TO	DR.-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHL-S PETRO-P COMPUT-C
							1000	5½	50			

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
10:30	6:00	7½		Drill 11" hole to 1,000'
6:00	10:00	4	2	Drill 7 7/8" hole to 1,160' RTD
10:00	10:30	½	5	Circulate hole clean
10:30	11:30	1	14	Run DST #1
11:30	12:00	½	5	Circulate hole clean
12:00	1:30	1½	14	Run DST #2
1:30	2:00	½	5	Circulate hole clean
2:00	6:00	4	2	Drill 7 7/8" hole to 1,500'

DRILLER: Tyler

EVENING TOUR

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

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
6:00	10:30	4½	2	Drill 7 7/8" hole to 1,160' RTD
10:30	11:30	1	5	Circulate hole clean
11:30	12:00	½	14	Run DST #1
12:00	1:30	1½	5	Circulate hole clean
1:30	2:00	½	14	Run DST #2
2:00	6:00	4	2	Drill 7 7/8" hole to 1,500'

DRILLER: Tyler

C 24126

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Powell M T N	# 4	42-135-10-01-00-00	06-1-74

OPERATOR	CONTRACTOR	RIG NO.
Mitchell Energy Corp	LOFFLAND BROTHERS COMPANY	12

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
	[illegible]

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

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION: Powell Ranch A-35

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKE. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	7-5/8						2212

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OIL TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

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

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

MORNING TOUR

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

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

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
0715	0745	1		Finish rigging Down Shut Pipe
0745	0930	1 1/2		Lay Down Drill Collars
0930				Pick up Bit Sub Collars and Kelly Set &
	0930	1		Repair Valves
1015	1145	1 1/2		Rig up to run Casing
1145	1245	1		Run 7 5/8 Casing
1245	1345	1		Rig up to Cement

DRILLER: [illegible]

DAY TOUR

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

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

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
[illegible]				[illegible] Rig Down
				[illegible]

DRILLER: [illegible]

EVENING TOUR

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

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

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
1800	2000	2		Rig up to Cement
2000	2115	2 1/4		Run Cement
2115	2315	2		Wait on Cement Release Rig
2315	2400	3/4		Run Cement

DRILLER: [illegible]

C 24125

DAILY DRILLING REPORT REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Rinehart Unit	A-1	42-335-30183-45	7-21-72

OPERATOR	CONTRACTOR	RIG NO.
Phillips Petroleum Co.	LOFFLAND BROTHERS COMPANY	12

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
M. W. Tate	A. L. Cockrell

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

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D 375	18
2	Emsco	D 375	18

LEGAL LAND DESCRIPTION: Rinehart Unit A-55

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13 3/8						5240

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	5		
6. TRIPS	2½		
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 BAC.:			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21. Circ.	12		
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	5		

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT F 17½	50	FT.
1	8" Sub	2.46	
1	STB RMR 17½ OD	27.71	FT.
1	D.C. ID 11½ OD	30.77	FT.
1	STB RMR 17½ OD	7.17	FT.
11	D.C. ID 11½ OD	330.63	FT.
	STB RMR OD		FT.
1	Kelly	39.50	
154	STANDS DP		FT.
1	SINGLES DP	40.11	FT.
	KELLY DOWN	39.50	FT.
	TOTAL	4838.11	FT.
WT. OF STRING	245M		LBS.

BIT RECORD

BIT NO.	#2
SIZE	17½
MFG.	Sec.
TYPE	[illegible]
JETS 1 32"	[illegible]
SER. NO.	[illegible]
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T B GAGE	
GPM PD-PSI	/

MUD RECORD

TIME	7	4:30	6:00
WEIGHT	12	10.2	
PRESSURE GRADIENT			
VISC.-SEC.	42	100	
PV YP	11 / 4	7 / 7	7 / 7
GELS.	4	7	7
WL -CC'S.	6		
pH		9.5	
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	5	Lime	
Gel	100	Lime	

FOOTAGE

FROM	TO	DR.D RM-R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PAR-EL-P COM-P-C
1125												

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
0001	0230	2½	1	Rig up & Tear Down
0230	0500	2½	21	Pump Cir. Prep to Trip
0300	0500	5	5	Circ. Hole Condition Mud

DRILLER [illegible]

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT		FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1		30	
	STANDS DP		FT.
1	SINGLES DP	40.11	FT.
	KELLY DOWN	39.50	FT.
	TOTAL	69.61	FT.
WT. OF STRING	65M		LBS.

BIT RECORD

BIT NO.	#2
SIZE	17½
MFG.	
TYPE	
JET 1 32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1 8's T B GAGE	
GPM PD-PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.D RM-R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL-S PAR-EL-P COM-P-C
								5½		5½		5

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
0001	3	5	5	Circ. Condition Mud
300	500	1		Pull to 1000
				Lay down Pipe

DRILLER [illegible]

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 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1 8's T.B. GAGE	
GPM PD-PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.D RM-R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PAR-EL-P COM-P-C
5250				Lay Down Pipe								

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
1800	12	4		Lay Down Pipe
1800	24	4		Cmp. Rig & Dwn Rig.

DRILLER [illegible]

C 24124

DAILY DRILLING REPORT REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Powell Division	6-4	41-55-1c-30-132-c-42	7-30-74

OPERATOR	CONTRACTOR	RIG NO.
Amoco Canada Ltd	LOFFLAND BROTHERS COMPANY	74

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

O.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
5"	19.5#	E	6 3/4	4 1/2 IF	1	1	Emsco	D 360	14"
5"	19.5#	E	6 3/4	4 1/2 IF	2	2	Emsco	D 360	14"

LEGAL LAND DESCRIPTION Powell Division 6-4

WIRE LINE RECORD REEL NO.

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	9 5/8						5214

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	3/4	6	
6. TRIPS	5	2 4½	
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE	3/4		
10. DEVIATION SURVEY			
11. WIRE LINE LOGS	3/4	3	
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.	3/4		
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	5	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 8 3/4		FT.
1	Stab 8 3/4	3.54	
1	STB RMR OD	27.71	FT.
1	D.C. ID 2 1/2 OD	31.27	FT.
1	STB RMR OD	3.13	FT.
19	D.C. ID 2 1/2 OD	570.53	FT.
	STB RMR CD		FT.
1	C/O	2.50	
12	STANDS DP		FT.
1	SINGLES DP	1163.21	FT.
	KELLY DOWN	32.14	FT.
	TOTAL	1933.21	FT.
WT. OF STRING	75		LBS.

BIT RECORD

BIT NO.	42
SIZE	8 3/4
MFG.	Smith
TYPE	F.G.H.
JETS 1 32"	18 18 18
SER. NO.	488174
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T B GAGE	
GPM PD-PSI	/

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHLUM PARFLEX COMTECH
12331												

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
0001	0045	3/4	11	Rig Up Loggers Lay
0045	0100	3/4	21	Rig Up Schlumberger
0100	0115	3/4	7	Shoot Up Dummy Run
0115		1		Run Ind Sonic Micro @ 9000'
0715	0800	3/4	5	Circ.

DRILLER

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 8 3/4		FT.
1	Stab 8 3/4	3.54	
1	STB RMR OD	27.71	FT.
1	D.C. ID 2 1/2 OD	31.27	FT.
1	STB RMR OD	3.13	FT.
19	D.C. ID 2 1/2 OD	570.53	FT.
	STB RMR CD		FT.
1	C/O	2.50	
12	STANDS DP		FT.
1	SINGLES DP	1163.21	FT.
	KELLY DOWN	32.14	FT.
	TOTAL	1933.21	FT.
WT. OF STRING	75		LBS.

BIT RECORD

BIT NO.	42
SIZE	8 3/4
MFG.	Smith
TYPE	F.G.H.
JETS 1 32"	18 18 18
SER. NO.	488174
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T B GAGE	
GPM PD-PSI	/

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHLUM PARFLEX COMTECH
12331							1400	5½	52			5

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
0800	1400	6	65	Wait to Run Sonic Log
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1400	1600	2	6	Trip out to Log.

DRILLER

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 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHLUM PARFLEX COMTECH
12331												

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
1600	2215	6 1/4	11	Trip out to Log. Rig Up Loggers Lay
2215	2230	1/4	21	Run out Schlumberger
2230	2400	1 1/2	1	Run in w/Sit

DRILLER

Form 3T6 APPROVED APPROVED

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

C 24123

DAILY DRILLING REPORT REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Pointed	A-4	A-55-60-30 123 W 45	7/23/74

OPERATOR	CONTRACTOR	RIG NO.
Amoco	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
N [illegible]	[illegible] Lockhart

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
5"	19.50	E-75	6 1/4	4½ I.F.		1	Emsco	D-375	16
						2	Emsco	D-375	16

LEGAL LAND DESCRIPTION N/A

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	7 5/8						2210

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	5	5	5
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	5	5	5

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD				
	BIT	FT.	BIT NO.		TIME	6			
			SIZE		WEIGHT	8			
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT	.5	V	V	
	D.C. ID OD	FT.	TYPE		VISC.-SEC.	32			
	STB RMR OD	FT.	JETS 1 32"		PV YP	1/	/	/	
	D.C. ID OD	FT.	SER. NO.		GELS.	1/	/	/	
	STB RMR OD	FT.	DEPTH OUT		WL -CC'S.	6			
			DEPTH IN		pH				
			TOTAL FTG.		SOLIDS %				
			TOTAL HRS. RUN						
	STANDS DP	FT.	COND. 1/8's T B GAGE		MUD & CHEMICALS ADDED				
	SINGLES DP	FT.	GPM PD-PSI		TYPE	AMT.	TYPE	AMT.	
	KELLY DOWN	FT.			NIL	V			
	TOTAL	FT.							
	WT. OF STRING	LBS.							

FOOTAGE FROM	FOOTAGE TO	DR..D RM-R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PAR-EL-P COM-DC
2324												

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
2400	0630	6½	11	DUAL INDUCTION
0630	0800	1½	11	SONIC G.R. CALIPER

DRILLER [illegible]

DAY TOUR

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

FOOTAGE FROM	FOOTAGE TO	DR..D RM-R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S. P. M.	METHOD RUN SCL-S PAR-EL-P COM-DC
2324												

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
0800	1000	2	11	R.A.E. Sonic Variable Density & Dip Meter

DRILLER [illegible]

EVENING TOUR

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

FOOTAGE FROM	FOOTAGE TO	DR..D RM-R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PAR-EL-P COM-DC
1530								5½		5½		

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
1000	1100	1	11	Run Dir. Meter Log
				Check B.O.P.'s.

DRILLER [illegible]

FORM 3T6 APPROVED APPROVED

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

C 24120

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Pan Am Ltd	A-4	A-55-60-30-123 WC 45	7/26/74

OPERATOR	CONTRACTOR	RIG NO.
Hugoton	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
[illegible]	[illegible]

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5	19.50	E-G	6 1/4	4 1/2 IF.	

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-1000	18
2	Emsco	D-700	16

LEGAL LAND DESCRIPTION: 02/c

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	9 7/8		40 K 55				9210
			43 N 80				
			47 S&C 95				

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		2	
6. TRIPS	3	3 1/4	
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			1/4
11. WIRE LINE LOGS	3		
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.		4	1/4
22.			
23.			
COMPLETION: A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	1

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: 147

CUMULATIVE ROTATING HRS.

TOTAL MUD COST: 112,835.37

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT 9 7/8	1.00 FT.	BIT NO.	
1	B. S.	3.84	SIZE	
1	STB RMR/REAMER OD	29.76 FT.	MFG.	
1	D.C. ID 6 1/2 OD	2097 FT.	TYPE	
1	STB RMR 9 7/8 OD	3.67 FT.	JETS 1 32"	
19	D.C. ID 6 1/2 OD	596.63 FT.	SER. NO.	
	STB RMR OD	FT.	DEPTH OUT	
1	C/I	2.50	DEPTH IN	
			TOTAL FTG.	
			TOTAL HRS. RUN	
124	STANDS DP	FT.	COND. 1/8's T/B GAGE	
1	SINGLES DP	1165.19 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	FOOTAGE TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL. PARTIAL COMPLE.
12326												

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
2400	1300	3	6	FINISH CUT & SLIP.
1300				RIG UP TO LOG & LOGGING, HIT BRIDGE @ 9750 & LAY DOWN LOGGING
	0600	3	11	TOOLS
0600	0900	2	6	RUN IN w/ BIT
				CHECK E.O.P.'s

DRILLER: [illegible]

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT 9 7/8	.40 FT.	BIT NO.	5
1	[illegible]	2.05	SIZE	9 7/8
1	STB RMR/REAMER OD	21.76 FT.	MFG.	[illegible]
1	D.C. ID [illegible] OD	30.27 FT.	TYPE	[illegible]
2	STB RMR 9 7/8 OD	3.67 FT.	JET 1 32"	12 12 11
17	D.C. ID [illegible] OD	540.63 FT.	SER. NO.	[illegible]
	STB RMR OD	FT.	DEPTH OUT	12320
1	[illegible]	2.00	DEPTH IN	11204
			TOTAL FTG.	
			TOTAL HRS. RUN	
124	STANDS DP	FT.	COND. 1/8's T/B GAGE	
1	SINGLES DP	1165.19 FT.	GPM/ PD-PSI	
	KELLY DOWN	34.64 FT.		
	TOTAL	11320.00 FT.		
WT. OF STRING	272000	LBS.		

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

MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AMT.
GEL	26-SKS		
GELEX	10-LBS		
CAUSTIC LIQ			

FOOTAGE FROM	FOOTAGE TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL. PARTIAL COMPLE.
12526							1200	5 1/2	48			5
										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
0900				RUN IN + REAMED RUBBER CAVE FORMATION, DUSH
	1100	3	6	THROUGH BRIDGE @ 11140 (WL Rpt)
1100	1145	3/4	5	UNPLUG BIT & WASH TO BOTTOM FROM 12210T12320
1145	1345	2	5	CIRC - CONDITION MUD.
1345	1[illegible]	2 1/4	6	DROP MULTI SHOT + JUNK TRIP.
				INTO CASING
				CIRC 1 HR

DRILLER: [illegible]

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 1/32"	
	D.C. ID OD	FT.	SER. NO.	
	STB RMR OD	FT.	DEPTH OUT	
			DEPTH IN	
			TOTAL FTG.	
			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 RECORD			
TIME	2000		
WEIGHT	10.3		
PRESSURE GRADIENT			
VISC.-SEC.	93		
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	9.0		
SOLIDS %			

MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AMT.
~~[illegible]~~	~~[illegible]~~		
~~GELEX~~	~~[illegible]~~		
GEL	6-SKS		
GELEX	2-LBS		

FOOTAGE FROM	FOOTAGE TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL. PARTIAL COMPLE.
12326								5 1/2				5
										5 1/2		5

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
1100	1745	1 3/4	10	R.I. RUN NUCLEAR-SHOT SURVEY
1745	1845	1	6	RUN IN
1845	1100	4 1/2	5	INSTALL CIC VALVE BIT
1100	2145	3 3/4	5	CIRC + CONDITION MUD
2145	2400	2 1/4	6	TRIP OUT TO LOG + SLM.
				STRAP PIPE 12,326.78 CHANGE T.D. TO 12326.
				TULLY 12 320.

DRILLER: [illegible]

C 24122

DAILY DRILLING REPORT REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
FOINTED	A-4	P-55-6.0-20-122 (45	2/20/74

OPERATOR	CONTRACTOR	RIG NO.
ATLANTIC	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
	[illegible]

LEGAL LAND DESCRIPTION NWC

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5"	19.50	E-75	6 5/8	H-90	

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	D-1000	18
2	EMSCO	D-700	18

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	7 5/8						9210

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	3½		
6. TRIPS	4½	12	
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS		5½	7
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	17½	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	

NO. 1 DRILLING ASSEMBLY (At end of tour)

1	BIT	12¼	80 FT.
1	[illegible]		2.80
1	STB RMR	12 OD	29.76 FT.
1	D.C. ID 2¼	12 OD	307.77 FT.
1	STB RMR	12 OD	5.47 FT.
12	D.C. ID 2¼	12 OD	3764.3 FT.
	STB RMR	OD	FT.
1	[illegible]		2.50
124	STANDS DP		FT.
1	SINGLES DP		1163.19 FT.
	KELLY DOWN		32.64 FT.
	TOTAL		12326.20 FT.

WT. OF STRING 270000 LBS.

BIT RECORD

BIT NO.	42
SIZE	12¼
MFG.	[illegible]
TYPE	M88
JETS 1 32nds	15 15 15
SER. NO.	
DEPTH OUT	
DEPTH IN	12326
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1-8's T B GAGE	
GPM/ PD-PSI	/ /

MUD RECORD

TIME	0130	0330
WEIGHT	10.2	10.2
PRESSURE GRADIENT		
VISC.-SEC.	90	92
PV/YP	/	/ /
GELS	/	/ /
WL-CC'S	26	26
pH	10.0	10.0
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
BARITE	30-35		

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
12326												

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
2400	0330	3½	5	CIRC & COND. MUD FROM 12326
0330	0800	4½	6	TRIP OUT TO LOG

CHECK B.O.P.'S

DRILLER [illegible]

NO. 2 DRILLING ASSEMBLY (At end of tour)

	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.

WT. OF STRING LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1/32nds	
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

FOOTAGE / FORMATION

FROM	TO	DR. D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
12326								6½				
										5½		

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
0800	0915	1½	6	Finish Trip - T Logs.
0915	1545	6½	11	R-U Schl. Ran DLL-MSFL-GR-Cal-Sonic Logs. DLL-MSFL-GR-Cal 12326-9210

DRILLER [illegible]

NO. 3 DRILLING ASSEMBLY (At end of tour)

	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.

WT. OF STRING LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1/32nds	
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. 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

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
1600	[illegible]	[illegible]		Logging [illegible] Dresser Atlas [illegible] Log. 12326-8203.

DRILLER

Form 3T6 APPROVED APPROVED

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

C 24121

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Pennzoil	A-11	A-55-60-20-123 W45	11-27-72

OPERATOR	CONTRACTOR	RIG NO.
Pennzoil	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
	H Dowdle

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5½	19.50	E-75	6 7/8	4½ IF	

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-1000	12
2	Emsco	D-700	12

LEGAL LAND DESCRIPTION: None

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	7 5/8						9218

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		12	
4. CORING			
5. CONDITION MUD & CIRCULATE		5	7
6. TRIPS	5	23	1
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS	3		
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.		4	
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.

HRS. W/OPR. D.P.

HRS. WO/D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD: 149

CUMULATIVE ROTATING HRS.

TOTAL MUD COST: 113,361.03

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 8½	80	FT.
1	8 5/8	3.84	
1	STB RMR OD	24.76	FT.
1	D.C. ID 2½ OD	30.97	FT.
1	STB RMR 8½ OD	3.67	FT.
19	D.C. ID 6½ OD	590.63	FT.
	STB RMR OD		FT.
1	12	2.50	
127	STANDS DP		FT.
1	SINGLES DP	11625.18	FT.
	KELLY DOWN	34.64	FT.
	TOTAL	12326.00	FT.

WT. OF STRING 370000 LBS.

BIT RECORD

BIT NO.	42
SIZE	7⅞
MFG.	Sec
TYPE	M 88
JETS 1/32"	5 5 5 5
SER. NO.	499694
DEPTH OUT	
DEPTH IN	12326
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T B GAGE	
GPM. PD-PSI	

MUD RECORD

TIME	0130		
WEIGHT	10.2		
PRESSURE GRADIENT			
VISC.-SEC.	47		
PV YP	1	1	1
GELS	1	1	1
WL -CC'S			
pH	10.0		
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 7⅞		FT.
1		2.64	
1	STB RMR OD	24.76	FT.
1	D.C. ID 2½ OD	30.97	FT.
1	STB RMR 8½ OD	3.67	FT.
19	D.C. ID 6½ OD	590.63	FT.
	STB RMR OD		FT.
1	12	2.50	
127	STANDS DP		FT.
1	SINGLES DP	11625.18	FT.
	KELLY DOWN	34.64	FT.
	TOTAL	12326.00	FT.

WT. OF STRING 370000 LBS.

BIT RECORD

BIT NO.	42
SIZE	7⅞
MFG.	Sec
TYPE	M 88
JET 1 32"	5 5 5 5
SER. NO.	499694
DEPTH OUT	
DEPTH IN	12326
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T B GAGE	
GPM. PD-PSI	

MUD RECORD

TIME	1300		1700
WEIGHT	10.2		10.2
PRESSURE GRADIENT			
VISC.-SEC.	54		65
PV YP	1	1	1
GELS	1	1	1
WL -CC'S			
pH	10.0		10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	24 SX		
CELEX	5 SX		
CONTX	2 SX		

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 7⅞	80	FT.
1	8 5/8	3.84	
1	STB RMR OD	24.76	FT.
1	D.C. ID 2½ OD	30.97	FT.
1	STB RMR 8½ OD	3.67	FT.
19	D.C. ID 6½ OD	590.63	FT.
	STB RMR OD		FT.
1	12	2.50	
127	STANDS DP		FT.
1	SINGLES DP	11625.18	FT.
	KELLY DOWN	34.64	FT.
	TOTAL	12326.00	FT.

WT. OF STRING 370000 LBS.

BIT RECORD

BIT NO.	42
SIZE	7⅞
MFG.	Sec
TYPE	M 88
JETS 1/32"	5 5 5 5
SER. NO.	499694
DEPTH OUT	
DEPTH IN	12326
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T B GAGE	
GPM. PD-PSI	

MUD RECORD

TIME	1700	2000	2300
WEIGHT	10.3	10.3	10.3
PRESSURE GRADIENT			
VISC.-SEC.	67	80	88
PV/YP	1	1	1
GELS	1	1	1
WL -CC'S			
pH	10.0	10.0	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	34 SX		
CELEX	14 LBS		

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 SCHLUM PARFL-P CONTIN-C
12326												

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
2400	0330	2½	6	FINISH OUT OF C.L.M.
0330			11	RIG UP TO LOG & RUN IN TO 9550
				W/C. ALUMBERGER & UNABLE TO WORK PAST
	0630	3		BRIDGE PULL OUT TO RUN IN W/ BIT.
0630	0800	1½	6	MAKE UP BIT & 42 & RUN IN
				SLM. 12326
				TOOH 320
				GOOD.

DRILLER: H Dowdle

FOOTAGE / FORMATION

FROM	TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHLUM PARFL-P CONTIN-C
							1600	5½	30			5
								5½				5

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
2400	0800	8	2	DRILL F/ 12326 T/ 12609
0800	1130	3½	3	REAM OUT 90' - WORK TIGHT
1130	1230	1	5	CIRC & COND MUD
1230		3½	2	DRILL F/ 12609 T/ 12736 (TD)
			5	CIRC & CONDITION MUD

DRILLER: H Dowdle

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 SCHLUM PARFL-P CONTIN-C
12326												

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
1130	1745	1¼	5	CIRC & CONDITION MUD. FROM 12326'
1745	1745	1	6	WIPER TRIP 15 STDS
1845	2400	5¼	5	CIRC & CONDITION MUD. FROM 12326'

DRILLER

Form 3T6

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

C 24119

DAILY DRILLING REPORT — REPORT NO. 146

LEASE	WELL NO.	API WELL NUMBER	DATE
Pierce Ward	A 4	42-55-60-30-123-00425	7/25/74

OPERATOR: Pierce

CONTRACTOR: LOFFLAND BROTHERS COMPANY — RIG NO. 72

SIGNATURE OF OPERATOR'S REPRESENTATIVE: W [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [illegible]

LEGAL LAND DESCRIPTION: Unit C

WIRE LINE RECORD — REEL NO.: SIZE 1/4 — NO. LINES 10 — FT. SLIPPED — 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	7"		40 N 80				8210
			43 N 80				
			47 S00 95				

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5"	19.50	E-75	6 5/8	4H	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Pierce	Gardner	10
2	Pierce	D-700	12

TIME DISTRIBUTION — HOURS

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

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	112538.23

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 9 7/8	10 FT.	
1	Bit Sub	2.84 FT.	
1	STB RMR NON MAG COD	32.76 FT.	
1	D.C. ID 2 1/2 OD	30.47 FT.	
1	STB RMR 9 1/2 OD	2263 FT.	
19	D.C. ID 6 1/2 OD	576.63 FT.	
	STB RMR OD	FT.	
1	Sub	2.50 FT.	
124	STANDS DP	11593.46 FT.	
	SINGLES DP	FT.	
	KELLY DOWN	21.37 FT.	
	TOTAL	12275.00 FT.	
WT. OF STRING	266,000 LBS.		

BIT RECORD

BIT NO.	42
SIZE	9 7/8
MFG.	Sec
TYPE	M 88
JETS 1/32"	11 11 11
SER. NO.	498695
DEPTH OUT	
DEPTH IN	12204
TOTAL FTG.	71
TOTAL HRS. RUN	10
COND. T.B.'s T.B. GAGE	
GPM PD-PSI	/ /

MUD RECORD

TIME	2400	0300	0600
WEIGHT	10.2	10.2	10.2
PRESSURE GRADIENT			
VISC.-SEC.	82	75	66
PV/YP	/	/	/
GELS	/	/	/
WL-CC'S			
pH	9.3	9.2	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Caustic	2-5K		

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT		FT.
1			
	STB RMR OD		FT.
1	D.C. ID OD		FT.
1	STB RMR OD		FT.
1	D.C. ID OD		FT.
1	STB RMR OD		FT.
124	STANDS DP	11625.17	FT.
1	SINGLES DP		FT.
	KELLY DOWN	22.64	FT.
	TOTAL	12320.00	FT.
WT. OF STRING	271,000	LBS.	

BIT RECORD

BIT NO.	42
SIZE	9 7/8
MFG.	Sec
TYPE	M 88
JETS 1/32"	11 11 11
SER. NO.	498695
DEPTH OUT	
DEPTH IN	12275
TOTAL FTG.	45
TOTAL HRS. RUN	6
COND. T.B.'s T.B. GAGE	
GPM PD-PSI	/ /

MUD RECORD

TIME	0300	0600	1200
WEIGHT	10.2	10.2	10.2
PRESSURE GRADIENT			
VISC.-SEC.	64	58	58
PV/YP	/	/	/
GELS	/	/	/
WL-CC'S			
pH	9.0	9.0	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Wi-Mat	105 SX		
Gel	8 SX		
Gelex	4 SX		

FOOTAGE / FORMATION

FROM	TO	DR. RM. CORE.	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL. S PAINT-P COMP-C
12217	12275	D		58'	45	30	1950	5 1/2	50	5 1/2		S
							1350	5 1/2	38			

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
2400	0800	8	2	DRILL
				(MAKE B.O.P.

DRILLER

DAY TOUR

FOOTAGE / FORMATION

FROM	TO	DR. RM. CORE.	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL. S PAINT-P COMP-C
[illegible]	12320	D		45'	45	30	1	5 1/2	[illegible]	5 1/2		S

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
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

DRILLER

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR. RM. CORE.	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL. S PAINT-P COMP-C
12320								5 1/2		5 1/2		S

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
1800	2100	3	5	Circ + Condition Mud - Hunt for Leak
2100				Trip out to Leak + Run Multi
				Shot from 12320 to 2200 @ 185'
	2400	3	6	Int. 1 Cir.

DRILLER

FORM 3T6 — APPROVED — APPROVED

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

C 24118

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
POINTED MESA	A-4	A-55-60-30-123 4145	7/24/74

OPERATOR	CONTRACTOR	RIG NO.
MECC	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
5"	19.50	E-G	6 1/4	4½ IF		1	EMSCO	D-1000	16
						2	EMSCO	D-700	16

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO.

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	9 5/8		40 K 36				2010
			43 J 55				
			47 S 95				

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	8	14	2
5.	CONDITION MUD & CIRCULATE			
6.	TRIPS		1½	5½
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.	L. C. F.			½
22.	Core Cor		1½	
23.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8	24	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	147
CUMULATIVE ROTATING HRS.	2303½
TOTAL MUD COST	110628.64

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT 9 7/16	80 FT.	BIT NO.	RR 37
1	9" E	64.40	SIZE	8 7/8
1	STB RMR Taper OD	6.72 FT.	MFG.	Christ
2	D.C. ID Over OD	3.54 FT.	TYPE	100 4SP C-120
1	STB RMR Mono OD	27.76 FT.	JETS 1 32"	
20	D.C. ID 6½ OD	621.60 FT.	SER. NO.	FC27333
1	STB RMR 9/16 OD	2.50 FT.	DEPTH OUT	
			DEPTH IN	12144
			TOTAL FTG.	51
			TOTAL HRS. RUN	13 3/4
122	STANDS DP	FT.	COND. 1/8's T. B. GAGE	
1	SINGLES DP	1143.24 FT.	GPM/ PD-PSI	/
	KELLY DOWN	25.96 FT.		
	TOTAL	12195.50 FT.		
WT. OF STRING	267000 LBS.			

MUD RECORD			
TIME	2400	0300	0600
WEIGHT	10.2	10.2	10.2
PRESSURE GRADIENT			.530
VISC.-SEC.	63	63	66
PV/YP	/	/	37/35
GELS.	/	/	5/11
WL -CC'S	/	/	8.0
pH	9.5	10.0	10.0
SOLIDS %			10.5

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	15-SKS		
CELEX	6-LBS		
CAUSTIC	2-SKS		
X-FEL-G	3-SKS		

FOOTAGE FROM	FOOTAGE TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL.-S PAR.FL.-P COMP.C.
12166	12195	C	5	29'	65	16	1600	5½	53	5½		S

DEVIATION RECORD

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
2400	0800	8	4	CORING

C 24117

DAILY DRILLING REPORT REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Fenton Unit	A-1	2-55-60-36 .1/2 NW/4	7/23/74

OPERATOR	CONTRACTOR	RIG NO.
Sunoco	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
[illegible] Pilcher	Phil Rushing

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5	19.50	E-75	6 7/8	4 1/2 IF	

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-1000	18
2	Emsco	D-700	16

LEGAL LAND DESCRIPTION Unit

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	9 5/8		40 K-55				9310
			43 N-80				
			47 S-95				

WIRE LINE RECORD REEL NO.

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	5 3/4		
3. REAMING			
4. CORING			5 3/4
5. CONDITION MUD & CIRCULATE			
6. TRIPS	1 3/4	6	1
7. LUBRICATE RIG			
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.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.		1/4	
22. MISC.			1/4
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	9	3	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	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT	8 1/2	80 FT.
1	E.S.		2.24
1	STB RMR Fine	OD	29.76 FT.
1	D.C. ID 6 1/2	OD	30.97 FT.
1	STB RMR 8 1/2	OD	2.67 FT.
19	D.C. ID 6 1/2	OD	570.43 FT.
	STB RMR	OD	FT.
1	C/O		9.50
122	STANDS DP		FT.
2	SINGLES DP		11467.47 FT.
	KELLY DOWN		14.36 FT.
	TOTAL		12144.80 FT.

WT. OF STRING 260000 LBS.

BIT RECORD

BIT NO.	41
SIZE	8 1/2
MFG.	Smith
TYPE	F J 2
JETS 1/32"	10 11 11
SER. NO.	DM 7712
DEPTH OUT	12144
DEPTH IN	12012
TOTAL FTG.	132
TOTAL HRS. RUN	12
COND. 1/8's T B GAGE	6 6 I
GPM PD-PSI	/ /

MUD RECORD

TIME	0000	0330	T
WEIGHT	10.2+	10.2+	K
PRESSURE GRADIENT			I
VISC.-SEC.	64	62	P
PV/YP	/	/	M
GELS	/	/	U
WL-CC'S			N
pH	10.0	10.0	G
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	10-SK		
GELEX	4-45		

FOOTAGE

FROM	TO	DR.D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SURF-S PART-P COMPL-C
12120	12144	D		22'	50	30	1900	5 1/2	41			S
							1050	5 1/2	32			S

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
12144								

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0000	0543	5 3/4	2	DRILL
0543	0615	1/2	11	CIRC. & DIRECTIONAL SURVEY
0615	0930	1 3/4	6	TRIP FOR BIT
				CHECK B.O.P.

DRILLER [illegible]

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT	0	70 FT.
1	[illegible]		14.14
1	STB RMR [illegible]	OD	1.16 FT.
1	D.C. ID [illegible]	OD	30 FT.
1	STB RMR Sol	OD	2.14 FT.
1	D.C. ID [illegible]	OD	2.76 FT.
20	STB RMR 2	OD	621. FT.
1	[illegible]		3.00
122	STANDS DP		11 [illegible] FT.
	SINGLES DP		FT.
	KELLY DOWN		[illegible] FT.
	TOTAL		[illegible] FT.

WT. OF STRING [illegible] LBS.

BIT RECORD

BIT NO.	37
SIZE	
MFG.	
TYPE	D
JET 1/32"	
SER. NO.	37533
DEPTH OUT	
DEPTH IN	[illegible]
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1 8's T B GAGE	
GPM PD-PSI	/

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SURF-S PART-P COMPL-C
[illegible]								5 1/2				
										6 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
[illegible]		3		[illegible]
11 [illegible]	11.45	[illegible]		[illegible]
[illegible]	[illegible]	1		[illegible]

DRILLER [illegible]

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT	7 7/8	78 FT.
1	C.B.		6.40
1	STB RMR Jars	OD	6.92 FT.
2	D.C. ID Subs	OD	3.54 FT.
1	STB RMR Monel	OD	29.76 FT.
20	D.C. ID 6 1/2	OD	631.60 FT.
	STB RMR	OD	FT.
1	C/O		2.50
122	STANDS DP		11402.19 FT.
	SINGLES DP		FT.
	KELLY DOWN		37.01 FT.
	TOTAL		12166.20 FT.

WT. OF STRING 260000 LBS.

BIT RECORD

BIT NO.	37
SIZE	7 7/8
MFG.	[illegible]
TYPE	D
JETS 1/32"	
SER. NO.	37533
DEPTH OUT	12144
DEPTH IN	12044
TOTAL FTG.	22
TOTAL HRS. RUN	6 3/4
COND. 1 8's T B GAGE	
GPM PD-PSI	/

MUD RECORD

TIME	2000	2200	2300
WEIGHT	10.2+	10.2	10.2
PRESSURE GRADIENT			
VISC.-SEC.	61	61	63
PV/YP	/	/	/
GELS	/	/	/
WL-CC'S			
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
WL-100	1-SK		
[illegible]			
[illegible]			
[illegible]			

FOOTAGE

FROM	TO	DR.D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SURF-S PART-P COMPL-C
12 [illegible]	12146	C	5		55	16	1600	5 1/2	53			S
										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
1500	1630	1/2	6	Circ. Out Trip Gas 10100
1630	1700	1/2	6	Finish Running In W/ Core Bbl.
1700	1915	1 1/4	22	Coring Cor. W.T.B. From 12110 To 12144
				+ Circ Bottoms Up
1915	2400	5 3/4	4	Coring & Hole

DRILLER

Form 3T6 APPROVED APPROVED

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

C 24116

DAILY DRILLING REPORT REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
POINTED MTN	A-4	A-55-60 = 30-123-W45	7-22-74

OPERATOR	CONTRACTOR	RIG NO.
AMOCO LTD	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5	19.50	E	6 1/2	4 1/2 IF	1
3	13.50	G	6 1/2	4 1/2 IF	2

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	D-1000	18"
2	EMSCO	D-700	16"

LEGAL LAND DESCRIPTION POINTED MTN A-55

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13 3/8		48 H80		82.0		82.0
			43 H80				
			47 S00 95				

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		4 1/4	7
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS	5 1/2		
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.		4	
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21. T.R	1	1/2	
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	9	9	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT 8 1/2	.90 FT.	BIT NO.	41
1	BIT SUB	2.84 FT.	SIZE	
1	STB RMR MONEL OD	29.67 FT.	MFG.	
1	D.C. ID 6 1/2 OD	30.17 FT.	TYPE	
1	STB RMR 8 1/2 OD	2.67 FT.	JETS 1/32"	
19	D.C. ID 6 1/2 OD	590.63 FT.	SER. NO.	
	STB RMR OD	FT.	DEPTH OUT	
1	5.0	2.00	DEPTH IN	
			TOTAL FTG.	
			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 RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
	BIT 8 1/2	1.00 FT.	BIT NO.	41
1	BIT SUB	2.84 FT.	SIZE	8 1/2
1	STB RMR MONEL OD	29.67 FT.	MFG.	SMITH
1	D.C. ID 6 1/2 OD	30.17 FT.	TYPE	4 J S
1	STB RMR 8 1/2 OD	2.67 FT.	JET 1/32"	16 16 16
19	D.C. ID 6 1/2 OD	590.63 FT.	SER. NO.	MW 772
	STB RMR OD	FT.	DEPTH OUT	
1	5.0	2.00	DEPTH IN	12012
			TOTAL FTG.	41
			TOTAL HRS. RUN	4 1/4
	STANDS DP	FT.	COND. 1/8's T.B. GAGE	
2	SINGLES DP	1 SMS FT.	GPM/ PD-PSI	
	KELLY DOWN	17 46 FT.		
	TOTAL	12 15 20 FT.		
WT. OF STRING	26-000	LBS.		

MUD RECORD

TIME	1130	1330	1500
WEIGHT	10.2	10.1	10.
PRESSURE GRADIENT			
VISC.-SEC.	57	60	55
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
BARITE	40 SKS		
GELEX H	4 SKS		
CAUSTIC	2 SKS		

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT	.90 FT.	BIT NO.	41
1	BIT SUB	2.84 FT.	SIZE	8 1/2
1	STB RMR MONEL OD	29.76 FT.	MFG.	SMITH
1	D.C. ID 6 1/2 OD	30.17 FT.	TYPE	4 J S
1	STB RMR MONEL OD	2.67 FT.	JETS 1/32"	16 16 16
19	D.C. ID 6 1/2 OD	590.63 FT.	SER. NO.	MW 772
	STB RMR OD	FT.	DEPTH OUT	
1	5.0	2.00	DEPTH IN	12012
			TOTAL FTG.	41
			TOTAL HRS. RUN	4 1/4
22	STANDS DP	1145.98 FT.	COND. 1/8's T/B/ GAGE	
1	SINGLES DP	31.33 FT.	GPM/ PD-PSI	
	KELLY DOWN	22.12 FT.		
	TOTAL	12120.00 FT.		
WT. OF STRING	267 000	LBS.		

MUD RECORD

TIME	1700	2000	2300
WEIGHT	10.2	10.2+	10.2
PRESSURE GRADIENT			
VISC.-SEC.	60	63	66
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH	9.5	10.0	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
WMH	30 SK		
Gel	16 SKS		
GELEX	3 SKS		
X-PLEX	1 SKS		

DAY TOUR

FOOTAGE FROM / TO | DR.D RM-R CORE.C | CORE NO. | FORMATION (SHOW CORE RECOVERY) | ROTARY RPM | WT. ON BIT 1000# | PUMP PRESS | PUMP NO. 1 LINER SIZE | PUMP NO. 1 S.P.M. | PUMP NO. 2 LINER SIZE | PUMP NO. 2 S.P.M. | METHOD RUN SCR-S PART-P CONV-C

FROM	TO										
	112			MUD							

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
1100	0130	2 1/2		MOVE MOUSE HOLE AT 11670
0130	0300	1 1/2		CUT DRILL LINE & WORK BLKS.
0300	0700	1		SLIP

DRILLER

DAY TOUR

FOOTAGE FROM / TO | DR.D RM-R CORE.C | CORE NO. | FORMATION (SHOW CORE RECOVERY) | ROTARY RPM | WT. ON BIT 1000# | PUMP PRESS | PUMP NO. 1 LINER SIZE | PUMP NO. 1 S.P.M. | PUMP NO. 2 LINER SIZE | PUMP NO. 2 S.P.M. | METHOD RUN SCR-S PART-P CONV-C

FROM	TO										
12012	12053	D		41	50	30	1900	5 1/4	48		S
							750	5 1/2	28		

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
0700	1100	3	6	TRIP IN W/ BIT #41
1100	1130	1/2	21	W. & R. FROM 11777 TO 12012
1130	1330	2	2	DRILL
1330	1345	1/4	12	C. & F. DRILL
1345	1600	2 1/4	2	DRILL

DRILLER

EVENING TOUR

FOOTAGE FROM / TO | DR.D RM-R CORE.C | CORE NO. | FORMATION (SHOW CORE RECOVERY) | ROTARY RPM | WT. ON BIT 1000# | PUMP PRESS | PUMP NO. 1 LINER SIZE | PUMP NO. 1 S.P.M. | PUMP NO. 2 LINER SIZE | PUMP NO. 2 S.P.M. | METHOD RUN SCR-S PART-P CONV-C

FROM	TO										
12053	12101	D		41	40	30	1900	5 1/4	48		S
12101	12120	D		41	40	30	1900	5 1/4	52		S

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
1700	2400	8		DRILL 8 1/2 HOLE

DRILLER

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

C 24115

DAILY DRILLING REPORT REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
POINTED MTN	2-4	[illegible]	11-1-84

OPERATOR	CONTRACTOR	RIG NO.
[illegible]	LOFFLAND BROTHERS COMPANY	25

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
[illegible]	[illegible]

LEGAL LAND DESCRIPTION POINTED MTN 4 T

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

	D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
	[illegible]	[illegible]	E	[illegible]	[illegible]	1
	5	19.5	S	[illegible]	[illegible]	1

	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
	1	[illegible]	D 100	[illegible]
	2	EMSCO	D 700	[illegible]

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	9		36		2210		2210
			23				
			17				

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1.	RIG UP AND TEAR DOWN			
2.	DRILL ACTUAL	9	9	
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.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		9	9	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONT'G D.P.

HRS. W/OPR. D.P.

HRS. WO/D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT [illegible]	[illegible] FT.	BIT NO.	AA-36
1	[illegible]	[illegible]	SIZE	12
1	STB RMR [illegible] OD	[illegible] FT.	MFG.	SEC
1	D.C. ID [illegible] OD	[illegible] FT.	TYPE	M-3
1	STB RMR [illegible] OD	FT.	JETS 1 32"	10 11 11
1	D.C. ID [illegible] OD	[illegible] FT.	SER. NO.	
	STB RMR OD	FT.	DEPTH OUT	
[illegible]	[illegible]	[illegible]	DEPTH IN	11211
			TOTAL FTG.	
			TOTAL HRS. RUN	
	STANDS DP	FT.	COND. 1/8's T B GAGE	
2	SINGLES DP	62.65 FT.	GPM PD-PSI	/ /
	KELLY DOWN	1.21 FT.		
	TOTAL	11211 FT.		
WT. OF STRING	[illegible]	LBS.		

MUD RECORD			
TIME			07
WEIGHT	10		
PRESSURE GRADIENT			
VISC.-SEC.			
PV YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]	[illegible]		

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT 12	1.00 FT.	BIT NO.	AA-36
1	8"	2.84	SIZE	8 1/2
1	STB RMR [illegible] OD	21.67 FT.	MFG.	SEC
1	D.C. ID 6 1/2 OD	210.47 FT.	TYPE	M-3
1	STB RMR 9 1/2 OD	2.67 FT.	JET 1 32"	12 12 12
10	D.C. ID 6 OD	310.63 FT.	SER. NO.	447108
	STB RMR OD	FT.	DEPTH OUT	
1	5 1/2	2.50	DEPTH IN	11611
			TOTAL FTG.	281
			TOTAL HRS. RUN	24 1/4
120	STANDS DP	FT.	COND. 1/8's T B GAGE	2 N
1	SINGLES DP	11 252.15 FT.	GPM PD-PSI	/ /
	KELLY DOWN	38.12 FT.		
	TOTAL	11750.00 FT.		
WT. OF STRING	265000	LBS.		

MUD RECORD			
TIME	0800	1100	1400
WEIGHT	10.2	10.2	10.2
PRESSURE GRADIENT			
VISC.-SEC.	66	65	63
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH	10.0	10.2	10.1
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	17 SX	M/L-10	1 SX
CELLEX	5 SX		
X-PEL-E	3 SX		
CAUSTIC	2 SX		

FOOTAGE FROM	FOOTAGE TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL-S PAR'EL-P COMB'D-C
[illegible]	[illegible]			[illegible]	50	30	[illegible]	5 1/2	48			S

DEVIATION RECORD

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	0600	6	2	DRILL

DRILLER [illegible]

DAY TOUR

FOOTAGE FROM	FOOTAGE TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL-S PAR'EL-P COMB'D-C
11750	11850	D		100'	50	30	1200	5 1/2	48	5 1/2		S
							1500	5 1/2	26	5 1/2		S

DEVIATION RECORD

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0600	1600	8	2	DRILL
				CHECK B.O.P.'S

DRILLER [illegible]

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT [illegible]	FT.	BIT NO.	AR 36
			SIZE	7 7/8
	STB RMR [illegible] OD	FT.	MFG.	SEC
1	D.C. ID [illegible] OD	[illegible] FT.	TYPE	M 84
1	STB RMR [illegible] OD	FT.	JETS 1 32"	10 11 11
1	D.C. ID [illegible] OD	[illegible] FT.	SER. NO.	447107
	STB RMR OD	FT.	DEPTH OUT	[illegible]
1	[illegible]	[illegible]	DEPTH IN	11611
			TOTAL FTG.	401
			TOTAL HRS. RUN	
121	STANDS DP	[illegible] FT.	COND. 1/8's T/B GAGE	2 1 1
	SINGLES DP	FT.	GPM/ PD-PSI	[illegible]
	KELLY DOWN	[illegible] FT.		
	TOTAL	[illegible] FT.		
WT. OF STRING	265 000	LBS.		

MUD RECORD			
TIME	1600		
WEIGHT	10.2		
PRESSURE GRADIENT			
VISC.-SEC.	65		
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.			
pH	10.0		
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	FOOTAGE TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL-S PAR'EL-P COMB'D-C
11750	12012								10.			

DEVIATION RECORD

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1200	1600	4		DRILL
				CIRCULATE & R.P.

DRILLER

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

C 24114

DAILY DRILLING REPORT

REPORT NO. 142

LEASE	WELL NO.	API WELL NUMBER	DATE
POINTED MTN	A4	A 55-50-30-123 WES	12-13-74

OPERATOR	CONTRACTOR	RIG NO.
AMOCO CANADA LTD	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

LEGAL LAND DESCRIPTION POINTED MTN A 55

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

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	9⅝		40 & 36		2210		2200
			J-55 NEW				
			J-55 USED				

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5	19.50	E	6⅝	XH	1
5	19.50	G	6⅝	XH	2

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

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	10½	8	5½
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS	3½		
7	LUBRICATE RIG			
8	REPAIR RIG	3½		
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	CHANGE	1½		
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.

HRS. W/OPR. D.P.

HRS. W/O D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD 142

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 8½	1.00	FT.
1	6¾	2.94	
1	STB RMR OD	30.76	FT.
1	D.C. ID 6¼ OD	30.97	FT.
1	STB RMR OD	3.17	FT.
11	D.C. ID 6¼ OD	540.63	FT.
	STB RMR OD		FT.
1	C/O	1.50	
119	STANDS DP	11534.24	FT.
	SINGLES DP		FT.
	KELLY DOWN	19.41	FT.
	TOTAL	11708.00	FT.
WT. OF STRING	165000		LBS.

BIT RECORD

BIT NO.	RR 36
SIZE	7⅞
MFG.	SEC
TYPE	M84
JETS 1/32"	11 11 11
SER. NO.	477191
DEPTH OUT	
DEPTH IN	11611
TOTAL FTG.	97
TOTAL HRS. RUN	10.75
COND. 1-8's T-B GAGE	1 6
GPM PD-PSI	/ /

MUD RECORD

TIME	0800	1100	1400
WEIGHT	10.2	10.2	10.2
PRESSURE GRADIENT			
VISC.-SEC.	65	66	61
PV/YP	/	/	/
GELS.	/	/	/
WL-CC'S.			
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
X-TEN-G	3-SKS		
GEL	4-SKS		
CELLEX	2-LBS		
CAUSTIC	2-SKS		

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT	1.00	FT.
1	6.7 DC	2.94	
1	STB RMR OD	30.76	FT.
1	D.C. ID 6¼ OD	30.97	FT.
1	STB RMR OD	3.17	FT.
11	D.C. ID 6¼ OD	540.63	FT.
	STB RMR OD		FT.
1	C/O	1.50	
119	STANDS DP	11534.24	FT.
	SINGLES DP		FT.
	KELLY DOWN	19.41	FT.
	TOTAL	11708.00	FT.
WT. OF STRING	165000		LBS.

BIT RECORD

BIT NO.	RR 36
SIZE	7⅞
MFG.	SEC
TYPE	M84
JETS 1/32"	11 11 11
SER. NO.	477191
DEPTH OUT	
DEPTH IN	11611
TOTAL FTG.	97
TOTAL HRS. RUN	10.75
COND. 1-8's T-B GAGE	1 6
GPM PD-PSI	/ /

MUD RECORD

TIME	0800	1100	1400
WEIGHT	10.2	10.2	10.2
PRESSURE GRADIENT			
VISC.-SEC.	65	66	61
PV/YP	/	/	/
GELS.	/	/	/
WL-CC'S.			
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
X-TEN-G	3-SKS		
GEL	4-SKS		
CELLEX	2-LBS		
CAUSTIC	2-SKS		

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT	1.00	FT.
1	6.7 DC	2.94	
1	STB RMR OD	30.76	FT.
1	D.C. ID 6¼ OD	30.97	FT.
1	STB RMR OD	3.17	FT.
11	D.C. ID 6¼ OD	540.63	FT.
	STB RMR OD		FT.
1	C/O	1.50	
119	STANDS DP	11534.24	FT.
	SINGLES DP		FT.
	KELLY DOWN	19.41	FT.
	TOTAL	11708.00	FT.
WT. OF STRING	165000		LBS.

BIT RECORD

BIT NO.	RR 36
SIZE	7⅞
MFG.	SEC
TYPE	M84
JETS 1/32"	11 11 11
SER. NO.	477191
DEPTH OUT	
DEPTH IN	11611
TOTAL FTG.	97
TOTAL HRS. RUN	10.75
COND. 1-8's T-B GAGE	1 6
GPM PD-PSI	/ /

MUD RECORD

TIME	1600	2100	0400
WEIGHT	10.2	10.2	10.2
PRESSURE GRADIENT			
VISC.-SEC.	65	67	67
PV/YP	/	/	/
GELS.	/	/	/
WL-CC'S.			
pH	9.5	10.5	10.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHLS PARTEL-P COMP.C
1100	1400	D			50	30	1400	5½	50			S
					50	30	1400			5½	40	S

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
0000	0300	3	1	RIG UP AND TEAR DOWN
0300	0330	½	11	RIG UP AND RUN LOGS
0330	0400	½	1	RIG UP AND RUN LOGS
0400	0500	1	11	RIG UP AND RUN LOGS TO DRILL DEC.
0500	0530	½	1	RIG UP AND RUN LOGS
0530	0615	¾	2	DRILL
0615	0630	¼	5	CIRC.
0630	0700	½	2	DRILL

DRILLER

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHLS PARTEL-P COMP.C
1162	1170	D		7'	50	30	1400	5½	40			S
							1500	6½	50			S
							1000			5½	33	S

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
0800	1100	3	2	DRILL

CIRC & C.O.P.'s

DRILLER

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHLS PARTEL-P COMP.C
11708	9	D		8' 8'	50	30	1400	5½	40			S

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
1600	2400	8	2	DRILL

DRILLER

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

C 24113

DAILY DRILLING REPORT

REPORT NO. 111

LEASE	WELL NO.	API WELL NUMBER	DATE

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

LEGAL LAND DESCRIPTION

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

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	T.K.B. TO CSG. HD.	SET AT

WIRE LINE RECORD RSEL 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	11½	11½	
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS				

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	111
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT	FT.	BIT NO.	RR 38
1		FT.	SIZE	8½
1	STB RMR OD	FT.	MFG.	SEC
1	D.C. ID OD	FT.	TYPE	M3
1	STB RMR OD	FT.	JETS 1/32"	11 11 11
17	D.C. ID OD	FT.	SER. NO.	453472
1	STB RMR OD	FT.	DEPTH OUT	
			DEPTH IN	11240
			TOTAL FTG.	321
			TOTAL HRS. RUN	37½
10	STANDS DP	FT.	COND. T.B's T B GAGE	3 3
2	SINGLES DP	FT.	GPM PD-PSI	/
	KELLY DOWN	FT.		
	TOTAL	FT.		
WT. OF STRING		LBS.		

MUD RECORD			
TIME	0700	1100	1430
WEIGHT	10.2	10.3	10.3
PRESSURE GRADIENT			
VISC.-SEC.	75	76	76
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	9.5+	9.5+	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	FOOTAGE TO	DR./D RM-R CORE../C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCI-S PAPET-P COMP-C
11474	11511	D			50	30	1100	5½	50			C
							1100	5½	50			C

DEVIATION RECORD

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0600	0800	2	2	Drill
0800	0830	½	5	Circ. & condition mud
0830	1130	3	2	Drill
1130	1200	½	5	Circ. & condition mud
1200	1430	2½	2	Drill

DRILLER

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT 8½	1.00 FT.	BIT NO.	RR 38
1	2 7/8	2.34 FT.	SIZE	8½
1	STB RMR CONAL OD	29.76 FT.	MFG.	SEC
1	D.C. ID 6½ OD	30.77 FT.	TYPE	M3
1	STB RMR 8½ OD	2.67 FT.	JETS 1/32"	11 11 11
17	D.C. ID 6½ OD	540.63 FT.	SER. NO.	453472
	STB RMR OD	FT.	DEPTH OUT	
1	CO	2.50 FT.	DEPTH IN	11240
			TOTAL FTG.	321
			TOTAL HRS. RUN	37½
10	STANDS DP	1011.32 FT.	COND. T.B's T/B/ GAGE	3 3
2	SINGLES DP	FT.	GPM/ PD-PSI	/
	KELLY DOWN	73.07 FT.		
	TOTAL	11811 FT.		
WT. OF STRING		240,000 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	FOOTAGE TO	DR./D RM-R CORE../C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCI-S PAPET-P COMP-C
11474	11511	D			50	30	1100	5½	50			C
							1100	5½	50			C

DEVIATION RECORD

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1430	1530	1	2	Drill
1530	1600	½	11	Trip for bit
1600				Trip 5.0 DP

DRILLER

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT 8½	1.00 FT.	BIT NO.	RR 38
1	2 7/8	2.34 FT.	SIZE	8½
1	STB RMR CONAL OD	29.76 FT.	MFG.	SEC
1	D.C. ID 6½ OD	30.77 FT.	TYPE	M3
1	STB RMR 8½ OD	2.67 FT.	JETS 1/32"	11 11 11
17	D.C. ID 6½ OD	540.63 FT.	SER. NO.	453472
	STB RMR OD	FT.	DEPTH OUT	
1	CO	2.50 FT.	DEPTH IN	11240
			TOTAL FTG.	321
			TOTAL HRS. RUN	37½
10	STANDS DP	1011.32 FT.	COND. T.B's T/B/ GAGE	3 3
2	SINGLES DP	FT.	GPM/ PD-PSI	
	KELLY DOWN	73.07 FT.		
	TOTAL	11811 FT.		
WT. OF STRING		240,000 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	FOOTAGE TO	DR./D RM-R CORE../C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCI-S PAPET-P COMP-C
11474	11511	D			50	30	1100	5½	50			C
							1100	5½	50			C

DEVIATION RECORD

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1600	2130	5½	1	Trip for bit
2130	2200	½	15	Safety mtg. with crews
2200	2230	½	6	Ream & work tight hole
2230	2400	1½	2	Drill

DRILLER

C 24112

DAILY DRILLING REPORT

REPORT NO. 14

LEASE	WELL NO.	API WELL NUMBER	DATE

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

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

LEGAL LAND DESCRIPTION

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

WIRE LINE RECORD REEL NO.

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1.	RIG UP AND TEAR DOWN			
2.	DRILL ACTUAL		7¾	
3.	REAMING			
4.	CORING			
5.	CONDITION MUD & CIRCULATE			
6.	TRIPS			
7.	LUBRICATE RIG			
8.	REPAIR RIG			
9.	CUT OFF DRILLING LINE			
10.	DEVIATION SURVEY			
	WIRE LINE LOGS			
12.	RUN CASING & CEMENT			
13.	WAIT ON CEMENT			
14.	NIPPLE UP B.O.P.			
15.	TEST B.O.P.		1/2	
16.	DRILL STEM TEST			
17.	PLUG BACK			
18.	SQUEEZE CEMENT			
19.	FISHING			
20.	DIR. WORK			
21.				
22.				
	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
	TOTALS		8	

COMPLETION

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO. D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	14
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
1	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-38
SIZE	8 3/4
MFG.	SEC
TYPE	M-88
JETS 1/32"	
SER. NO.	H83782
DEPTH OUT	
DEPTH IN	11,260
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.

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL-S PAR'L-P COMP'D-C
10												

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

DRILLER

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
1	BIT	7⅞	11,410 FT.
1		9¼	3.84
1	STB RMR	OD 9	9.76 FT.
1	D.C. ID 6½	OD 9	29.97 FT.
1	STB RMR	OD 9	3.51 FT.
14	D.C. ID	OD 9	390.42 FT.
	STB RMR	OD	FT.
1			2.50
114	STANDS DP		10,973.24 FT.
2	SINGLES DP		65.44 FT.
	KELLY DOWN		28.51 FT.
	TOTAL	11,410	FT.
	WT. OF STRING	260000	LBS.

BIT RECORD

BIT NO.	RR-38
SIZE	8 3/4
MFG.	SEC
TYPE	M-88
JETS 1/32"	10 10 11
SER. NO.	H83782
DEPTH OUT	
DEPTH IN	11260
TOTAL FTG.	150
TOTAL HRS. RUN	15
COND. T.B GAGE	6&D
GPM PD-PSI	
	22.15

MUD RECORD

TIME	0800	1100	1400
WEIGHT	10.1+	10.2	10.1+
PRESSURE GRADIENT			
VISC.-SEC.	73	73	72
PV YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH	9.5+	9.5+	9.5+
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL-S PAR'L-P COMP'D-C
11,410	11,410	D		RS	50	20	1100	5½	30			5
				KILLING RATE →			1100	5½	32			5

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
0800	1100	3	2	DRILL
1100	1115	¼	15	R.O.R. DRILL
1115	1600	4¾	2	DRILL

DRILLER

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
1	BIT	8¾	11,410 FT.
1		9¼	3.84
1	STB RMR	OD 9	9.76 FT.
1	D.C. ID 6½	OD 9	29.97 FT.
1	STB RMR	OD 9	3.51 FT.
14	D.C. ID	OD 9	390.42 FT.
	STB RMR	OD	FT.
1			2.50
114	STANDS DP		10,973.24 FT.
2	SINGLES DP		65.44 FT.
	KELLY DOWN		28.51 FT.
	TOTAL	11,410	FT.
	WT. OF STRING	260000	LBS.

BIT RECORD

BIT NO.	RR-38
SIZE	8 1/2
MFG.	SEC
TYPE	M-88
JETS 1/32"	10 10 11
SER. NO.	H83782
DEPTH OUT	
DEPTH IN	11,260
TOTAL FTG.	150
TOTAL HRS. RUN	15 3/4
COND. T/B/ GAGE	2
GPM/ PD-PSI	

MUD RECORD

TIME	1600
WEIGHT	10.2
PRESSURE GRADIENT	
VISC.-SEC.	73
PV/YP	/
GELS	/
WL -CC'S	
pH	9.5+
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL-S PAR'L-P COMP'D-C
11,410	11,410	D						5½				5

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
1600			2	DRILL 8 1/2 HOLE

DRILLER

Form 3T6

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

C 24111

DAILY DRILLING REPORT

REPORT NO. 137

LEASE	WELL NO.	API WELL NUMBER	DATE

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

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

LEGAL LAND DESCRIPTION

WIRE LINE RECORD REEL NO.

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

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		2½	
5	CONDITION MUD & CIRCULATE			
6	TRIPS		4½	
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				

COMPLETION

A. PERF'R'T'N	
B. TBG TRIPS	
C. TREATING	
D. SWABBING	
E. TESTING	
F. ADDIT'N'L	
G.	

TOTALS

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO. D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	137
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

NO. 1 DRILLING ASSEMBLY (At end of tour)

1	BIT		FT.
	STB RMR OD		FT.
1	D.C. ID OD		FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
113	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.

WT. OF STRING LBS.

BIT RECORD

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

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

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 SCL PART-S PART-P COMPL-C

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

NO. 2 DRILLING ASSEMBLY (At end of tour)

1	BIT	4¾	FT.
	C.E.		
1	STB RMR 4¾ OD	6.10	FT.
2	D.C. ID 2¼ OD	3.54	FT.
1	STB RMR 4¾ OD	30.76	FT.
12	D.C. ID 6¼ OD	6.60	FT.
	STB RMR OD		FT.
1	C/O	2.50	
112	STANDS DP	1105.13	FT.
1	SINGLES DP		FT.
	KELLY DOWN	23.16	FT.
	TOTAL	1130.79	FT.

WT. OF STRING 46000 LBS.

BIT RECORD

BIT NO.	RR 35
SIZE	4¾
MFG.	HTC
TYPE	ATM 40
JET 1/32"	
SER. NO.	5211278
DEPTH OUT	
DEPTH IN	11200
TOTAL FTG.	60
TOTAL HRS. RUN	10½
COND. 1/8's T.B GAGE	1-1-D
GPM PD-PSI	/

MUD RECORD

TIME	0200			
WEIGHT	10.1+			
PRESSURE GRADIENT				
VISC.-SEC.	73			
PV-YP	/	/	/	
GELS	/	/	/	
WL -CC'S				
pH	10.0			
SOLIDS %				

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	10 SKS		
GELEX	4 LBS		
WT MAT	25 SKS		

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 SCL PART-S PART-P COMPL-C
11246	11260	C	5		60	20	1450	5½	50			5

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
0900	1000	1	4	CUTTING CORE #5
1000	1030	½	4B	BREAK OFF CORE + SLUG PIPE FOR TRIP
1030	1500	4½	6	TRIP OUT W/ CORE BBL.
1500	1600	1	4B	RECOVER 60' OF CORE, CORE + LAY DOWN TOOLS
				CHECK B.O.P's

DRILLER Pat Tolar

NO. 3 DRILLING ASSEMBLY (At end of tour)

1	BIT		FT.
1			
1	STB RMR OD		FT.
1	D.C. ID OD		FT.
1	STB RMR OD		FT.
19	D.C. ID OD		FT.
	STB RMR OD		FT.
1	C/O		
114	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.

WT. OF STRING LBS.

BIT RECORD

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

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

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 SCL PART-S PART-P COMPL-C
11246												

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
1600	1730	1½	4	SERVICE + LAY DOWN CORE BBL.
1730	1845	1¼	6	MAKE UP BIT + RUN IN D.C.
1845	1930	¾	9	SLIP + CUT 82' OF D.L.
1930	2200	2½	1	PICKING UP DRILL COLLARS
2200	2330	1½	6	RUN IN W/BIT
2330	2400	½	6	LAY DOWN 10 JTS + SUB
2400	2400	1	2	REAM TO BTM

DRILLER

FORM 3T6

APPROVED APPROVED

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

C 24110

DAILY DRILLING REPORT

REPORT NO. 135

LEASE	WELL NO.	API WELL NUMBER	DATE
Reed Eaton	4-4	42-501-32-0-45	6-11-84

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

LEGAL LAND DESCRIPTION Reed Eaton #4-45

WIRE LINE RECORD REEL NO.

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
5	19.5#	E	6 5/8	4 1/2 XH	1	1	Oilwell	A-600	12"
5	19.5#	E	6 5/8	4 1/2 XH	2	2	Oilwell	A-600	12"

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
9 5/8		40 H-40	248	2481		2481
		43.5 K-55				
		47 S-95				

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	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	5		
3	REAMING			
4	CORING			7½
5	CONDITION MUD & CIRCULATE			
6	TRIPS		9	
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	CIRC			1½
22				
23				
	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
	TOTALS	5		19

COMPLETION

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	135
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT	FT.	BIT NO.	11
1			SIZE	7 7/8
1	STB RMR OD	FT.	MFG.	
	D.C. ID OD	FT.	TYPE	F-3
1	STB RMR OD	FT.	JETS 1/32"	12 12
11	D.C. ID OD	FT.	SER. NO.	10357
	STB RMR OD	FT.	DEPTH OUT	
1			DEPTH IN	10,877
			TOTAL FTG.	453
			TOTAL HRS. RUN	24¼
1	STANDS DP	FT.	COND. 1/8's T.B. GAGE	
1	SINGLES DP	FT.	GPM PD-PSI	
1	KELLY DOWN	FT.		
	TOTAL	FT.		
WT. OF STRING		LBS.		

MUD RECORD			
TIME	0900	1030	
WEIGHT	10.1+	10.1+	
PRESSURE GRADIENT			
VISC.-SEC.	67	61	
PV/YP	/	/	
GELS	/	/	
WL-CC'S			
pH	10.0	10.0	
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT	.88 FT.	BIT NO.	11
1	E/S	1.94	SIZE	7 7/8
1	STB RMR Fine COD	29.76 FT.	MFG.	Smith
1	D.C. ID 2 1/2 OD	30.97 FT.	TYPE	F-3
1	STB RMR Smooth OD	2.67 FT.	JET 1/32"	12 12 12
59	D.C. ID 2 1/2 OD	596.63 FT.	SER. NO.	10357
	STB RMR OD	FT.	DEPTH OUT	11200
1	S/S	2.50	DEPTH IN	10877
			TOTAL FTG.	323
			TOTAL HRS. RUN	20¼
112	STANDS DP	10475.50 FT.	COND. 1/8's T.B. GAGE	8 2 1/2
1	SINGLES DP	21.33 FT.	GPM PD-PSI	
1	KELLY DOWN	32.70 FT.		
	TOTAL	11200.00 FT.		
WT. OF STRING	260,000	LBS.		

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT	FT.	BIT NO.	RR 35
1	C-331	1.44	SIZE	7 7/8
1	STB RMR OD	FT.	MFG.	Chn137
1	D.C. ID OD	FT.	TYPE	
1	STB RMR OD	FT.	JETS 1/32"	
28	D.C. ID OD	FT.	SER. NO.	EC07309
	STB RMR OD	FT.	DEPTH OUT	
10			DEPTH IN	11,200
1			TOTAL FTG.	3
			TOTAL HRS. RUN	1½
111	STANDS DP	FT.	COND. 1/8's T.B. GAGE	
9	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.

EVENING TOUR

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL-S PAPET-P COMP.C
11150	11200	D			55	32	1200	5½	90			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
0001	0600	6		Drilling 50 ft.

DRILLER

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL-S PAPET-P COMP.C
11177	11200	D			55	32	1200	5½	90	5½		5

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
11200	4°	S62E						

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0600	0915	1½	2	DRILL
0915	1115	2	5	CIRC SAMPLE FROM 11200'
1115	1145	½	10	CIRC & DIRECTIONAL SURVEY
1145	1600	4¼	6	TRIP OUT TO CORE
				PULL P.C.P.

DRILLER Pat Loflin

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL-S PAPET-P COMP.C
11200	11200	C	5		60	15	1450	5½	90			5

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
1600	1630	½	6	FINISH OUT
1630				MAKE UP BIT RR 35 & CHANGE
				CATCHER IN CORE BBL. & PICK UP
	1730	1	6	JARS & LAY DOWN 8" STR. BODY
1730	2300	5½	6	RUNNING IN
2330	2330	½	21	Drop Ball Core String & Circ Hole
2330	2400	½	4	Cut Core #5

DRILLER Pat Loflin

SAFETY ▲ FILM

C 24109

DAILY DRILLING REPORT

REPORT NO. 137

LEASE	WELL NO.	API WELL NUMBER	DATE
[illegible]	24	21-30-[illegible]-20-23-20-00	07-15-74

OPERATOR	CONTRACTOR	RIG NO.
[illegible]	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

LEGAL LAND DESCRIPTION

WIRE LINE RECORD REEL NO.

	D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	22.20	[illegible]	[illegible]	[illegible]	1	2	[illegible]	[illegible]	[illegible]

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

WIRE LINE RECORD: SIZE [illegible] NO. LINES [illegible] 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	2-6	6	7
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE	1		
6	TRIPS	3		
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		12		
22				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
	TOTALS	8	5	9

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	137
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT	[illegible] FT.	BIT NO.	[illegible]
	[illegible]	[illegible]	SIZE	[illegible]
1	STB RMR OD	[illegible] FT.	MFG.	[illegible]
1	D.C. ID OD	[illegible] FT.	TYPE	[illegible]
1	STB RMR OD	[illegible] FT.	JETS 1/32"	[illegible]
1	D.C. ID OD	[illegible] FT.	SER. NO.	[illegible]
	STB RMR OD	FT.	DEPTH OUT	
1	[illegible]	[illegible]	DEPTH IN	[illegible]
			TOTAL FTG.	[illegible]
			TOTAL HRS. RUN	[illegible]
[illegible]	STANDS DP	[illegible] FT.	COND. 1-8's T-8 GAGE	[illegible]
1	SINGLES DP	[illegible] FT.	GPM PD-PSI	[illegible]
	KELLY DOWN	[illegible] FT.		
	TOTAL	[illegible] FT.		
WT. OF STRING	[illegible]	LBS.		

MUD RECORD			
TIME			0430
WEIGHT			10.3
PRESSURE GRADIENT			
VISC.-SEC.			91
PV/YP	/	/	/
GELS	/	/	1
WL-CC'S			
pH			10
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]			

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT [illegible]	[illegible] FT.	BIT NO.	[illegible]
	[illegible]	[illegible]	SIZE	[illegible]
1	STB RMR OD	[illegible] FT.	MFG.	[illegible]
1	D.C. ID OD	[illegible] FT.	TYPE	[illegible]
1	STB RMR OD	[illegible] FT.	JETS 1/32"	[illegible]
1	D.C. ID OD	[illegible] FT.	SER. NO.	[illegible]
	STB RMR OD	FT.	DEPTH OUT	
1	[illegible]	[illegible]	DEPTH IN	[illegible]
			TOTAL FTG.	[illegible]
			TOTAL HRS. RUN	[illegible]
[illegible]	STANDS DP	[illegible] FT.	COND. 1-8's T-8 GAGE	[illegible]
1	SINGLES DP	[illegible] FT.	GPM PD-PSI	[illegible]
	KELLY DOWN	[illegible] FT.		
	TOTAL	[illegible] FT.		
WT. OF STRING	[illegible]	LBS.		

MUD RECORD			
TIME	[illegible]	[illegible]	[illegible]
WEIGHT	[illegible]	[illegible]	[illegible]
PRESSURE GRADIENT	[illegible]	[illegible]	[illegible]
VISC.-SEC.	[illegible]	[illegible]	[illegible]
PV/YP	/	/	[illegible]
GELS	/	/	[illegible]
WL-CC'S	[illegible]	[illegible]	[illegible]
pH	[illegible]	[illegible]	[illegible]
SOLIDS %	[illegible]	[illegible]	[illegible]

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]	[illegible]	[illegible]	[illegible]

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT	20 FT.	BIT NO.	4E
1	8 1/2	294	SIZE	9 1/4
1	STB RMR [illegible] OD	4470 FT.	MFG.	[illegible] WITH
1	D.C. ID 6 1/2 OD	29.97 FT.	TYPE	F5
1	STB RMR [illegible] OD	267 FT.	JETS 1/32"	10 11 11
11	D.C. ID 6 1/2 OD	2963 FT.	SER. NO.	TD357
	STB RMR OD	FT.	DEPTH OUT	
1	9 1/2	120	DEPTH IN	10277
			TOTAL FTG.	313
			TOTAL HRS. RUN	19 3/4
111	STANDS DP	10391.36 FT.	COND. 1-8's T-8 GAGE	
	SINGLES DP	FT.	GPM PD-PSI	
	KELLY DOWN	38.55 FT.		
	TOTAL	11080.00 FT.		
WT. OF STRING	257000	LBS.		

MUD RECORD			
TIME	1600	2000	2200
WEIGHT	10.2	10.2	10.1+
PRESSURE GRADIENT	.530	.530	
VISC.-SEC.	82	77	78
PV/YP	/	/	/
GELS	/	/	/
WL-CC'S			
pH	10.5	10.5	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	5 SXS	XPEL-6	3 SX
GELEX	10 LBS		
[illegible]	[illegible]	WTMAT	110 SX
NL-100	2 SX		

KORNING TOUR

FOOTAGE FROM	TO	DR.-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL-S PARTEL-P COMP-C
[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]
										[illegible]	[illegible]	[illegible]

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
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

DRILLER [illegible]

DAY TOUR

FOOTAGE FROM	TO	DR.-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHL-S PARTEL-P COMP-C
[illegible]	[illegible]	D		[illegible]	42	30	1300	5½	50			5
					55	30	1400	6½	50			5

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
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

DRILLER [illegible]

EVENING TOUR

FOOTAGE FROM	TO	DR.-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL-S PARTEL-P COMP-C
11700	11741	D			42	20	1200	5½	50			5
11741	11890	D			55	32	1400	5½	50			5

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
1600	2400	9	2	DRILL
				CHECK B.O.P.

DRILLER [illegible]

C 24108

DAILY DRILLING REPORT

REPORT NO. 136

LEASE	WELL NO.	API WELL NUMBER	DATE
Fawcett Unit	1-4	A-55-20-30-12-W-45	07-14-74

OPERATOR	CONTRACTOR	RIG NO.
Pennzoil Co.	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

LEGAL LAND DESCRIPTION A-55

WIRE LINE RECORD REEL NO.

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	13⅜		48 H-40		5210		5210
			68 K-55				

SIZE 1-E NO. LINES 10 FT. SLIPPED

FT. CUT OFF PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
5	19.50	E	6⅝	4½ I.F.	1	1	Emsco	D-360	16
5	19.50	E	6⅝	4½ I.F.	1	2	Emsco	D-360	16

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	1		
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				

COMPLETION

A	PERF'R'T'N		
B	TBG TRIPS		
C	TREATING		
D	SWABBING		
E	TESTING		
F	ADDIT'N'L		
G			
TOTALS		8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	136
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
1	BIT O		FT.
1			
1	STB RMR OD		FT.
1	D.C. ID OD		FT.
1	STB RMR OD		FT.
1	D.C. ID OD		FT.
1	STB RMR OD		FT.
127	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

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

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL-S PARFL-P COMPLC
13210	13214	D			60	30	1000	6½	48			S
										5½		S

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
13200	1°	S 80 E						

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	0100	1		
0100	0130	½		
0130	0500	4		
0530	0630	1		
0630	0700	1½		

DRILLER

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
1	BIT O		FT.
1			
1	STB RMR OD		FT.
1	D.C. ID OD		FT.
1	STB RMR OD		FT.
1	D.C. ID OD		FT.
1	STB RMR OD		FT.
115	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

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

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHL-S PARFL-P COMPLC
13210	13214	C			60	12	1000	6½	50			S
										5½		S

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	1345	1¾	1	Rig up Lay Down
1345	1400	¼	4	Run in to Tag = 25
1400	1415	¼	5	Circ Clean Rat Hole
1415	1430	¼	5	Circ Clean Rat Hole
1430				Pull out of Hole Strap to Drop Pump Clearance
	1545	1¼	31	Drop Pump
1545		¼	4	Set Back Kelly

DRILLER

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
1	BIT O		FT.
1			
1	STB RMR OD		FT.
1	D.C. ID OD		FT.
1	STB RMR OD		FT.
1	D.C. ID OD		FT.
1	STB RMR OD		FT.
105	STANDS DP		FT.
1	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

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

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL-S PARFL-P COMPLC
13210	13239	C	01	13 10	60	12	1050	6½	50			S
										5½		S

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
1700	2000	4		Circ Cond Mud
2000	2400	4		Pull out

DRILLER

C 24107

DAILY DRILLING REPORT

REPORT NO. 1

LEASE	WELL NO.	API WELL NUMBER	DATE
			7-15-74

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO.

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

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1			
2			

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

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	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	2	5	8
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS	4		
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.	2		
22.			
23.			

COMPLETION

A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	5	5

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	135
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT		FT.
1			
1	STB RMR OD		FT.
1	D.C. ID OD		FT.
1	STB RMR OD		FT.
1	D.C. ID OD		FT.
1	STB RMR OD		FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	35
SIZE	
MFG.	
TYPE	
JETS 1/32"	11 11 10
SER. NO.	
DEPTH OUT	
DEPTH IN	10658
TOTAL FTG.	
TOTAL HRS. RUN	2
COND. 1/8's T B GAGE	
GPM, PD-PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE / FORMATION

FROM	TO	DR.D RM-R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHLUM-P PARFL-P COMP.C
10572	10671	D	1		48	30	1150	5½	40	5½		S

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
0001	0600	6		
0600	0200	1¼		
0215	0600	3¾		
		¼		
	0600	2		

DRILLER

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 8½		FT.
1			
1	STB RMR OD		FT.
1	D.C. ID OD		FT.
1	STB RMR OD		FT.
1	D.C. ID OD		FT.
1	STB RMR OD		FT.
1	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	35
SIZE	8½
MFG.	
TYPE	
JET 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T B GAGE	
GPM, PD-PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE / FORMATION

FROM	TO	DR.D RM-R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHLUM-S PARFL-P COMP.C
10671	10715	D			42	30	1250	5½	42			S

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
0600	1100	5	2	Drilling 8½ hole

DRILLER

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 8½	.50	FT.
1		2.34	
1	STB RMR OD	2.76	FT.
1	D.C. ID OD	30.77	FT.
1	STB RMR OD	2.67	FT.
17	D.C. ID OD	510.13	FT.
1	STB RMR OD	2.30	FT.
105	STANDS DP	10105.44	FT.
2	SINGLES DP	63.16	FT.
	KELLY DOWN	22.25	FT.
	TOTAL	10550.00	FT.
WT. OF STRING	75,000		LBS.

BIT RECORD

BIT NO.	35
SIZE	8½
MFG.	Sec
TYPE	DSJ
JETS 1/32"	11 11 11
SER. NO.	483724
DEPTH OUT	10658
DEPTH IN	10546
TOTAL FTG.	112
TOTAL HRS. RUN	18
COND. 1/8's T B GAGE	
GPM, PD-PSI	

MUD RECORD

TIME	1800	2100	2300
WEIGHT	10.0	10.0+	10.0+
PRESSURE GRADIENT			
VISC.-SEC.	1	58	60
PV/YP	/	/	/
GELS	/	/	/
WL-CC'S			
pH	7.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE / FORMATION

FROM	TO	DR.D RM-R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHLUM-S PARFL-P COMP.C
10715	10750	D		75	42	30	1250	5½	42			S

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
1800	2400	6		Drilling 8½ hole

DRILLER

C 24106

DAILY DRILLING REPORT

REPORT NO. 134

LEASE	WELL NO.	API WELL NUMBER	DATE
Ford Unit	4	A-25-(C-30-12S-40-W	7-2-74

OPERATOR	CONTRACTOR	RIG NO.
Amoco Production Co.	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
[illegible]	[illegible]

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4	[illegible]	E	[illegible]	[illegible]	1	1	[illegible]	[illegible]	12
5	19.50	G	[illegible]	[illegible]	1	2	[illegible]	[illegible]	12

LEGAL LAND DESCRIPTION [illegible] 1-S-E

WIRE LINE RECORD REEL NO.

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13 3/8		54.5 & 61	40	6210		6210

SIZE 1/2 NO. LINES 10 FT. SLIPPED 88'

FT. CUT OFF 88 PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TOM MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	4		
3	REAMING			
4	CORING		4	
5	CONDITION MUD & CIRCULATE			
6	TRIPS	[illegible]		
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE	1		
10	DEVIATION SURVEY	½		
	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	[illegible]		5	1½
22				
23				
	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
	TOTALS	8	9	7

COMPLETION

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	134
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT ◇	1	FT.
1	[illegible]	[illegible]	
1	STB RMR [illegible] OD	[illegible]	FT.
1	D.C. ID [illegible] OD	[illegible]	FT.
1	STB RMR [illegible] OD	[illegible]	FT.
1	D.C. ID [illegible] OD	[illegible]	FT.
1	STB RMR [illegible] OD	[illegible]	FT.
1	[illegible]	30.00	
1	STANDS DP	[illegible]	FT.
4	SINGLES DP	120.32	FT.
	KELLY DOWN	40.75	FT.
	TOTAL	6130.00	FT.

WT. OF STRING [illegible] LBS.

BIT RECORD

BIT NO.	26 / 27
SIZE	12¼ / 12¼
MFG.	[illegible]
TYPE	[illegible]
JETS 1/32"	[illegible]
SER. NO.	[illegible]
DEPTH OUT	[illegible]
DEPTH IN	[illegible]
TOTAL FTG.	204
TOTAL HRS. RUN	17 ¾
COND. 1/8's T/B GAGE	1 / 1 / T
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.

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT ◇	[illegible]	FT.
1	[illegible]	[illegible]	
1	STB RMR [illegible] OD	[illegible]	FT.
1	D.C. ID [illegible] OD	[illegible]	FT.
1	STB RMR [illegible] OD	[illegible]	FT.
1	D.C. ID [illegible] OD	[illegible]	FT.
1	STB RMR [illegible] OD	[illegible]	FT.
2	[illegible]	[illegible]	
1	[illegible]	[illegible]	
1	STANDS DP	[illegible]	FT.
1	SINGLES DP	[illegible]	FT.
	KELLY DOWN	[illegible]	FT.
	TOTAL	[illegible]	FT.

WT. OF STRING [illegible] LBS.

BIT RECORD

BIT NO.	39
SIZE	[illegible]
MFG.	[illegible]
TYPE	[illegible]
JET 1/32"	[illegible]
SER. NO.	[illegible]
DEPTH OUT	[illegible]
DEPTH IN	[illegible]
TOTAL FTG.	[illegible]
TOTAL HRS. RUN	4¼
COND. 1/8's T/B GAGE	[illegible]
GPM PD-PSI	[illegible]

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]			
[illegible]			

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT ◇	[illegible]	FT.
1	[illegible]	[illegible]	
1	STB RMR [illegible] OD	[illegible]	FT.
1	D.C. ID [illegible] OD	[illegible]	FT.
1	STB RMR [illegible] OD	[illegible]	FT.
1	D.C. ID [illegible] OD	[illegible]	FT.
20	STB RMR [illegible] OD	[illegible]	FT.
1	[illegible]	[illegible]	
[illegible]	STANDS DP	[illegible]	FT.
2	SINGLES DP	[illegible]	FT.
	KELLY DOWN	[illegible]	FT.
	TOTAL	[illegible]	FT.

WT. OF STRING [illegible] LBS.

BIT RECORD

BIT NO.	37
SIZE	[illegible]
MFG.	[illegible]
TYPE	◇
JETS 1/32"	[illegible]
SER. NO.	[illegible]
DEPTH OUT	[illegible]
DEPTH IN	[illegible]
TOTAL FTG.	58
TOTAL HRS. RUN	1
COND. 1/8's T/B/ GAGE	[illegible]
GPM/ PD-PSI	[illegible]

MUD RECORD

TIME	[illegible]
WEIGHT	[illegible]
PRESSURE GRADIENT	
VISC.-SEC.	[illegible]
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. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
12[illegible]	12[illegible]	D			60	30/	[illegible]	5½	54			S
										5½		S

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
[illegible]	1¾	S 65 E						

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
[illegible]	0045	3¼		[illegible]
[illegible]	[illegible]	¼		[illegible]
[illegible]	0530	4¾		[illegible]
0530	[illegible]			[illegible]
[illegible]	0615	¾		[illegible]
[illegible]	0645	½		[illegible]
[illegible]	[illegible]	1		[illegible]
[illegible]	1200	5¼		[illegible]

DRILLER [illegible]

FOOTAGE / FORMATION

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
[illegible]	10[illegible]	C	2		60	16	[illegible]	5½	51			S

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
[illegible]	1230	3½	1	[illegible]
1230	1445	1¼	21	[illegible]
1445	[illegible]	[illegible]	4	[illegible]

DRILLER [illegible]

FOOTAGE / FORMATION

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
11[illegible]	10[illegible]	C	3	51	60	16	[illegible]	5½	51			S
										5½		S

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
[illegible]	2045	6¾		[illegible]
2045	2400	3¼		[illegible]

DRILLER [illegible]

C 24105

DAILY DRILLING REPORT — REPORT NO. 133

LEASE	WELL NO.	API WELL NUMBER	DATE
[illegible] TED Moore	A-4	A-55-10-30-1.3-4-4[illegible]	07-11-74

OPERATOR	CONTRACTOR	RIG NO.
[illegible] Energy Co.	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
	[illegible]

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5	[illegible]	E	[illegible]	4½ IF	
5	7.50	E	[illegible]	4½ IF	

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	[illegible]	A-1700	12
2	[illegible]	A-700	12

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	7		20 [illegible]		9210		9210
			23 [illegible]				
			17 [illegible]				

WIRE LINE RECORD — REEL NO.

SIZE [illegible] — NO. LINES 10 — 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	4
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE	¼		
6	TRIPS	3½		
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		12		
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		0	5	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	133
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
1	BIT	[illegible]	FT.
1	[illegible]	[illegible]	
1	STB RMR OD	2[illegible]	FT.
1	D.C. ID OD	[illegible]	FT.
1	STB RMR OD	2[illegible]	FT.
2	D.C. ID OD	[illegible]	FT.
1	STB RMR OD	[illegible]	FT.
	STANDS DP		FT.
2	SINGLES DP	170.61	FT.
	KELLY DOWN	34.54	FT.
	TOTAL	[illegible]	FT.
	WT. OF STRING	[illegible]	LBS.

BIT RECORD			
BIT NO.	36		
SIZE	[illegible]		
MFG.	[illegible]		
TYPE	[illegible]		
JETS 1/32"	[illegible]		
SER. NO.	[illegible]		
DEPTH OUT			
DEPTH IN	[illegible]		
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.

NO.	DRILLING ASSEMBLY (At end of tour)		
1	BIT [illegible]	[illegible]	FT.
1	[illegible]	[illegible]	
1	STB RMR OD	39.71	FT.
1	D.C. ID OD	30.09	FT.
1	STB RMR OD	2.[illegible]	FT.
12	D.C. ID OD	[illegible]	FT.
	STB RMR OD		FT.
1	[illegible]	[illegible]	
	STANDS DP	[illegible]	FT.
	SINGLES DP		FT.
	KELLY DOWN	[illegible]	FT.
	TOTAL	[illegible]	FT.
	WT. OF STRING	[illegible]	LBS.

BIT RECORD			
BIT NO.	31		
SIZE	[illegible]		
MFG.	[illegible]		
TYPE	[illegible]		
JETS 1/32"	[illegible]		
SER. NO.	[illegible]		
DEPTH OUT			
DEPTH IN	[illegible]		
TOTAL FTG.	[illegible]		
TOTAL HRS. RUN	[illegible]		
COND. T.B. GAGE	[illegible]		
GPM/ PD-PSI			

MUD RECORD			
TIME	[illegible]	[illegible]	[illegible]
WEIGHT	[illegible]	[illegible]	[illegible]
PRESSURE GRADIENT			[illegible]
VISC.-SEC.	[illegible]	56	[illegible]
PV/YP	[illegible]	[illegible]	[illegible]
GELS	[illegible]	[illegible]	[illegible]
WL -CC'S.			[illegible]
pH	[illegible]	[illegible]	[illegible]
SOLIDS %			[illegible]
[illegible]			[illegible]
MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AMT.
[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	

NO.	DRILLING ASSEMBLY (At end of tour)		
1	BIT [illegible]	[illegible]	FT.
1	[illegible]	[illegible]	
1	STB RMR OD	32.76	FT.
1	D.C. ID OD	30.37	FT.
1	STB RMR OD	[illegible]	FT.
11	D.C. ID OD	[illegible]	FT.
1	STB RMR OD	[illegible]	FT.
46	STANDS DP	[illegible]	FT.
	SINGLES DP		FT.
	KELLY DOWN	13.64	FT.
	TOTAL	10512.00	FT.
	WT. OF STRING	[illegible]	LBS.

BIT RECORD			
BIT NO.	31		
SIZE	[illegible]		
MFG.	[illegible]		
TYPE	[illegible]		
JETS 1/32"	[illegible]		
SER. NO.	[illegible]		
DEPTH OUT			
DEPTH IN	[illegible]		
TOTAL FTG.	[illegible]		
TOTAL HRS. RUN	[illegible]		
COND. T.B. GAGE	[illegible]		
GPM/ PD-PSI			

MUD RECORD			
TIME	[illegible]	[illegible]	[illegible]
WEIGHT	[illegible]	[illegible]	[illegible]
PRESSURE GRADIENT			
VISC.-SEC.	[illegible]	[illegible]	[illegible]
PV/YP	[illegible]	[illegible]	[illegible]
GELS	[illegible]	[illegible]	[illegible]
WL -CC'S.			
pH	[illegible]	[illegible]	[illegible]
SOLIDS %			
MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AMT.
[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	

DAY TOUR

FOOTAGE FROM	FOOTAGE TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCI-S PAR-EL-P COM-BC
[illegible]								[illegible]				
										[illegible]		

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
[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]		[illegible]
0300	0930	[illegible]		[illegible]
0930	0730	[illegible]		[illegible]
0730	[illegible]	[illegible]		[illegible]

DRILLER [illegible]

FOOTAGE FROM	FOOTAGE TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCI-S PAR-EL-P COM-BC
[illegible]	[illegible]	D			HE	30	[illegible]	5½	48			5
				[illegible]								
				[illegible]								

DAY TOUR

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
[illegible]	[illegible]	[illegible]		[illegible]

DRILLER [illegible]

FOOTAGE FROM	FOOTAGE TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCI-S PAR-EL-P COM-BC
[illegible]	[illegible]	D		17	HE	30	1950	5½	48			5
										5½		

EVENING TOUR

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
[illegible]	2400	[illegible]		[illegible]

DRILLER [illegible]

Form 3T6 — APPROVED — APPROVED

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

C 24104

DAILY DRILLING REPORT

REPORT NO. 132

LEASE	WELL NO.	API WELL NUMBER	DATE
[illegible]	A-4	[illegible]	07-10-74

OPERATOR	CONTRACTOR	RIG NO.
[illegible]	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

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

LEGAL LAND DESCRIPTION

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	[illegible]				8210		8216

WIRE LINE RECORD REEL NO.

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

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	132
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
1	BIT	0	1.00 FT.
1	[illegible]	[illegible]	[illegible]
1	STB RMR [illegible] OD	[illegible]	FT.
1	D.C. ID [illegible] OD	[illegible]	FT.
1	STB RMR [illegible] OD	[illegible]	FT.
1	D.C. ID [illegible] OD	[illegible]	FT.
1	STB RMR [illegible] OD	[illegible]	FT.
1	[illegible]	[illegible]	[illegible]
1-2	STANDS DP	[illegible]	FT.
2	SINGLES DP	[illegible]	FT.
	KELLY DOWN	27.15	FT.
	TOTAL	[illegible]	FT.
WT. OF STRING		[illegible]	LBS.

BIT RECORD	
BIT NO.	35
SIZE	5 3/8-4
MFG.	[illegible]
TYPE	[illegible]
JETS 1 32"	
SER. NO.	[illegible]
DEPTH OUT	
DEPTH IN	10276
TOTAL FTG.	72
TOTAL HRS. RUN	22 1/4
COND. 1/8's T B GAGE	[illegible]
GPM PD-PSI	/ /

MUD RECORD			
TIME	0200	0400	[illegible]
WEIGHT	10.0	10.1	10.0
PRESSURE GRADIENT			
VISC.-SEC.	43	44	45
PV/YP	/	/	/
GELS	/	/	/
WL-CC'S			
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]	3-50		
GEL	2 1-25		
[illegible]	4-50		

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

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

MUD RECORD			
TIME	[illegible]	[illegible]	[illegible]
WEIGHT	[illegible]	[illegible]	[illegible]
PRESSURE GRADIENT			
VISC.-SEC.	[illegible]	[illegible]	[illegible]
PV/YP	/	/	/
GELS.	/	/	/
WL-CC'S.			
pH	[illegible]	[illegible]	[illegible]
SOLIDS %			
[illegible]			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]			
[illegible]			
[illegible]			
[illegible]			

NO.	DRILLING ASSEMBLY (At end of tour)		
1	BIT	[illegible]	FT.
1	[illegible]	[illegible]	[illegible]
1	STB RMR [illegible] OD	[illegible]	FT.
1	D.C. ID [illegible] OD	[illegible]	FT.
1	STB RMR [illegible] OD	[illegible]	FT.
1	D.C. ID [illegible] OD	[illegible]	FT.
1	STB RMR OD		FT.
36	[illegible]	[illegible]	[illegible]
1	[illegible]	[illegible]	[illegible]
103	STANDS DP	[illegible]	FT.
	SINGLES DP		FT.
	KELLY DOWN	26.24	FT.
	TOTAL	[illegible]	FT.
WT. OF STRING		[illegible]	LBS.

BIT RECORD	
BIT NO.	35
SIZE	[illegible]
MFG.	[illegible]
TYPE	[illegible]
JETS 1/32"	
SER. NO.	[illegible]
DEPTH OUT	[illegible]
DEPTH IN	[illegible]
TOTAL FTG.	100
TOTAL HRS. RUN	[illegible]
COND. 1-8's T-B GAGE	[illegible]
GPM PD-PSI	/ /

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHLUM. PARFL'D COMP'L'D
10270	10368	C	2	18	60	20	1700	5 1/2	53			S
										5 1/2		S

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
0001	0400	5		[illegible]

DRILLER

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. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
10318	10321	C	2		[illegible]	20	1700	5 1/2	53			S

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
0600	[illegible]	5		[illegible]

DRILLER

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
10321	10340	C	2	19	[illegible]	20	1700	5 1/2	53			S
										5 1/2		S

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
1800	2100	5		[illegible]
2100	2400	3		[illegible]

DRILLER

EVENING TOUR

C 24103

DAILY DRILLING REPORT

REPORT NO. 131

LEASE	WELL NO.	API WELL NUMBER	DATE
			07-1-74

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	

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

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

LEGAL LAND DESCRIPTION

WIRE LINE RECORD REEL NO.

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

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				
COMPLETION A	PERF'R'T'N			
B	TBG TRIPS			
C	TREATING			
D	SWABBING			
E	TESTING			
F	ADDIT'N'L			
G				
	TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	131
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

DRILLING ASSEMBLY (At end of tour) / BIT RECORD / MUD RECORD

NO.	DRILLING ASSEMBLY		BIT RECORD		MUD RECORD			
1	BIT	FT.	BIT NO.	35	TIME	0100	1300	0100
			SIZE		WEIGHT	10.8	10.0	10.0
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT			
	D.C. ID OD	FT.	TYPE		VISC.-SEC.	43	42	43
	STB RMR OD	FT.	JETS 1 32"		PV YP	/	/	/
	D.C. ID OD	FT.	SER. NO.		GELS	/	/	/
	STB RMR OD	FT.	DEPTH OUT		WL -CC'S			8.1
			DEPTH IN		pH	10	10	9.5
			TOTAL FTG.		SOLIDS %			
			TOTAL HRS. RUN					
	STANDS DP	FT.	COND. 1-8's T.B. GAGE		MUD & CHEMICALS ADDED			
1	SINGLES DP	FT.	GPM PD-PSI		TYPE	AMT.	TYPE	AMT.
	KELLY DOWN	FT.						
	TOTAL	FT.						
WT. OF STRING		LBS.						

MORNING TOUR

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR..D RM-R CORE..C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL-S PAR'L-P COMB-C
10305	10343	C	1	32	60	18	1350	5½	53			S
										5½		S

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
0001	0300	3		CUTTING CORE #1

DRILLER

DRILLING ASSEMBLY (At end of tour) / BIT RECORD / MUD RECORD

NO.	DRILLING ASSEMBLY		BIT RECORD		MUD RECORD			
1	BIT	FT.	BIT NO.	35	TIME			
			SIZE		WEIGHT			
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT			
	D.C. ID OD	FT.	TYPE		VISC.-SEC.			
	STB RMR OD	FT.	JET 1/32"		PV YP	/	/	/
	D.C. ID OD	FT.	SER. NO.		GELS	/	/	/
	STB RMR OD	FT.	DEPTH OUT		WL -CC'S			
			DEPTH IN		pH			
			TOTAL FTG.		SOLIDS %			
			TOTAL HRS. RUN					
	STANDS DP	FT.	COND. 1-8's T.B. GAGE		MUD & CHEMICALS ADDED			
	SINGLES DP	FT.	GPM PD-PSI		TYPE	AMT.	TYPE	AMT.
	KELLY DOWN	FT.						
	TOTAL	FT.						
WT. OF STRING		LBS.						

DAY TOUR

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR..D RM-R CORE..C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PAR'L-P COMB-C
10343	10345	C	1		60	18	1350	5½	53			S

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
0500	1100	6	4	Cut Core #1
1100	1300	2	1	Work Core #1 (Tight Hole in 1338' to 1345' Core #2)
1300	1330	½	21	Circ. Pill
1330	1800	4½	1	Work Core #1

DRILLER

DRILLING ASSEMBLY (At end of tour) / BIT RECORD / MUD RECORD

NO.	DRILLING ASSEMBLY		BIT RECORD		MUD RECORD			
1	BIT	FT.	BIT NO.	35	TIME			
			SIZE		WEIGHT			
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT			
	D.C. ID OD	FT.	TYPE		VISC.-SEC.			
	STB RMR OD	FT.	JETS 1/32"		PV/YP	/	/	/
	D.C. ID OD	FT.	SER. NO.		GELS	/	/	/
	STB RMR OD	FT.	DEPTH OUT		WL -CC'S			
			DEPTH IN		pH			
			TOTAL FTG.		SOLIDS %			
			TOTAL HRS. RUN					
	STANDS DP	FT.	COND. 1-8's T.B. GAGE		MUD & CHEMICALS ADDED			
	SINGLES DP	FT.	GPM PD-PSI		TYPE	AMT.	TYPE	AMT.
	KELLY DOWN	FT.						
	TOTAL	FT.						
WT. OF STRING		LBS.						

EVENING TOUR

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR..D RM-R CORE..C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL-S PAR'L-P COMB-C
10345	10360	C	2	2	60	18	1350	5½	53			S
										5½		S

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
1800	1900	1	21	Reamed Core #2 Rough Spot
1900	1930	½		Screen Core #2
1930	2100	3½		Ream in Hole to Bottom
2100	2130	½		Pump Circ Wash To Bottom From 10308 To 10345
2130	2330	1		Circ & Drop Tool
2330	2400	1½		Cutting Core #2

DRILLER

FORM 3T6 APPROVED APPROVED

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

C 24102

DAILY DRILLING REPORT

REPORT NO. 126

LEASE	WELL NO.	API WELL NUMBER	DATE
[illegible]	2-2	1-55-20-30N-17-W	07-?-74

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	22

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
	[illegible]

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5	16.6	E	6 5/8	H	1
5	16.6	E	6 5/8	H	2

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	[illegible]	D-800	16
2	[illegible]	D-800	16

LEGAL LAND DESCRIPTION [illegible]

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	9 5/8		36		4211		3211
			7				
			[illegible]				

WIRE LINE RECORD REEL NO.

SIZE	NO. LINES	FT. SLIPPED
1 3/16	10	

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	12		
3. REAMING			10
4. CORING			2
5. CONDITION MUD & CIRCULATE	12	1/2	1 1/2
6. TRIPS		3 3/4	2 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. DIR. WORK			
21.			12
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	12	3 3/4	8 1/4

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	130
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT	[illegible]	FT.
1	[illegible]	[illegible]	
1	STB RMR [illegible] OD	20.75	FT.
1	D.C. ID 2 1/2 OD	2.75	FT.
1	STB RMR [illegible] OD	2.25	FT.
10	D.C. ID [illegible] OD	90.17	FT.
	STB RMR OD		FT.
1	[illegible]	2.50	
102	STANDS DP	3007.01	FT.
2	SINGLES DP	62.31	FT.
	KELLY DOWN	37.41	FT.
	TOTAL	3106.73	FT.
WT. OF STRING	[illegible]		LBS.

BIT RECORD

BIT NO.	34
SIZE	8
MFG.	[illegible]
TYPE	[illegible]
JETS 1 32"	[illegible]
SER. NO.	[illegible]
DEPTH OUT	[illegible]
DEPTH IN	10211
TOTAL FTG.	[illegible]
TOTAL HRS. RUN	[illegible]
COND. 1/8's T/B GAGE	2 3 5
GPM PD-PSI	/ /

MUD RECORD

TIME	0200	0500	0630
WEIGHT	9.7+	9.7	9.9
PRESSURE GRADIENT			
VISC.-SEC.	41	43	43
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	10.0	10.0	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
STARCH	150#		
CELEX	100 LBS		

HORNING TOUR

FOOTAGE FROM	FOOTAGE TO	DR. D RM. R CORE. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL. DPLX PARTL. P COMPLC.
10253	10296	43			68	20	1500	5 1/2	50	5 1/2		S

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
0001	[illegible]	1 1/2		[illegible]
0130	[illegible]	1/2		[illegible]
				[illegible]
				[illegible]
				[illegible]
				[illegible]
				[illegible]
				[illegible]
				[illegible]

DRILLER L. Underhill

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT	1.00	FT.
1	[illegible]	1.40	
1	STB RMR [illegible] OD	6.44	FT.
1	D.C. ID [illegible] OD	30.72	FT.
1	STB RMR [illegible] OD	2.84	FT.
1	D.C. ID [illegible] OD	31.71	FT.
20	STB RMR [illegible] OD	621.10	FT.
1	[illegible]	2.00	
102	STANDS DP	9567.00	FT.
	SINGLES DP		FT.
	KELLY DOWN	37.24	FT.
	TOTAL	10282.00	FT.
WT. OF STRING	276,000		LBS.

BIT RECORD

BIT NO.	35
SIZE	[illegible]
MFG.	[illegible]
TYPE	D
JET 1/32"	[illegible]
SER. NO.	[illegible]
DEPTH OUT	
DEPTH IN	10211
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

FOOTAGE FROM	FOOTAGE TO	DR. D RM. R CORE. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S. P. M.	METHOD RUN SGL. DPLX PARTL. P COMPLC.
10 [illegible]		1			68	[illegible]	[illegible]	5 1/2	50			S
										5 1/2		S

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
10256	2°	S 15 E						

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0000	0030	1/2		[illegible]
0030	0930	4		[illegible]
0930	1330	4		[illegible]
1330	1400	1/2		[illegible]
1400	1500	1		[illegible]
1500	1600	1		[illegible]

DRILLER

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT Q	1.00	FT.
1	[illegible]	4.40	
1	STB RMR [illegible] OD	1.90	FT.
1	D.C. ID [illegible] OD	30.72	FT.
1	STB RMR [illegible] OD	2.84	FT.
1	D.C. ID [illegible] OD	31.71	FT.
20	STB RMR [illegible] OD	621.10	FT.
1	[illegible]	2.50	
102	STANDS DP	9547.01	FT.
	SINGLES DP		FT.
	KELLY DOWN	37.24	FT.
	TOTAL	10282.00	FT.
WT. OF STRING	275,000		LBS.

BIT RECORD

BIT NO.	35
SIZE	[illegible]
MFG.	[illegible]
TYPE	D
JETS 1/32"	[illegible]
SER. NO.	EC-10314
DEPTH OUT	
DEPTH IN	10211
TOTAL FTG.	12
TOTAL HRS. RUN	3
COND. 1/8's T/B GAGE	[illegible]
GPM PD-PSI	/ / /

MUD RECORD

TIME	2100
WEIGHT	9.7
PRESSURE GRADIENT	.515
VISC.-SEC.	44
PV/YP	17/11
GELS.	3/4
WL -CC'S.	8.8
pH	11
SOLIDS %	8

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL MUD AT SHK			
[illegible]	1 SHK		

EVENING TOUR

FOOTAGE FROM	FOOTAGE TO	DR. D RM. R CORE. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL. DPLX PARTL. P COMPLC.
10296	10326	C	1		68	15	1250	5 1/2	55			S

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
1600	1930	3 1/2	6	Running in to Slow.
1930	2045	1 1/4	3	Circ. in to Btm Fr 10236 to 10326
2045	2100	1/4	5	Drop Ball Circ. out STD to Pump Pull to Btm
2100	2400	3	4	Cut Loc #1

DRILLER [illegible]

FORM 3T6

APPROVED APPROVED

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

C 24101

DAILY DRILLING REPORT

REPORT NO. 129

LEASE	WELL NO.	API WELL NUMBER	DATE
[illegible]	2-4	42-55-10-30-123-45W	07-07-74

OPERATOR	CONTRACTOR	RIG NO.
[illegible]	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
[illegible]	[illegible]

LEGAL LAND DESCRIPTION [illegible] 2-5E

WIRE LINE RECORD REEL NO.

SIZE 1 3/8 | NO. LINES 10 | FT. SLIPPED

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	9 5/8		36 NEW		628		620
			23 N-80				
			17 K-55				

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5	19.5	E	6	[illegible]	1
5	19.5	E	6	[illegible]	2

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	D-B	16
2	[illegible]	[illegible]	16

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1.	RIG UP AND TEAR DOWN			
2.	DRILL ACTUAL	5	8	5
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			
30.	DIR. WORK			
21.				
22.				
23.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		5	8	5

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	129
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 8 1/2	.50 FT.	
1	[illegible]	2.64 FT.	
1	STB RMR [illegible] OD	29.91 FT.	
1	D.C. ID [illegible] OD	30.37 FT.	
1	STB RMR [illegible] OD	2.17 FT.	
10	D.C. ID [illegible] OD	[illegible] FT.	
	STB RMR OD	FT.	
1	[illegible]	2.35 FT.	
102	STANDS DP	[illegible] FT.	
2	SINGLES DP	13.35 FT.	
	KELLY DOWN	[illegible] FT.	
	TOTAL	[illegible] FT.	

WT. OF STRING [illegible] LBS.

BIT RECORD

BIT NO.	34
SIZE	8 1/2
MFG.	SMITH
TYPE	F5
JETS 1/32"	10 10 11
SER. NO.	JD 381
DEPTH OUT	
DEPTH IN	10141
TOTAL FTG.	77
TOTAL HRS. RUN	16
COND. 1/8's T/B/ GAGE	[illegible]
GPM/ PD-PSI	/ /

MUD RECORD

	0001	0300	0600
TIME			
WEIGHT	9.7+	9.7+	9.7+
PRESSURE GRADIENT			
VISC.-SEC.	43	41	42
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH	9.0	9.0	9.5
SOLIDS %			

MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AMT.
WT MAT	35SK		
GELEX	2#		
X-R2-G	4-SKS		
CAUSTIC	2-SKS		

MORNING TOUR

FOOTAGE FROM	TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCR-S PART-P COMP-C
10111	10247	53			48	30	1500	5 1/2	50	5 1/2		S

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
0001	0500	5		Drlg 9 Hole

DRILLER [illegible]

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 8 1/2	.50 FT.	
1	[illegible]	2.64 FT.	
1	STB RMR [illegible] OD	29.76 FT.	
1	D.C. ID [illegible] OD	30.17 FT.	
1	STB RMR [illegible] OD	2.17 FT.	
10	D.C. ID [illegible] OD	[illegible] FT.	
	STB RMR OD	FT.	
1	[illegible]	2.70 FT.	
102	STANDS DP	[illegible] FT.	
	SINGLES DP	FT.	
	KELLY DOWN	30.77 FT.	
	TOTAL	10238.00 FT.	

WT. OF STRING [illegible] LBS.

BIT RECORD

BIT NO.	34
SIZE	8 1/2
MFG.	SMITH
TYPE	F5
JET 1/32"	10 10 11
SER. NO.	JD 381
DEPTH OUT	
DEPTH IN	10141
TOTAL FTG.	77
TOTAL HRS. RUN	16
COND. 1/8's T/B/ GAGE	[illegible]
GPM/ PD-PSI	/ /

DESANDER - 3 CONES

U.F. - 15.4 # 9.7

MUD RECORD

	0800	1200	1500
TIME			
WEIGHT	9.7+	9.7+	9.8+
PRESSURE GRADIENT			
VISC.-SEC.	43	42	39
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH	10.0	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AMT.
WT MAT	100SK		
GEL	10 SK		
X-R-G	3 SK		
GELEX	5 SK		

DAY TOUR

FOOTAGE FROM	TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S. P. M.	METHOD RUN SCR-S PART-P COMP-C
10104	10238	D		34'	48	30	1500	5 1/2	50			S
										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
0400	1600	8		Drlg 9 Hole

Circulate B.O.T.'s

DRILLER [illegible]

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 8 1/2	.40 FT.	
1	[illegible]	2.64 FT.	
1	STB RMR [illegible] OD	29.76 FT.	
1	D.C. ID [illegible] OD	30.47 FT.	
1	STB RMR [illegible] OD	2.17 FT.	
10	D.C. ID [illegible] OD	290.43 FT.	
	STB RMR OD	FT.	
1	C/A	2.50	
102	STANDS DP	9603.00 FT.	
2	SINGLES DP	11.31 FT.	
	KELLY DOWN	14.46 FT.	
	TOTAL	10283.00 FT.	

WT. OF STRING 96,000 LBS.

BIT RECORD

BIT NO.	34
SIZE	8 1/2
MFG.	SMITH
TYPE	F5
JETS 1/32"	10 10 11
SER. NO.	JD 381
DEPTH OUT	
DEPTH IN	10141
TOTAL FTG.	122
TOTAL HRS. RUN	24
COND. 1/8's T/B/ GAGE	[illegible]
GPM/ PD-PSI	/ /

MUD RECORD

	1430	2200	2200
TIME			
WEIGHT	9.8+	9.8	9.7+
PRESSURE GRADIENT			
VISC.-SEC.	42	42	42
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH	9.5	9.5	10.0
SOLIDS %			

MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AMT.
CAUSTIC	2-SKS		

EVENING TOUR

FOOTAGE FROM	TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCR-S PART-P COMP-C
10238	10265	D	45'		48	30	1500	5 1/2	60	5 1/2		S
10265	10283				48	30	1500	/		5 1/2	52	

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
1600	0001	8		Drlg 8 1/2 Hole

DRILLER [illegible]

FORM 3T6

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

C 23620

DAILY DRILLING REPORT

REPORT NO. 12

LEASE	WELL NO.	API WELL NUMBER	DATE
POINTER MOUNTAIN	A-4	A-55-11-30-123-4CW	7-1-74

OPERATOR: [illegible]

CONTRACTOR: LOFFLAND BROTHERS COMPANY — RIG NO. 52

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: R. Loffland

LEGAL LAND DESCRIPTION: POINTER MOUNTAIN AREA

WIRE LINE RECORD — REEL NO.

SIZE: 7/16 — NO. LINES: 10 — FT. SLIPPED:

FT. CUT OFF: — PRESENT LENGTH:

TON MI. OR TRIPS SINCE LAST CUT:

CUMULATIVE TON MI. OR TRIPS:

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	9⅝		40 N60		521		521
			43.5 N80				
			47 K55				

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5"	16.60	E	6 1/4	4½ IF	1
5"	19.50	G	6 1/4	4½ IF	2

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	D-375	18
2	EMSCO	D-375	18

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	7	4½	
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS		3	1
7. LUBRICATE RIG			
8. REPAIR RIG			¾
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY	1	½	
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			3¼
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	125
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
1	BIT 9⅝	.60	FT.
1	[illegible]	2.50	
1	STB RMR [illegible] OD	29.76	FT.
1	D.C. ID [illegible] OD	29.97	FT.
1	STB RMR [illegible] OD	2.17	FT.
19	D.C. ID 11" OD	598.13	FT.
	STB RMR OD		FT.
1	C.O.	2.50	
	STANDS DP	[illegible]	FT.
	SINGLES DP		FT.
	KELLY DOWN	33.92	FT.
	TOTAL	[illegible]	FT.
WT. OF STRING	75,000		LBS.

BIT RECORD	
BIT NO.	33
SIZE	9½
MFG.	Smith
TYPE	4 J 55
JETS 1/32"	11 11 11
SER. NO.	MN724
DEPTH OUT	
DEPTH IN	9764
TOTAL FTG.	272
TOTAL HRS. RUN	45½
COND. 1/8's T/B/ GAGE	[illegible]
GPM/ PD–PSI	/ /

MUD RECORD			
TIME	0001	0330	
WEIGHT	9.2+	9.2+	10.6+
PRESSURE GRADIENT			
VISC.–SEC.	42	41	41
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
WT MAT	115 SKS		
GELEX	8 SKS		

FOOTAGE FROM	FOOTAGE TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000 #	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL.–S PARTEL–P COMPCO.–C
10056	10377	8'			55	30	1600	5½	52	5½		S

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	10110	4°	S76E						

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	0600	6		DRILLING 9⅝" HOLE

DRILLER: L. Boucaud

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
1	BIT 9⅝	.60	FT.
1	Rec Sub	.84	
1	STB RMR [illegible] OD	29.76	FT.
1	D.C. ID [illegible] OD	30.17	FT.
1	STB RMR [illegible] OD	2.17	FT.
19	D.C. ID 11" OD	598.13	FT.
	STB RMR OD		FT.
1	9⅝ Sub	2.50	
10	STANDS DP	952.70	FT.
1	SINGLES DP	31.35	FT.
	KELLY DOWN	11.54	FT.
	TOTAL		FT.
WT. OF STRING	75,000		LBS.

BIT RECORD	
BIT NO.	33
SIZE	9½
MFG.	Smith
TYPE	4 J 55
JET 1/32"	11 11 11
SER. NO.	MN724
DEPTH OUT	10161
DEPTH IN	9764
TOTAL FTG.	397
TOTAL HRS. RUN	50
COND. 1/8's T/B/ GAGE	8 7 I
GPM/ PD–PSI	/ /

MUD RECORD			
TIME		1100	
WEIGHT	9.6	9.5	
PRESSURE GRADIENT			
VISC.–SEC.	43	42	
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH	9.5	10.5	
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
WATER	180 bbl		
GELEX	4 sks		

FOOTAGE FROM	FOOTAGE TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000 #	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL.–S PARTEL–P COMPCO.–C
10137	10161	D		24	55	30	1600	5½	52			S

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	10138	3°	S76E						

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0600	1230	6½		DRLG 9⅝" HOLE
1230	1700	½		CIRC & SURVEY
1700	1800	3		TRIP & PUT RUBBER ON PIPE

DRILLER: [illegible]

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
1	BIT 9⅝	.60	FT.
1	Rec Sub	2.50	
1	STB RMR [illegible] OD	29.76	FT.
1	D.C. ID [illegible] OD	30.97	FT.
1	STB RMR [illegible] OD	2.17	FT.
19	D.C. ID 11" OD	598.13	FT.
	STB RMR OD		FT.
1	C.O.	2.50	
10	STANDS DP	952.70	FT.
1	SINGLES DP	31.35	FT.
	KELLY DOWN	11.54	FT.
	TOTAL	[illegible]	FT.
WT. OF STRING	240,000		LBS.

BIT RECORD	
BIT NO.	34
SIZE	9½
MFG.	Smith
TYPE	F5
JETS 1/32"	10 10 11
SER. NO.	FD381
DEPTH OUT	
DEPTH IN	10161
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	/ /

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	FOOTAGE TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000 #	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL.–S PARTEL–P COMPCO.–C
10161							1900	5½	52	5½		

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1600	1815	2¼		TRIP IN
1815	1900	¾		ATTEMPT SURVEY, CHANGE BITS, CHECK B.O.P.'S
1900	2130	2½		RUNNING IN
2130	2215	¾		REAM 90' TO BOTTOM
2215	2330	1¼		DRILLING
2330	2400	½		REPAIR CIRC. RETURNS ON MUD PIT & W.T.R.

DRILLER: [illegible]

C 23619

DAILY DRILLING REPORT — REPORT NO. 127

LEASE	WELL NO.	API WELL NUMBER	DATE
POINTER MOUNTAIN UNIT	9-4	A-55-61-31-127-4 NW	07-5-74

OPERATOR	CONTRACTOR	RIG NO.
Amoco Production Co.	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
[illegible]	[illegible]

LEGAL LAND DESCRIPTION: POINTER MOUNTAIN UNIT 9-4

WIRE LINE RECORD — REEL NO.: SIZE 1 3/16 | NO. LINES 10 | FT. SLIPPED | FT. CUT OFF | PRESENT LENGTH | TON MI. OR TRIPS SINCE LAST CUT | CUMULATIVE TON MI. OR TRIPS

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
9 5/8		40 N80		9210		9216
		43.5 N80				
		47 S00 95				

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5"	16.60	E	6 5/8	NC50 (4 1/2 IF)	1
5"	19.50	E	6 5/8	NC50 (4 1/2 IF)	2

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

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	6	8	8
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	6	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	127
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 8 1/2	.90	FT.
1	[illegible]	2.94	
1	STB RMR [illegible] OD	29.76	FT.
1	D.C. ID 6 1/2 OD	30.97	FT.
1	STB RMR [illegible] OD	2.67	FT.
19	D.C. ID 6 1/2 OD	590.13	FT.
	STB RMR OD		FT.
1	C/O	2.50	
97	STANDS DP	9[illegible]	FT.
2	SINGLES DP	12.58	FT.
	KELLY DOWN	37.69	FT.
	TOTAL	9926.00	FT.

WT. OF STRING 270,000 LBS.

BIT RECORD

BIT NO.	33
SIZE	Security 9 1/2
MFG.	Smith
TYPE	4-J-S
JETS 1/32"	11 11 11
SER. NO.	MN 724
DEPTH OUT	
DEPTH IN	9714
TOTAL FTG.	116
TOTAL HRS. RUN	20 1/2
COND. 1/8's T/B/ GAGE	[illegible]
GPM/ PD-PSI	/ /

MUD RECORD

TIME	001	2400	0600
WEIGHT	9.2+	9.2+	9.2+
PRESSURE GRADIENT			
VISC.-SEC.	42	42	42
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	9.0	9.5	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCH. S PARTIAL P COMPLE.
9872	9917				55	30	1600	5 1/2	52	5 1/2		S
9917	9930				55	30	1600			5 1/2	57	S

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
0001	0600	6		DRLG 9917 TO 9930

DRILLER [illegible]

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 8 1/2	.90	FT.
1	[illegible]	2.94	
1	STB RMR [illegible] OD	29.76	FT.
1	D.C. ID 6 1/2 OD	30.97	FT.
1	STB RMR [illegible] OD	2.67	FT.
19	D.C. ID 6 1/2 OD	590.13	FT.
	STB RMR OD		FT.
1	C/O	2.50	
97	STANDS DP	9[illegible]	FT.
2	SINGLES DP	12.58	FT.
	KELLY DOWN	37.69	FT.
	TOTAL	9926.00	FT.

WT. OF STRING 270,000 LBS.

BIT RECORD

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

MUD RECORD

TIME	0001	1130	1530
WEIGHT	9.2+	9.2+	9.2+
PRESSURE GRADIENT			
VISC.-SEC.	40	38	37
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	10.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCH. S PARTIAL P COMPLE.
1130	1165	D		58	55	30	[illegible]			5 1/2	57	S
9165	1183	D			55	30	[illegible]	5 1/2	52			S

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
	1400	8		

DRILLER [illegible]

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 8 1/2	.90	FT.
1	[illegible]	2.94	
1	STB RMR [illegible] OD	29.76	FT.
1	D.C. ID 6 1/2 OD	30.97	FT.
1	STB RMR [illegible] OD	2.67	FT.
19	D.C. ID 6 1/2 OD	590.13	FT.
	STB RMR OD		FT.
1	C/O	2.50	
100	STANDS DP	9359.33	FT.
	SINGLES DP		FT.
	KELLY DOWN	37.50	FT.
	TOTAL	10056.00	FT.

WT. OF STRING 312,000 LBS.

BIT RECORD

BIT NO.	33
SIZE	8 1/2
MFG.	Smith
TYPE	4 J S
JETS 1/32"	11 11 11
SER. NO.	MN 724
DEPTH OUT	
DEPTH IN	9764
TOTAL FTG.	292
TOTAL HRS. RUN	38 1/2
COND. 1/8's T/B/ GAGE	[illegible]
GPM/ PD-PSI	/ /

MUD RECORD

TIME	1900	2030	2300
WEIGHT	9.2+	9.2+	9.2+
PRESSURE GRADIENT			
VISC.-SEC.	43	42	43
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	13 SXS	WL-100	1 SX
GELEX	2 SXS		
X-PEL-G	4 SXS		
CAUSTIC	2 SXS		

DESILTER 2 3/8 gpm OF 10.2
OF 9.2+
SFANTIRIGF OF 17.1 OF 9.1

FOOTAGE

FROM	TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCH. S PARTIAL P COMPLE.
1188	1056	D			55	30	1600	5 1/2	52	5 1/2		S

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
1600	2400	8		Drlg 8 1/2 Hole

DRILLER [illegible]

C 23618

DAILY DRILLING REPORT — REPORT NO. 126

LEASE	WELL NO.	API WELL NUMBER	DATE
POINT MOUNTAIN	A-4	A-55-40-30-123-454W	07-4-74

OPERATOR: AMOCO CANADA LTD.

CONTRACTOR: LOFFLAND BROTHERS COMPANY — RIG NO. 72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Lockhart

LEGAL LAND DESCRIPTION: POINT MOUNTAIN A-55

WIRE LINE RECORD — REEL NO. — SIZE 1/4 — NO. LINES 10 — FT. SLIPPED — PT. CUT OFF — PRESENT LENGTH — TON MI. OR TRIPS SINCE LAST CUT — CUMULATIVE TON MI. OR TRIPS

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
9 5/8		40 N80		5210		5210
		43.5 N80				
		47 S00 95				

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

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	D-1000	15
2	EMSCO	D-700	16

TIME DISTRIBUTION — HOURS

CODE NO. — OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	7 3/4	7 1/2	7 1/2
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS	8		
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			3/4
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.	1/4		
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	126
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT 9 7/8	.61 FT.	BIT NO.	32
1	Reamer	2.90	SIZE	9 7/8
1	STB RMR Monel OD	24.72 FT.	MFG.	Security
1	D.C. ID 6 1/2 OD	30.97 FT.	TYPE	H-44
1	STB RMR Monel OD	2.67 FT.	JETS 1/32"	11 11 11
19	D.C. ID 6 1/2 OD	598.63 FT.	SER. NO.	MR-724
	STB RMR OD	FT.	DEPTH OUT	
1	C/O	2.50	DEPTH IN	9764
			TOTAL FTG.	
			TOTAL HRS. RUN	
97	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 RECORD			
TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %			
MUD & CHEMICALS ADDED	TYPE	AMT.	TYPE AMT.

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT 8 3/4	.50 FT.	BIT NO.	33
1	Reamer	2.14	SIZE	8 3/4
1	STB RMR OD	24.75 FT.	MFG.	Security
1	D.C. ID OD	30.17 FT.	TYPE	H-44
1	STB RMR OD	2.67 FT.	JETS 1/32"	11 11 11
11	D.C. ID OD	345.53 FT.	SER. NO.	MR-724
	STB RMR OD	FT.	DEPTH OUT	
1	Bit Sub	2.50 FT.	DEPTH IN	9764
			TOTAL FTG.	60
			TOTAL HRS. RUN	7 1/2
17	STANDS DP	1075.60 FT.	COND. 1/8's T/B GAGE	1 1
2	SINGLES DP	63.22 FT.	GPM/PD-PSI	/ /
	KELLY DOWN	41 FT.	Drilled 9764-9824	
	TOTAL	1240 FT.	DF 9.3 VF 1.2	
WT. OF STRING	238 000 LBS.	Cut 1 1/4" of drlg line		

MUD RECORD			
TIME	1800	2300	1500
WEIGHT	9.3	9.3	9.3
PRESSURE GRADIENT			
VISC.-SEC.	45	42	41
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	9.8	9.5	9.5
SOLIDS %			
MUD & CHEMICALS ADDED	TYPE	AMT.	TYPE AMT.

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT 8 3/4	.91 FT.	BIT NO.	33
1	Reamer	2.90	SIZE	8 3/4
1	STB RMR OD	24.72 FT.	MFG.	Security
1	D.C. ID OD	30.97 FT.	TYPE	H-44
1	STB RMR OD	2.67 FT.	JETS 1/32"	11 11 11
19	D.C. ID 6 1/2 OD	598.63 FT.	SER. NO.	MR-724
	STB RMR OD	FT.	DEPTH OUT	
1	C/O	2.50	DEPTH IN	9764
			TOTAL FTG.	60
			TOTAL HRS. RUN	7 1/2
97	STANDS DP	9119.60 FT.	COND. 1/8's T/B GAGE	1 1
2	SINGLES DP	18.22 FT.	GPM/PD-PSI	/ /
	KELLY DOWN	42.23 FT.		
	TOTAL	9824.05 FT.		
WT. OF STRING	275000 LBS.			

MUD RECORD			
TIME	1740	2200	2400
WEIGHT	9.2+	9.2+	9.2+
PRESSURE GRADIENT			
VISC.-SEC.	40	41	41
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	9.5	9.0	9.0
SOLIDS %			
MUD & CHEMICALS ADDED	TYPE	AMT.	TYPE AMT.
	X-TEL-69-SKS		

EVENING TOUR

FOOTAGE FROM 9764 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 5 1/2 — PUMP NO. 2 LINER SIZE 5 1/2 — METHOD RUN

DEVIATION RECORD — DEPTH — DEV. — DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	0315	3 1/4		ULTRASONIC INSPECT DP & LAY DOWN BAD JT.
0315	0500	1 3/4		MAKE UP & RUN 76 JTS 5 1/2 CASING

DRILLER

FOOTAGE FROM 9764 TO 9824 — DR.-D RM.-R CORE.-C D — CORE NO. 1 — FORMATION (SHOW CORE RECOVERY) — ROTARY RPM 55 — WT. ON BIT 1000# 30 — PUMP PRESS 1600 — PUMP NO. 1 LINER SIZE 5 1/2 S.P.M. 52 — PUMP NO. 2 LINER SIZE 5 1/2 S.P.M. — METHOD RUN Sonic Survey Co. 5

DEVIATION RECORD — DEPTH — DEV. — DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0100	0700	6		Run Sonic Survey Co. Tool from 9764 to 9764
0700	1100	4		Pull out of hole
1100	1830	7 1/2		Rig up Sonic Survey Co. Run Sonic Survey Co. Tool from 9764 to 9824

DRILLER

FOOTAGE FROM 9824 TO 9872 — DR.-D RM.-R CORE.-C D — CORE NO. 48 — FORMATION (SHOW CORE RECOVERY) — ROTARY RPM 55 — WT. ON BIT 1000# 30 — PUMP PRESS 1600 — PUMP NO. 1 LINER SIZE 5 1/2 S.P.M. 52 — PUMP NO. 2 LINER SIZE 5 1/2 S.P.M. — METHOD RUN Sonic Survey Co. 5

DEVIATION RECORD — DEPTH 1823 — DEV. 3° — DIRECTION S 30° E

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1100	1830	2 1/2		Lay down DP
1830	1315	7 1/4		Wait on Sonic Survey Co.
1315	2400	11		Run 5 1/2 Liner

DRILLER

C 23617

DAILY DRILLING REPORT

REPORT NO. 125

LEASE	WELL NO.	API WELL NUMBER	DATE
Pioneer Nuclear Inc	A-4	A-57-10-36-127-4541	07-2-74

OPERATOR	CONTRACTOR	RIG NO.
Samedan Oil Corp.	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

V Lovelace

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

PUMP	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-1000	12
2	Emsco	D-1000	12

LEGAL LAND DESCRIPTION: Section 36 T12N R53E

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	4½		11.6 N-80		9218		9218
			13.5 N-80				
			14.7 S-95				

WIRE LINE RECORD — REEL NO.

SIZE 1.75 | NO. LINES 10 | 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	4¾		
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE	1½		
6	TRIPS	6½	7½	8
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	DIR. WORK			
21		½		
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. T&G TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		24		

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	125
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)			BIT RECORD	
1	BIT 9½		100 FT.	BIT NO.	32
1	Flex Sub		2.94	SIZE	9½
1	STB RMR	OD	26.56 FT.	MFG.	S.I.C.
1	D.C. ID	OD	30.57 FT.	TYPE	S4C
1	STB RMR	OD	9.67 FT.	JETS 1/32"	12 12 12
19	D.C. ID	OD	570.3 FT.	SER. NO.	MH729
	STB RMR	OD	FT.	DEPTH OUT	9776
1	Crossover		2.55	DEPTH IN	9601
				TOTAL FTG.	769
				TOTAL HRS. RUN	97
97	STANDS DP		9059.19 FT.	COND. 1/8's T.B. GAGE	8 7 E
1	SINGLES	DP	31.35 FT.	GPM/ PD-PSI	/ /
	KELLY DOWN		13.09 FT.		
	TOTAL		9776.00 FT.		
WT. OF STRING	230,000		LBS.		

MUD RECORD			
TIME	0200	0500	T
WEIGHT	9.3+	9.3+	R
PRESSURE GRADIENT			L
VISC.-SEC.	44	43	P
PV/YP	/	/	PV
GELS	/	/	Y
WL-CC'S			H
pH	9.5	9.5	G
SOLIDS %			OUT

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

NO.	DRILLING ASSEMBLY (At end of tour)			BIT RECORD	
	BIT		FT.	BIT NO.	33
				SIZE	8¾
	STB RMR	OD	FT.	MFG.	Smith
	D.C. ID	OD	FT.	TYPE	F2
	STB RMR	OD	FT.	JETS 1/32"	11 11 11
	D.C. ID	OD	FT.	SER. NO.	MH726
	STB RMR	OD	FT.	DEPTH OUT	
				DEPTH IN	1764
				TOTAL FTG.	
				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 RECORD			
TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS	/	/	/
WL-CC'S			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

NO.	DRILLING ASSEMBLY (At end of tour)			BIT RECORD	
1	BIT 9½		30 FT.	BIT NO.	33
1	Flex Sub		2.95	SIZE	9½
1	STB RMR	OD	26.76 FT.	MFG.	Smith
1	D.C. ID	OD	30.97 FT.	TYPE	4 TC
1	STB RMR	OD	9.67 FT.	JETS 1/32"	11 11 11
19	D.C. ID	OD	570.3 FT.	SER. NO.	MH724
	STB RMR	OD	FT.	DEPTH OUT	
1	Cross		2.55	DEPTH IN	9764
				TOTAL FTG.	
				TOTAL HRS. RUN	
97	STANDS DP		9059.19 FT.	COND. 1/8's T/B/ GAGE	
1	SINGLES	DP	31.35 FT.	GPM/ PD-PSI	/ /
	KELLY DOWN		13.09 FT.		
	TOTAL		9764.00 FT.		
WT. OF STRING	230,000		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 FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
9720	9764	34			55	35	1300	5½	57	6½		S

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
0001	0645	4¾		Drilling @ 9720'
0645	0715	½		Circ. & Cond.
0715	0830	1¼		Wiper trip 10 stds.
0830	0900	½		Circ. & Cond.
0900	0930	½		Pump slug
0930	1130	2		Trip out for bit #33
1130	1200	½		Change bits & trip in hole

DRILLER: V. Lovelace

EVENING TOUR

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
9764								5½		5½		S

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	2400	8		Pull out of hole w/ bit #33 and mud motor. Lay down 62 joints of 5" HWDP.

DRILLER: V. Lovelace

Form 3TS — APPROVED — APPROVED

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

C 23616

DAILY DRILLING REPORT — REPORT NO. 124

LEASE	WELL NO.	API WELL NUMBER	DATE
POINTED MOUNTAIN	A-4	A-55-6-30-123-45W	02-2-74

OPERATOR	CONTRACTOR	RIG NO.
AMOCO PRODUCTION CO.	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER — W. Burkhart

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

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	D-100C	18
2	EMSCO	D-700	16

LEGAL LAND DESCRIPTION: POINTED MOUNTAIN A-55

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	9 5/8		40 N80		8210		8210
			43.5 S90				
			47 S095				

WIRE LINE RECORD — REEL NO.

SIZE 1 3/16 — NO. LINES 10 — 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	8	7¾
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY	1		¼
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'NL			
	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 124

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 9⅞	.30	FT.
1	IBS 9⅞	2.84	
1	STB RMR 9⅞ OD	28.46	FT.
1	D.C. ID 2 1/2 OD	30.47	FT.
1	STB RMR 9⅞ OD	2.47	FT.
19	D.C. ID 2 1/2 OD	598.13	FT.
	STB RMR OD		FT.
1	CUT	2.50	
95	STANDS DP	8874.42	FT.
2	SINGLES DP	62.69	FT.
	KELLY DOWN	15.72	FT.
	TOTAL	9164.80	FT.
WT. OF STRING	227,000		LBS.

BIT RECORD

BIT NO.	32
SIZE	8½
MFG.	SEC
TYPE	S88
JETS 1/32"	13 13 13
SER. NO.	304381
DEPTH OUT	
DEPTH IN	8542
TOTAL FTG.	614
TOTAL HRS. RUN	14
COND. 1/8's T/B GAGE	2 1 WT /
GPM/ PD-PSI	/

MUD RECORD

	001	0230	0600
TIME			
WEIGHT	9.3+	9.3	9.3+
PRESSURE GRADIENT			
VISC.-SEC.	44	46	43
PV/YP	/	/	/
GELS	/	/	/
WL-CC'S			
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE / FORMATION

FROM	TO	DR. RMR CORE.	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
9559	9710	51'		DESANDER MF-14.1 OF-9.2	CENTRIFUGE MF-17.3 OF-9.2	55	30	1200	6½	57	5½	S

DEVIATION RECORD: DEPTH 9490 — DEV. 5½ — DIRECTION S 79E

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	0730	6½		DRILLING 8½ HOLE
0730	0800	½		CIRCULATE SURVEY
0800	0600	22		DRILLING 8½ HOLE

DRILLER

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT	.80	FT.
1	IBS	2.84	
1	STB RMR OD	28.46	FT.
1	D.C. ID 2 1/2 OD	30.47	FT.
1	STB RMR OD	2.47	FT.
19	D.C. ID 2 1/2 OD	598.13	FT.
	STB RMR OD		FT.
1	CUT	2.50	
96	STANDS DP	9166.04	FT.
1	SINGLES DP	31.60	FT.
	KELLY DOWN	19.11	FT.
	TOTAL	9879.00	FT.
WT. OF STRING	230,000		LBS.

BIT RECORD

BIT NO.	32
SIZE	8½
MFG.	SEC
TYPE	S88
JETS 1/32"	13 13 13
SER. NO.	304381
DEPTH OUT	
DEPTH IN	9106
TOTAL FTG.	670
TOTAL HRS. RUN	75
COND. 1/8's T/B GAGE	1 1 WT /
GPM/ PD-PSI	/

DESANDER 15.2 OF 9.2 DE

CENTRIFUGE 16.9 OF 9.1 DE

MUD RECORD

	0900	1100	1500
TIME			
WEIGHT	9.3	9.3	9.3
PRESSURE GRADIENT			
VISC.-SEC.	42	44	46
PV/YP	/	/	/
GELS	/	/	/
WL-CC'S			
pH	9.5	9.5	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	15 SKS		
GELEX	3 SKS		
X-TEL-G	4 SKS		
CAUSTIC	2 SKS		

FOOTAGE / FORMATION

FROM	TO	DR. RMR CORE.	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
1676	7676	2			55	30	1200	5½	57	5½		S

DEVIATION RECORD: DEPTH — DEV. — DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	1600	8		

DRILLER

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 9⅞	.80	FT.
1	IBS 9⅞	2.84	
1	STB RMR OD	28.46	FT.
1	D.C. ID 2 1/2 OD	30.47	FT.
1	STB RMR OD	2.47	FT.
19	D.C. ID 2 1/2 OD	598.13	FT.
	STB RMR OD		FT.
1	CUT	2.50	
96	STANDS DP	9166.04	FT.
2	SINGLES DP	62.22	FT.
	KELLY DOWN	11.57	FT.
	TOTAL	9241.80	FT.
WT. OF STRING	230,000		LBS.

BIT RECORD

BIT NO.	32
SIZE	8½
MFG.	SEC
TYPE	S88
JETS 1/32"	13 13 13
SER. NO.	304381
DEPTH OUT	
DEPTH IN	9106
TOTAL FTG.	734
TOTAL HRS. RUN	92½
COND. 1/8's T/B GAGE	1 1 WT /
GPM/ PD-PSI	/

MUD RECORD

	1900	2100	2300
TIME			
WEIGHT	9.3	9.3+	9.3+
PRESSURE GRADIENT			
VISC.-SEC.	43	43	44
PV/YP	/	/	/
GELS	/	/	/
WL-CC'S			
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	15 SKS		
GELEX	6 LBS		
WL-100	2 SKS		

FOOTAGE / FORMATION

FROM	TO	DR. RMR CORE.	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
1676	9730	0			55	30	1200	5½	57	3½		S

DEVIATION RECORD: DEPTH 1135 — DEV. 5 — DIRECTION S 7E

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1100	1130	3½		DRLG 8½ HOLE
1130	2015	3¼		TOOH & SURVEY
2015	2400	3¾		DRLG 8½ HOLE

DRILLER

FORM 3T6 — APPROVED — APPROVED

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

C 23615

DAILY DRILLING REPORT

REPORT NO. 172

LEASE	WELL NO.	API WELL NUMBER	DATE
Peters [illegible]	[illegible]	[illegible]	07 [illegible]

OPERATOR	CONTRACTOR	RIG NO.
[illegible]	LOFFLAND BROTHERS COMPANY	[illegible]

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
[illegible]	[illegible]

LEGAL LAND DESCRIPTION [illegible]

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		

	D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
	5	19.50	E	6 5/8	H-90	1
	5	19.50	E	6 5/8	H-90	2

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	[illegible]	D-[illegible]	12
2	[illegible]	D-[illegible]	12

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	7 5/8		26 N-80				
			29.7 N-80				
			47 S-95				

TIME DISTRIBUTION – HOURS

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

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. W/O D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	172
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
1	BIT 5 7/8		FT.
1	[illegible]		FT.
1	STB PMR, OD		FT.
1	D.C. ID, OD		FT.
1	STB RMR OD		FT.
1	D.C. ID OD		FT.
	STB RMR OD		FT.
1	[illegible]		
22	STANDS DP	6182.42	FT.
5	SINGLES DP	315.51	FT.
	KELLY DOWN	24.00	FT.
	TOTAL	9421.93	FT.
WT. OF STRING		225000	LBS.

BIT RECORD	
BIT NO.	32
SIZE	5 7/8
MFG.	Sec
TYPE	S33
JETS 1 32"	[illegible]
SER. NO.	304381
DEPTH OUT	
DEPTH IN	[illegible]
TOTAL FTG.	261
TOTAL HRS. RUN	41
COND. 1/8's T. B. GAGE	[illegible]
GPM/ PD-PSI	/

MUD RECORD			
TIME	0001	[illegible]	0001
WEIGHT	12	9.2	9
PRESSURE GRADIENT			
VISC.-SEC.	45	45	43
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	9.5	10	9.5
SOLIDS %			

MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AMT.
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

NO.	DRILLING ASSEMBLY (At end of tour)		
1	BIT [illegible]		FT.
1	[illegible]		FT.
1	STB RMR OD		FT.
1	D.C. ID OD		FT.
1	STB RMR OD		FT.
19	D.C. ID OD		FT.
	STB RMR OD		FT.
1	[illegible]		
9	STANDS DP	5[illegible]	FT.
1	SINGLES DP	31.42	FT.
	KELLY DOWN	11.56	FT.
	TOTAL	9055.00	FT.
WT. OF STRING		225000	LBS.

BIT RECORD	
BIT NO.	32
SIZE	5 7/8
MFG.	Sec
TYPE	S33
JET 1/32"	13 13 13
SER. NO.	304381
DEPTH OUT	
DEPTH IN	8584
TOTAL FTG.	470
TOTAL HRS. RUN	53
COND. 1/8's T. B GAGE	RING NO
GPM/ PD-PSI	/ /

MUD RECORD			
TIME	0800	1100	1400
WEIGHT	9.3	9.3+	9.3+
PRESSURE GRADIENT	485	487	487
VISC.-SEC.	44	45	43
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AMT.
WT Mat	10 SK	for Mud Comp	
WT -	13.3+		
VIS -	65		

NO.	DRILLING ASSEMBLY (At end of tour)		
1	BIT 5 7/8	1.20	FT.
1	[illegible]	2.34	
1	STB RMR [illegible] OD	2.76	FT.
1	D.C. ID 6 5/8 OD	30.47	FT.
1	STB RMR [illegible] OD	2.67	FT.
17	D.C. ID 6 5/8 OD	516.63	FT.
	STB RMR OD		FT.
1	6 5/8 Sub	2.50	
15	STANDS DP	8871.42	FT.
	SINGLES DP		FT.
	KELLY DOWN	27.41	FT.
	TOTAL	9557.00	FT.
WT. OF STRING		226000	LBS.

BIT RECORD	
BIT NO.	32
SIZE	5 7/8
MFG.	Sec
TYPE	S-33
JETS 1/32"	13 13 13
SER. NO.	304381
DEPTH OUT	
DEPTH IN	9006
TOTAL FTG.	553
TOTAL HRS. RUN	60
COND. 1/8's T/B/ GAGE	[illegible]
GPM/ PD-PSI	/

MUD RECORD			
TIME	1600	2000	
WEIGHT	9.3	9.3+	9.3
PRESSURE GRADIENT			
VISC.-SEC.	41	43	42
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AMT.
GEL	12 SKS		
XP-G	4 SKS		
GELEX	2 SKS		
CAUSTIC	2 SKS		

CENTRIFUGE UF 17.2 DF 9.1

DESANDER UF 14.2 DF 9.2

DAY TOUR

FOOTAGE FROM	FOOTAGE TO	DR.D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL-S PARTI-P COMPLC
7235	7465	D		CHERT, LIME, FX TUFF, LIME	55	30	1200	5 1/2	57			S

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	0600	6		DRLG F/ 7235 T/ 7465

DRILLER [illegible]

FOOTAGE FROM	FOOTAGE TO	DR.D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY) DESANDER	FORMATION (SHOW CORE RECOVERY) CENTRIFUGE	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL-S PARTI-P COMPLC
9005	9445	90'		UF - 10.7 DF - 9.3	UF - 17.3 DF - 9.2+	55	30	1200	5 1/2	57	5 1/2		S
	"												

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	9410	5 3/4	S 55E						

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	0615	3/4		DRLG F/ 9410 T/ 9445
0615	0715	1		TRIP OUT FOR BIT
0715	1315	6		TRIP IN W/ BIT #2

DRILLER [illegible]

EVENING TOUR

FOOTAGE FROM	FOOTAGE TO	DR.D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL-S PARTI-P COMPLC
1485	1557	D		74'	55	30	1700	5 1/2	57	5 1/2		S

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	1485	5 3/4	S 80E						

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1100	1830	22		DRLG 8 3/4 HOLE
1830	1930	1		WIRE LINE SURVEY
1930	2400	4 1/2		DRLG 8 3/4 HOLE

DRILLER [illegible]

FORM 3T6

APPROVED APPROVED

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

C 23614

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
P... MTN	A-1	[illegible]	11-30-74

OPERATOR	CONTRACTOR	RIG NO.
[illegible]	LOFFLAND BROTHERS COMPANY	10

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [illegible]

LEGAL LAND DESCRIPTION: P... [illegible]

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5	19.50	E	7 1/2	HWDP	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	[illegible]	D-[illegible]	15
2	[illegible]	D-[illegible]	15

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
7 5/8		40 [illegible]				
		43.5 [illegible]				
		[illegible]				

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED

FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

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

COMPLETION

A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	E	8	F

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	199
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

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

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

MUD RECORD			
TIME	[illegible]	[illegible]	[illegible]
WEIGHT	[illegible]	[illegible]	[illegible]
PRESSURE GRADIENT			
VISC.-SEC.	[illegible]	[illegible]	[illegible]
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH	[illegible]	[illegible]	[illegible]
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

NO.	DRILLING ASSEMBLY (At end of tour)		
1	BIT [illegible]	.90	FT.
1	[illegible]	0.00	
1	STB RMR [illegible] OD	[illegible]	FT.
1	D.C. ID [illegible] OD	[illegible]	FT.
1	STB RMR [illegible] OD	[illegible]	FT.
10	D.C. ID [illegible] OD	[illegible]	FT.
	STB RMR OD		FT.
1	[illegible]	2.50	
6	STANDS DP	[illegible]	FT.
	SINGLES DP		FT.
	KELLY DOWN	[illegible]	FT.
	TOTAL	[illegible]	FT.
WT. OF STRING	[illegible]		LBS.

BIT RECORD			
BIT NO.	72		
SIZE	8 1/2		
MFG.	[illegible]		
TYPE	[illegible]		
JET 1/32"	[illegible]		
SER. NO.	[illegible]		
DEPTH OUT			
DEPTH IN	[illegible]		
TOTAL FTG.	265		
TOTAL HRS. RUN:	3 1/2		
COND. 1/8's T/B/ GAGE	RUNNING		
GPM/ PD-PSI	/	/	/

MUD RECORD			
TIME	0800	[illegible]	[illegible]
WEIGHT	9.3	9.3	[illegible]
PRESSURE GRADIENT			
VISC.-SEC.	47	[illegible]	[illegible]
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH	9.5+	[illegible]	[illegible]
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
X-FEL-G	4 SKS		

NO.	DRILLING ASSEMBLY (At end of tour)		
1	BIT [illegible]		FT.
1	[illegible]		
1	STB RMR [illegible] OD	[illegible]	FT.
1	D.C. ID [illegible] OD	[illegible]	FT.
1	STB RMR [illegible] OD	[illegible]	FT.
17	D.C. ID [illegible] OD	[illegible]	FT.
	STB RMR OD		FT.
1	[illegible]	1.50	
5	STANDS DP	[illegible]	FT.
3	SINGLES DP	[illegible]	FT.
	KELLY DOWN	32.00	FT.
	TOTAL	[illegible]	FT.
WT. OF STRING	[illegible]		LBS.

BIT RECORD			
BIT NO.	32		
SIZE	8 1/2		
MFG.	SEC		
TYPE	SSC		
JETS 1/32"	13 13 13		
SER. NO.	200341		
DEPTH OUT			
DEPTH IN	8001		
TOTAL FTG.	397		
TOTAL HRS. RUN:	3 1/2		
COND. 1/8's T/B/ GAGE	2		
GPM/ PD-PSI	/	/	/

MUD RECORD			
TIME	1630		
WEIGHT	9.3+		
PRESSURE GRADIENT			
VISC.-SEC.	43		
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH	9.5		
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 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHLUM PARFL-P COMP.D.C
7142	9210	D			55	30	1200	5 1/2	57			S

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
7167	3°	S E S E						

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0600	0645	3/4	2	Drilling 8 1/2 hole
0645	0745	1	10	Survey
0745	0800	1/4	2	Drilling 8 1/2 hole

DRILLER: [illegible]

FOOTAGE

FROM	TO	DR'D RM'R CORE'C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHLUM PARFL-P COMP.D.C
9210	9270	60'		DESANDER / CENTRIFUGE	55	30	1200	5 1/2	57	5 1/2		S
				DS - 1 1/2 GPM / UF - 11.0+ / OF - 9.2								
				UF - 10.0+ / OF - 9.2								
				OF - 9.2								

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
0900	1700	8	2	Drilling 8 1/2 hole

DRILLER: [illegible]

EVENING TOUR

FOOTAGE

FROM	TO	DR'D RM'R CORE'C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHLUM PARFL-P COMP.D.C
9274	9330	D			50	30	1200	5 1/2	57	5 1/2		S

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
9280	[illegible]		[illegible]	[illegible]	S 6 E			

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1600	1745	1 3/4	2	Drilling 8 1/2 hole
1745	1830	3/4	10	Eastman Survey - Miss Run
1830	2130	3	2	Drilling 8 1/2 hole
2130	2330	1	10	Survey
2330	0400	1 1/2	2	Drilling 8 1/2 hole

DRILLER: [illegible]

C 23613

DAILY DRILLING REPORT

REPORT NO. 111

LEASE	WELL NO.	API WELL NUMBER	DATE
Pinto Main	H-4	42-055-10 30 103-10145	11.30.74

OPERATOR	CONTRACTOR	RIG NO.
Apache Corporation	LOFFLAND BROTHERS COMPANY	12

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5"	19.5#	E	6 5/8	H 90 IF	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Ellis	D-1000	12"
2	Ellis	D-1000	12"

LEGAL LAND DESCRIPTION Pinto Unit Area B Sec

WIRE LINE RECORD REEL NO.

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13 3/8		48 H-40		2310		2310
			42 J-55				
			47 S-95				

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	14	8	7 1/4
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS	3 3/4		
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			3/4
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. OTHER	2		
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	6	8	6

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 121

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
1	BIT 12 1/4	.50	FT.
1	R.S.S.	2.50	
1	STB RMR	30.76	FT.
2	D.C. ID 2 1/2 OD	30.90	FT.
1	STB RMR OD	2.62	FT.
11	D.C. ID 6 1/2 OD	340.13	FT.
	STB RMR OD		FT.
1	C/O	2.50	
87	STANDS DP	8382.38	FT.
1	SINGLES DP	31.33	FT.
	KELLY DOWN	39.00	FT.
	TOTAL	8511.12	FT.
WT. OF STRING 240,000			LBS.

BIT RECORD		
BIT NO.	31	
SIZE	12 1/4	
MFG.	Sec	
TYPE	F3	
JETS 1 32"	13 13 13	
SER. NO.	204251	
DEPTH OUT		
DEPTH IN	7601	
TOTAL FTG.	4	
TOTAL HRS. RUN	1 1/4	
COND. 1/8's T/B/ GAGE	R	
GPM/ PD-PSI	/	/

MUD RECORD				
TIME	7			
WEIGHT	8			
PRESSURE GRADIENT				
VISC.-SEC.				
PV/YP	/		/	
GELS.	/		/	
WL -CC'S.				
pH			7	
SOLIDS %				

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

NO.	DRILLING ASSEMBLY (At end of tour)		
1	BIT 8 1/2	.60	FT.
1	B.S.R.	2.54	
1	STB RMR	30.76	FT.
1	D.C. ID 6 1/2 OD	30.97	FT.
1	STB RMR OD	2.62	FT.
14	D.C. ID 6 1/2 OD	421.13	FT.
	STB RMR OD		FT.
1	C/O	2.50	
90	STANDS DP	8371.18	FT.
	SINGLES DP		FT.
	KELLY DOWN	39.00	FT.
	TOTAL	9009.00	FT.
WT. OF STRING 220,000			LBS.

BIT RECORD		
BIT NO.	32	
SIZE	8 1/2	
MFG.	SEC.	
TYPE	S86	
JET 1/32"	13 13 13	
SER. NO.	204281	
DEPTH OUT		
DEPTH IN	9006	
TOTAL FTG.	78	
TOTAL HRS. RUN	9 1/4	
COND. 1/8's T/B/ GAGE	R	
GPM/ PD-PSI	/	/

MUD RECORD			
TIME	0800	1200	1430
WEIGHT	9.5	9.5	9.4+
PRESSURE GRADIENT			
VISC.-SEC.	42	38	42
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	9.0+	9.0	9.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	15-SKS		
GELEX	6-LBS		
X-TEL-64-SKS			
AUSTIC	3-SKS		

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
1	BIT 8 1/2	.60	FT.
1	R.S.S.	2.54	
1	STB RMR	30.76	FT.
1	D.C. ID 6 1/2 OD	30.97	FT.
1	STB RMR OD	2.62	FT.
14	D.C. ID 6 1/2 OD	421.13	FT.
	STB RMR OD		FT.
1	C/O	2.50	
87	STANDS DP	8382.38	FT.
2	SINGLES DP	63.96	FT.
	KELLY DOWN	39.00	FT.
	TOTAL	9112.35	FT.
WT. OF STRING 220,000			LBS.

BIT RECORD		
BIT NO.	32	
SIZE	8 1/2	
MFG.	SEC.	
TYPE	S86	
JETS 1/32"	13 13 13	
SER. NO.	204281	
DEPTH OUT		
DEPTH IN	9006	
TOTAL FTG.	137	
TOTAL HRS. RUN	16 1/2	
COND. 1/8's T/B/ GAGE	R	
GPM/ PD-PSI	/	/

MUD RECORD			
TIME	1600		
WEIGHT	9.2+		
PRESSURE GRADIENT			
VISC.-SEC.	40		
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	9.0		
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL.-S PAR.-P COM.-C
9011	9016	D			50	30	1200			5 1/2	41	S

DEVIATION RECORD

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	0345	3 3/4	2	Ran in Hole (Lay down 46 Joints Singles)
0345	0645	3	21	Pick up 46 Singles
0645	0800	1 1/4	2	Drlg F/ 9016 to 9034

DRILLER

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL.-S PAR.-P COM.-C
9034	9084			CENTREFUGE. WF - 18.3 OF - 9.1+ Pump Efficiency Coming.	50	35	1200	5 1/2	57	5 1/2		S

DEVIATION RECORD

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0800	1600	8	2	Drilling 9034 to 9084

DESANDER - WF - 10.0+ - OF - 9.2 - DISCH - 5 GPM

Check 9.6.0

DRILLER J. Hawkins

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL.-S PAR.-P COM.-C
9084	9142	D			50	35	1200	5 1/2	57	5 1/2		S

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
9085	5 1/2	S 86 E						

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1600	1745	1 3/4	2	Drilling 8 1/2 Hole
1745	1820	1/2	11	Eastman Survey
1830	2400	5 1/2	2	Drilling 8 1/2 Hole

DRILLER

C 23612

DAILY DRILLING REPORT

REPORT NO. 12

LEASE	WELL NO.	API WELL NUMBER	DATE
Peters Estate	A-4	[illegible]	[illegible]

OPERATOR	CONTRACTOR	RIG NO.
[illegible]	LOFFLAND BROTHERS COMPANY	22

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Al Lockhart

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

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	[illegible]	Duplex	12
2	[illegible]	Duplex	12

LEGAL LAND DESCRIPTION: Section 9, T-30-N, R-5-E

WIRE LINE RECORD — REEL NO.

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	7 5/8		26.4 K-55		2301		2310
			24.5 J-55				
			17 S-95				

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON M. 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	5 1/2	
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			7 1/2
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY		2 1/2	
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21	CTU			1/2
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		2	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	12
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT		15 FT.
1	[illegible]		[illegible]
1	STB RMR [illegible] OD		[illegible] FT.
1	D.C. ID [illegible] OD		[illegible] FT.
1	STB RMR [illegible] OD		[illegible] FT.
1	D.C. ID [illegible] OD		[illegible] FT.
	STB RMR OD		FT.
	[illegible]		
59	STANDS DP	[illegible]	FT.
	SINGLES DP		FT.
	KELLY DOWN	[illegible]	FT.
	TOTAL	[illegible]	FT.
WT. OF STRING	[illegible]		LBS.

BIT RECORD

BIT NO.	21
SIZE	[illegible]
MFG.	[illegible]
TYPE	[illegible]
JETS 1 32"	
SER. NO.	[illegible]
DEPTH OUT	
DEPTH IN	[illegible]
TOTAL FTG.	[illegible]
TOTAL HRS. RUN	12½
COND. 1/8's T/B. GAGE	2 [illegible]
GPM/ PD-PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]	[illegible]		
[illegible]	[illegible]		
[illegible]	[illegible]		
[illegible]	[illegible]		

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN PARTIAL P.P. COMPLETE
[illegible]	[illegible]				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			

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
[illegible]	[illegible]	[illegible]		[illegible]

DRILLER [illegible]

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT		.95 FT.
1	30T H-RR	5.12	
1	STB RMR [illegible] OD	[illegible]	FT.
1	D.C. ID [illegible] OD	[illegible]	FT.
1	STB RMR [illegible] OD	[illegible]	FT.
14	D.C. ID [illegible] OD	[illegible]	FT.
	STB RMR OD		FT.
1	K/O	2.00	
59	STANDS DP	2259.59	FT.
1	SINGLES DP	31.53	FT.
	KELLY DOWN	21.19	FT.
	TOTAL	[illegible]	FT.
WT. OF STRING	115000		LBS.

BIT RECORD

BIT NO.	31
SIZE	[illegible]
MFG.	[illegible]
TYPE	[illegible]
JET 1/32"	
SER. NO.	EC [illegible]
DEPTH OUT	[illegible]
DEPTH IN	[illegible]
TOTAL FTG.	[illegible] 721
TOTAL HRS. RUN	[illegible] 100½
COND. 1/8's T/B GAGE	[illegible]
GPM/ PD-PSI	/ /

MUD RECORD

TIME	0800	1200	1400
WEIGHT	9.4+	9.4+	9.4+
PRESSURE GRADIENT			
VISC.-SEC.	38	38	37
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.			
pH	9.5	9.5	9.0+
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	5-SKS		
GELEX	2-LBS		
X-Pel-Gi-SX			

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN PARTIAL P.P. COMPLETE
[illegible]	[illegible]			DUMP'S MEAN NO 1 & 2 SETTLING (CONT.)	80	30	1400	5½	54	5½		S

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
[illegible]	5½	S24E						

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0800	[illegible]	17½		[illegible]
[illegible]	[illegible]	1		[illegible]
[illegible]	[illegible]	¼		[illegible]
[illegible]	[illegible]	¾		[illegible]
[illegible]	[illegible]	2¾		[illegible]
[illegible]	[illegible]	¾		[illegible]
[illegible]	[illegible]	¾		[illegible]

DRILLER [illegible]

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT		.85 FT.
1	3PT RMR	5.12	
1	STB RMR [illegible] OD	[illegible]	FT.
1	D.C. ID [illegible] OD	[illegible]	FT.
1	STB RMR [illegible] OD	[illegible]	FT.
12	D.C. ID [illegible] OD	[illegible]	FT.
	STB RMR OD		FT.
1	K/O	2.50	
59	STANDS DP	[illegible]	FT.
1	SINGLES DP	31.53	FT.
	KELLY DOWN	21.19	FT.
	TOTAL	[illegible]	FT.
WT. OF STRING	[illegible]		LBS.

BIT RECORD

BIT NO.	31
SIZE	[illegible]
MFG.	CHRIS
TYPE	[illegible]
JETS 1/32"	
SER. NO.	EC [illegible]
DEPTH OUT	[illegible]
DEPTH IN	[illegible]
TOTAL FTG.	721
TOTAL HRS. RUN	[illegible]
COND. 1/8's T/B/ GAGE	[illegible]
GPM/ PD-PSI	/ /

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN PARTIAL P.P. COMPLETE
[illegible]					80	30	[illegible]	5½	54	5½		

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
1100	2346	11¾	F	WAIT FOR BIT
2345	0115	½	11	CHECK BLIND R. - TRIP IN HOLE W/ BIT
0115	0600	3 3/4	6	REAM IN FROM 43'

DRILLER [illegible]

FORM 3T6

APPROVED APPROVED

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

C - 23611

DAILY DRILLING REPORT

REPORT NO. 119

LEASE	WELL NO.	API WELL NUMBER	DATE
[illegible]	[illegible]	[illegible]	[illegible]

OPERATOR	CONTRACTOR	RIG NO.
[illegible]	LOFFLAND BROTHERS COMPANY	[illegible]

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5"	[illegible]	E	6 1/4	[illegible]	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	[illegible]	D-[illegible]	12"
2	[illegible]	D-[illegible]	14"

LEGAL LAND DESCRIPTION [illegible]

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

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	[illegible]	[illegible]	[illegible]
3.	REAMING			
4.	CORING			
5.	CONDITION MUD & CIRCULATE			
6.	TRIPS			3½
7.	LUBRICATE RIG			
8.	REPAIR RIG			
9.	CUT OFF DRILLING LINE			
10.	DEVIATION SURVEY			
11.	WIRE LINE LOGS			
12.	RUN CASING & CEMENT			
13.	WAIT ON CEMENT			
14.	NIPPLE UP B.O.P.			
15.	TEST B.O.P.			
16.	DRILL STEM TEST			
17.	PLUG BACK			
18.	SQUEEZE CEMENT			
19.	FISHING			
20.	DIR. WORK			
21.				
22.				
23.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS				

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	119
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)			BIT RECORD	
1	BIT	[illegible]	FT.	BIT NO.	3I
1	[illegible]	[illegible]		SIZE	5 7/8
1	STB RMR	OD	FT.	MFG.	[illegible]
1	D.C. ID	OD	FT.	TYPE	[illegible]
1	STB RMR	OD	FT.	JETS 1/32"	
[illegible]	D.C. ID	OD	FT.	SER. NO.	[illegible]
	STB RMR	OD	FT.	DEPTH OUT	
1	[illegible]			DEPTH IN	[illegible]
				TOTAL FTG.	137
				TOTAL HRS. RUN	[illegible]
[illegible]	STANDS DP	[illegible]	FT.	COND. 1/8's T/B GAGE	[illegible]
1	SINGLES UP	[illegible]	FT.	GPM/ PD-PSI	
	KELLY DOWN	[illegible]	FT.		
	TOTAL	[illegible]	FT.		
WT. OF STRING	[illegible]		LBS.		

MUD RECORD			
TIME	[illegible]	[illegible]	[illegible]
WEIGHT	[illegible]	[illegible]	[illegible]
PRESSURE GRADIENT			
VISC.-SEC.	[illegible]	[illegible]	[illegible]
PV/YP	/	/	/
GELS	/	/	/
WL.-CC'S.			
pH	[illegible]	[illegible]	[illegible]
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]	[illegible]		
[illegible]	[illegible]		
[illegible]	[illegible]	[illegible]	[illegible]

NO.	DRILLING ASSEMBLY (At end of tour)			BIT RECORD	
1	BIT	[illegible]	FT.	BIT NO.	3I
1	[illegible]	[illegible]		SIZE	5 7/8
1	STB RMR	OD	FT.	MFG.	[illegible]
1	D.C. ID	OD	FT.	TYPE	[illegible]
1	STB RMR	OD	FT.	JET 1/32"	
1	D.C. ID	OD	FT.	SER. NO.	[illegible]
	STB RMR	OD	FT.	DEPTH OUT	
				DEPTH IN	[illegible]
				TOTAL FTG.	[illegible]
				TOTAL HRS. RUN	[illegible]
84	STANDS DP	[illegible]	FT.	COND. 1/8's T/B GAGE	[illegible]
2	SINGLES DP	[illegible]	FT.	GPM/ PD-PSI	
	KELLY DOWN	[illegible]	FT.		
	TOTAL	[illegible]	FT.		
WT. OF STRING	[illegible]		LBS.		

MUD RECORD			
TIME	0800	1200	1400
WEIGHT	9.4	9.5	9.5
PRESSURE GRADIENT			
VISC.-SEC.	39	37	37
PV/YP	/	/	/
GELS	/	/	/
WL.-CC'S.			
pH	10.0	10.0	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)			BIT RECORD	
1	BIT	[illegible]	FT.	BIT NO.	3I
1	[illegible]	[illegible]		SIZE	5 7/8
1	STB RMR	OD	FT.	MFG.	[illegible]
1	D.C. ID	OD	FT.	TYPE	[illegible]
1	STB RMR	OD	FT.	JETS 1/32"	
1	D.C. ID	OD	FT.	SER. NO.	[illegible]
	STB RMR	OD	FT.	DEPTH OUT	
1	[illegible]			DEPTH IN	[illegible]
				TOTAL FTG.	[illegible]
				TOTAL HRS. RUN	[illegible]
52	STANDS DP	[illegible]	FT.	COND. 1 8's T/B GAGE	[illegible]
	SINGLES DP		FT.	GPM/ PD-PSI	
	KELLY DOWN	[illegible]	FT.		
	TOTAL	[illegible]	FT.		
WT. OF STRING	[illegible]		LBS.		

MUD RECORD			
TIME	1600		
WEIGHT	9.5		
PRESSURE GRADIENT			
VISC.-SEC.	35		
PV/YP	/	/	/
GELS	/	/	/
WL.-CC'S.			
pH	4.5		
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE FROM	FOOTAGE TO	DR'D RM'R CORE'C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
8665	8911	[illegible]		[illegible] A1	80	30	1900	5½	51			S
				Sandy Shale	80	30	1900	5½	52			S

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	0600	6	9	Drlg 7 7/8 hole

DRILLER [illegible]

FOOTAGE FROM	FOOTAGE TO	DR'D RM'R CORE'C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
8912	9041	27			80	30	1900	5½	51	5½		S

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0800	[illegible]	[illegible]	2	DRLG 7 7/8 HOLE

DRILLER [illegible]

FOOTAGE FROM	FOOTAGE TO	DR'D RM'R CORE'C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
9041	9141	71			80	30	1900	5½	51	5½		S
					75	30	1200	5½	51			S

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1800	1730	1½	9	DRLG 8½" hole
1730	1930	2	5	Hoist for wash out in kelly & pump out 2 stands wash out @ 19 stands off btm.
1930	2400	4½	6	Run tests
0000	0600	6	9	Drlg 8½" hole

DRILLER [illegible]

C 23610

DAILY DRILLING REPORT

REPORT NO. 6

LEASE	WELL NO.	API WELL NUMBER	DATE
Pecos Tract	14	[illegible]	6-15-64

OPERATOR	CONTRACTOR	RIG NO.
Atlantic Richfield Co.	LOFFLAND BROTHERS COMPANY	12

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [illegible]

LEGAL LAND DESCRIPTION: Pecos Flowing [illegible]

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:

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
7"		40 [illegible]		5211		5211
		[illegible]				
		[illegible]				

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

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-375	22
2	Emsco	D-375	22

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	3 1/2	4	11 1/2
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS	5	4	
7	LUBRICATE RIG			
8	REPAIR RIG			1/2
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.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21	[illegible]	1/2		
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8 1/2	8	7 1/2

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	118
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT	15" FT.	BIT NO.	31
1	3 PR [illegible]	510	SIZE	5 1/2
1	STB RMR [illegible] OD	[illegible] FT.	MFG.	[illegible]
	D.C. ID [illegible] OD	[illegible] FT.	TYPE	F-1032
1	STB RMR [illegible] OD	3 29 FT.	JETS 1 32"	
19	D.C. ID [illegible] OD	[illegible] FT.	SER. NO.	[illegible]
	STB RMR OD	FT.	DEPTH OUT	
1	[illegible]	[illegible]	DEPTH IN	5355
			TOTAL FTG.	585
			TOTAL HRS. RUN	9 1/2
87	STANDS DP	[illegible] FT.	COND. 1/8's T/B/ GAGE	5 [illegible]
2	SINGLES DP	[illegible] FT.	GPM/ PD-PSI	
	KELLY DOWN	[illegible] FT.		
	TOTAL	[illegible] FT.		
WT. OF STRING	[illegible]	LBS.		

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT	.95 FT.	BIT NO.	31
1	3 [illegible]	5.12	SIZE	5 1/2
1	STB RMR [illegible] OD	24.76 FT.	MFG.	CHRIS
1	D.C. ID [illegible] OD	30.5 FT.	TYPE	MF 731
1	STB RMR [illegible] OD	[illegible] FT.	JET 1/32"	
19	D.C. ID [illegible] OD	[illegible] FT.	SER. NO.	EC 5742
	STB RMR OD	FT.	DEPTH OUT	
1	[illegible]	2.50	DEPTH IN	5235
			TOTAL FTG.	172
			TOTAL HRS. RUN	4 1/2
87	STANDS DP	[illegible] FT.	COND. 1/8's T/B/ GAGE	[illegible]
2	SINGLES DP	12.94 FT.	GPM/ PD-PSI	
	KELLY DOWN	32.71 FT.		
	TOTAL	8457.00 FT.		
WT. OF STRING	211000	LBS.		

MUD RECORD			
TIME	0800	T	1500
WEIGHT	9.4	K	9.4+
PRESSURE GRADIENT			
VISC.-SEC.	38	D	46
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	4.5	G	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	[illegible] SKS		
GELEX	3 LBS		
X-FEL-G	[illegible] SKS		

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT	[illegible] FT.	BIT NO.	31
1	[illegible]	[illegible]	SIZE	5 1/2
1	STB RMR [illegible] OD	[illegible] FT.	MFG.	CHRIS
1	D.C. ID [illegible] OD	[illegible] FT.	TYPE	MF 731
1	STB RMR [illegible] OD	[illegible] FT.	JETS 1/32"	
19	D.C. ID [illegible] OD	[illegible] FT.	SER. NO.	EC 57420
	STB RMR OD	FT.	DEPTH OUT	
1	[illegible]	[illegible]	DEPTH IN	8235
			TOTAL FTG.	6[illegible]
			TOTAL HRS. RUN	1[illegible]
88	STANDS DP	[illegible] FT.	COND. 1/8's T/B/ GAGE	R
	SINGLES DP	FT.	GPM/ PD-PSI	
	KELLY DOWN	[illegible] FT.		
	TOTAL	[illegible] FT.		
WT. OF STRING	[illegible]	LBS.		

MUD RECORD			
TIME	1600		
WEIGHT	9.5		
PRESSURE GRADIENT			
VISC.-SEC.	39		
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	4.5		
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
5231	5246	D		Lm. D[illegible]								S
				Sl. to Sd [illegible]								
				Dk. Gy. Sltst								

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	5246	5°	N						

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	0230	2 1/2	1	Mkg. Inspect Strap for Next Cut
0230	0300	1/2	11	Retrieve Survey. Coord. Bit Clean Flow Rate
0300	0530	2 1/2	6	Rig [illegible] TOH
0530	0600	1/2	2	Drilling 5 1/2 Hole

DRILLER: [illegible]

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
8440	8457	17'		DESILTER - 1 CIRC	80	30	[illegible]	5 1/2	56	5 1/2		S
		1'		DIS - 6 GPM			1900					
				VF - 10.1								
				VF - 9.4								

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0900	1030	2 1/2		Drilling 8 1/2 Hole
1030	1130	1		Circ. Clean Hole & Mix [illegible] Wash Out
				Sand Washed out 30 Std. add Jts. (1275')
1130	1430	3		Trip In
1430	1600	1 1/2		Drilling 8 1/2 Hole

DRILLER: [illegible]

EVENING TOUR

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
8457	8685	D			70	30	[illegible]	5 1/2		5 1/2		S
							1900					

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	8650	5 1/2	N [illegible] E						

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1600	1730	1 1/2	2	Drilling 8 1/2 Hole
1730	1845	1 1/4	11	Eastman Survey - Miss Run
1845	1930	3/4	2	Drilling 8 1/2 Hole
1930	2400	4 1/2	11	Eastman Survey [illegible] Drill in 8 1/2 Hole
2400	0230	1 1/2	2	Drilling 8 1/2 Hole
0230	0300	1/2	5	Work on [illegible] Mud Pump
0300	0715	4 1/4	2	Drilling 8 1/2 Hole
0715	0800	3/4	5	Work on [illegible] Mud Pump

DRILLER: [illegible]

NO. OF DAYS FROM SPUD	118
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

FORM 3T6 — APPROVED — APPROVED

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

C 23609

DAILY DRILLING REPORT

REPORT NO. 117 / 1

LEASE	WELL NO.	API WELL NUMBER	DATE
P [illegible]	4	[illegible]	6-25-84

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	12

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
[illegible]	[illegible] Pusher

O.D. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
5	[illegible]	E	6 5/8	NC 50 IF	1	1	[illegible]	D-[illegible]	12
						2	[illegible]	D-[illegible]	12

LEGAL LAND DESCRIPTION [illegible]

WIRE LINE RECORD — REEL NO.

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	7 5/8		26 [illegible]		5[illegible]		5[illegible]
			[illegible]				
			[illegible]				

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	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	5	5 1/2	13 1/2
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			1/2
6	TRIPS			1 1/2
7	LUBRICATE RIG			
8	REPAIR RIG		1 1/2	
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY		1	1/2
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS			5 8	5

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	117
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT	0	[illegible] FT.
1	[illegible]	[illegible]	[illegible]
1	STB RMR [illegible] OD	[illegible]	FT.
1	D.C. ID [illegible] OD	[illegible]	FT.
1	STB RMR [illegible] OD	[illegible]	FT.
10	D.C. ID [illegible] OD	[illegible]	FT.
	STB RMR OD		FT.
1	[illegible]	[illegible]	
21	STANDS DP	[illegible]	FT.
1	SINGLES DP	[illegible]	FT.
	KELLY DOWN	[illegible]	FT.
	TOTAL	[illegible]	FT.
WT. OF STRING	[illegible]		LBS.

BIT RECORD

BIT NO.	3
SIZE	7 7/8
MFG.	[illegible]
TYPE	[illegible]
JETS 1/32"	
SER. NO.	[illegible]
DEPTH OUT	
DEPTH IN	[illegible]
TOTAL FTG.	[illegible]
TOTAL HRS. RUN	[illegible]
COND. 1/8's T/B/ GAGE	[illegible]
GPM/ PD–PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	

FOOTAGE

FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL–S PAR–P FLT–F COMB–C
8[illegible]	8[illegible]			DES - LOIRE								
				DIS - 5 1/2 GPM	8[illegible]	[illegible]	[illegible]	5 1/2				S
				OF - 9.2+								
				UF - 9.9+								

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[illegible]	[illegible]	[illegible]		DRILLING [illegible]

DRILLER [illegible]

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT ◇	[illegible]	FT.
1	[illegible]	[illegible]	
1	STB RMR [illegible] OD	[illegible]	FT.
1	D.C. ID [illegible] OD	[illegible]	FT.
1	STB RMR [illegible] OD	[illegible]	FT.
14	D.C. ID [illegible] OD	[illegible]	FT.
	STB RMR OD		FT.
1	[illegible]	[illegible]	
87	STANDS DP	[illegible]	FT.
	SINGLES DP		FT.
	KELLY DOWN	[illegible]	FT.
	TOTAL	[illegible]	FT.
WT. OF STRING	[illegible]		LBS.

BIT RECORD

BIT NO.	3
SIZE	7 7/8
MFG.	[illegible]
TYPE	M0331
JET 1/32"	
SER. NO.	EC5742[illegible]
DEPTH OUT	
DEPTH IN	[illegible]
TOTAL FTG.	[illegible]
TOTAL HRS. RUN	[illegible]
COND. 1/8's T/B/ GAGE	[illegible]
GPM/ PD–PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	[illegible]		
GELEX	[illegible]		
X-[illegible]	[illegible]		
CAUSTIC	[illegible]		

FOOTAGE

FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL–S PAR–P FLT–F COMB–C
8[illegible]	[illegible]	3'		DES - LOIRE								
				DIS - 5 1/2 GPM	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6 1/2		S
				OF - 9.3								
				UF - 10.0+								

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
[illegible]	[illegible]	[illegible]						

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
[illegible]	[illegible]	[illegible]		DRILLING [illegible]
[illegible]	[illegible]	[illegible]		WIRE LINE [illegible]
[illegible]	[illegible]	[illegible]		DRILLING [illegible]
[illegible]	[illegible]	[illegible]		WORK ON ROTARY CHAIN & SPROCKET REPLACE BOLTS
[illegible]	[illegible]	[illegible]		DRILLING TO [illegible]

DRILLER [illegible]

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT [illegible]	[illegible]	FT.
1	[illegible]	[illegible]	
1	STB RMR [illegible] OD	[illegible]	FT.
2	D.C. ID [illegible] OD	[illegible]	FT.
1	STB RMR [illegible] OD	[illegible]	FT.
14	D.C. ID [illegible] OD	[illegible]	FT.
	STB RMR OD		FT.
1	[illegible]	[illegible]	
87	STANDS DP	[illegible]	FT.
1	SINGLES DP	[illegible]	FT.
	KELLY DOWN	[illegible]	FT.
	TOTAL	[illegible]	FT.
WT. OF STRING	[illegible]		LBS.

BIT RECORD

BIT NO.	3
SIZE	7 7/8
MFG.	[illegible]
TYPE	M0331
JETS 1/32"	
SER. NO.	EC5742[illegible]
DEPTH OUT	
DEPTH IN	[illegible]
TOTAL FTG.	[illegible]
TOTAL HRS. RUN	[illegible]
COND. 1/8's T/B/ GAGE	[illegible]
GPM/ PD–PSI	

MUD RECORD

TIME	1630		
WEIGHT	9.4		
PRESSURE GRADIENT			
VISC.-SEC.	42		
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.			
pH	9.5		
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL–S PAR–P FLT–F COMB–C
8[illegible]	[illegible]				[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		S

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
16[illegible]	[illegible]	[illegible]		DRILLING [illegible]
[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]		[illegible]

DRILLER [illegible]

FORM 3T6 — APPROVED — APPROVED

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

C 23608

DAILY DRILLING REPORT

REPORT NO. 116

LEASE	WELL NO.	API WELL NUMBER	DATE
Federal Mountain	A-4	05-045-10-30-123-W-45	6/24/74

OPERATOR	CONTRACTOR	RIG NO.
Mesa Energy Co.	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO.

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5"	19.50	E	6.5	4 1/2 IF	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-1300	14
2	Emsco	D-700	14

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	9 5/8		40.50	240	8210		8210
			43.5				
			47				

WIRE LINE RECORD: SIZE 1/4 — NO. LINES 10 — 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	8	14	7
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			1
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			4
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
	TOTALS	9	15	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	116
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT	O	.95 FT.
1	3PT Reamer		5.62 FT.
1	STB RMR Monel	OD	2.76 FT.
1	D.C. ID 2 1/2	OD	30.17 FT.
1	STB RMR Carb.	OD	2.87 FT.
11	D.C. ID 2 1/2	OD	339.62 FT.
1	STB RMR 3 PT	OD	2.50 FT.
33	STANDS DP		7112.00 FT.
1	SINGLES DP		31.50 FT.
	KELLY DOWN		21.40 FT.
	TOTAL		8127.00 FT.

WT. OF STRING 210,000 LBS.

BIT RECORD

BIT NO.	31
SIZE	8 3/4
MFG.	Smith
TYPE	F3
JETS 1/32"	
SER. NO.	JC-57425
DEPTH OUT	
DEPTH IN	8285
TOTAL FTG.	342
TOTAL HRS. RUN	55 1/4
COND. 1/8's T.B./GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	0200	0330	
WEIGHT	9.4	9.3	
PRESSURE GRADIENT	.470		
VISC.-SEC.	42	41	
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	10.5		10
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	5 SKS		
GELEX	3 SKS		
X-FEL	4 SKS		

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCR-S PART-P COMB-C
8596	8627	D		31	80	30	2100	5 1/2	55	5 1/2	57	S

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
1001	2400	8		Drlg 8596-8627

DRILLER

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT	O	.95 FT.
1	3PT Reamer		5.62 FT.
1	STB RMR	OD	2.76 FT.
1	D.C. ID 2 1/2	OD	30.17 FT.
1	STB RMR	OD	2.87 FT.
11	D.C. ID 2 1/2	OD	339.62 FT.
	STB RMR	OD	FT.
1	C/O		2.50 FT.
33	STANDS DP		7112.00 FT.
1	SINGLES	DP	31.50 FT.
	KELLY DOWN		21.40 FT.
	TOTAL		8127.00 FT.

WT. OF STRING 210,000 LBS.

BIT RECORD

BIT NO.	31
SIZE	8 3/4
MFG.	Smith
TYPE	F3
JETS 1/32"	
SER. NO.	JC-57425
DEPTH OUT	
DEPTH IN	8285
TOTAL FTG.	342
TOTAL HRS. RUN	55 1/4
COND. 1/8's T.B./GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	0200	0330	
WEIGHT	9.4	9.3	
PRESSURE GRADIENT	.470		
VISC.-SEC.	42	41	
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	10.5		10
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	5 SKS		
GELEX	3 SKS		
X-FEL	4 SKS		

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCR-S PART-P COMB-C
8627	8707			Drlg Ex Hole	80	30	2100	5 1/2	55			S
8707	8715			Circ & R.P. for Logs								
8715	8800			Drlg on Hole								

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
0600	1230	6 1/2	2	Drlg Ex Hole
1230	1345	1/2	15	Check B.P. for Leaks
1345	1800	3 1/4	2	Drlg on Hole

DRILLER

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT	O	.95 FT.
1	3PT Reamer		5.62 FT.
1	STB RMR	OD	2.76 FT.
1	D.C. ID 2 1/2	OD	30.97 FT.
1	STB RMR	OD	2.87 FT.
19	D.C. ID 2 1/2	OD	580.63 FT.
	STB RMR	OD	FT.
1	C/O		2.50 FT.
56	STANDS DP		3065.68 FT.
1	SINGLES	DP	31.54 FT.
	KELLY DOWN		21.48 FT.
	TOTAL		3772.00 FT.

WT. OF STRING 210,000 LBS.

BIT RECORD

BIT NO.	31
SIZE	8 3/4
MFG.	Smith
TYPE	F3
JETS 1/32"	
SER. NO.	JC-57425
DEPTH OUT	
DEPTH IN	8285
TOTAL FTG.	427
TOTAL HRS. RUN	70
COND. 1/8's T.B./GAGE	Running
GPM/ PD-PSI	

MUD RECORD

TIME	1600	2000	2200
WEIGHT	9.3	9.2+	9.3
PRESSURE GRADIENT			
VISC.-SEC.	38	38	39
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	9.5	10.0	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	5 SKS	CAUSTIC	2 SK
GELEX	4 LBS		
WL-10A	1-SK		
X-FEL-G	4-SKS		

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCR-S PART-P COMB-C
8707	8712	45'		REC - 1 CIRC	80	30	2100	5 1/2	55	5 1/2		S
				DIS - 6 GPM								
				VE - 9.7+								
				VF - 9.2+								

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
8700								

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1600	2300	7		Drlg in Ex Hole
2300	2400	1		Fastening Sonde to

DRILLER J. Hauschild

C 23607

DAILY DRILLING REPORT

REPORT NO. 115

LEASE	WELL NO.	API WELL NUMBER	DATE
FONTAN No.	4-4	A-55-(11)-30-123-W4E	4/23/74

OPERATOR	CONTRACTOR	RIG NO.
FLINTCO CANADA LTD.	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4"	16.60	E	6 5/8	4 1/2 IF	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-1000	12
2	Emsco	D-700	15

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13 3/8		54.5 #80	26	526		526
			42.5 #80				
			47 #80				

WIRE LINE RECORD REEL NO.

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

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. W.O./D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	115
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT	12 1/4	FT.
1	JET NIPPLE	5.62	
1	STB RMR Pendulum OD	21.76	FT.
1	D.C. ID 6 1/2 OD	30.17	FT.
1	STB RMR OD	2.67	FT.
11	D.C. ID 6 1/2 OD	331.63	FT.
1	STB RMR 6 1/2 OD	2.70	FT.
33	STANDS DP	7723.77	FT.
2	SINGLES DP	62.52	FT.
	KELLY DOWN	37.01	FT.
	TOTAL	8496.00	FT.
WT. OF STRING	207000		LBS.

BIT RECORD

BIT NO.	31
SIZE	12 1/4
MFG.	Chr
TYPE	HP 33J
JETS 1 32"	
SER. NO.	600740
DEPTH OUT	
DEPTH IN	8295
TOTAL FTG.	201
TOTAL HRS. RUN	32 1/4
COND. 1/8's T/B GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME	0200	2300	0700
WEIGHT	1.5	1.4	1.5
PRESSURE GRADIENT			
VISC.-SEC.	40	42	41
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH	10	10.5	10.5
SOLIDS %	0	1.4	10.5

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
X-Flo-C	4 SAX		
Gel	30 SAX		
Caustic	7 SAX		
Caustic	2 SAX		

MORNING TOUR

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL-S PAR-FL-P COM-DC
8452	8470	D		34	80	30	2100	5 1/2	55			S
							2100			5 1/2	57	S

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
0001	0800	8		Drlg 8½ Hole

DRILLER

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT		FT.
1		5.62	
	STB RMR OD		FT.
1	D.C. ID OD	30	FT.
	STB RMR OD		FT.
1	D.C. ID OD		FT.
	STB RMR OD		FT.
1		5	
24	STANDS DP	7612.00	FT.
1	SINGLES DP	31.00	FT.
	KELLY DOWN	37.00	FT.
	TOTAL	7680.00	FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	31
SIZE	12 1/4
MFG.	Chr
TYPE	HP 33J
JETS 1/32"	
SER. NO.	600740
DEPTH OUT	
DEPTH IN	8295
TOTAL FTG.	26
TOTAL HRS. RUN	1 1/4
COND. 1/8's T/B GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME	0700		1100
WEIGHT	1.5		1.5
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH		10.5	
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. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PAR-FL-P COM-DC
8451	8545	D			60	30	2100			5½	57	S

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
0600	1100	5		Drlg 8½ Hole

DRILLER

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT		FT.
1		5.62	
1	STB RMR OD	21.76	FT.
1	D.C. ID 6 1/2 OD	30.17	FT.
1	STB RMR OD	2.67	FT.
11	D.C. ID 6 1/2 OD	331.63	FT.
1	STB RMR 6 1/2 OD	2.70	FT.
33	STANDS DP	7723.77	FT.
2	SINGLES DP	62.52	FT.
	KELLY DOWN	37.01	FT.
	TOTAL	8496.00	FT.
WT. OF STRING	210000		LBS.

BIT RECORD

BIT NO.	31
SIZE	12 1/4
MFG.	Chr
TYPE	HP 33J
JETS 1/32"	
SER. NO.	600740
DEPTH OUT	
DEPTH IN	8295
TOTAL FTG.	251
TOTAL HRS. RUN	32 1/4
COND. 1/8's T/B GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME	1100	2300	2400
WEIGHT	1.4	1.4	1.4
PRESSURE GRADIENT			
VISC.-SEC.	37	37	36
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH	10.5	10.5	10.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PAR-FL-P COM-DC
8545	8596	D	5A	Cut 51' Rec 51' Clyde Shale	60	30	3100	5½		5½	57	S

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
8545	3½	N 45E						

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1100	1715	6 1/4	2	Drlg 8½ Hole
1715	1815	1	5	Circ
1815	2400	5 3/4	3	Trip out for DST

DRILLER

C 23606 — DAILY DRILLING REPORT — REPORT NO. 114

LEASE	WELL NO.	API WELL NUMBER	DATE
Pointed Hill.	A-4	A-55-6030-123-W-45	6/22/74

OPERATOR	CONTRACTOR	RIG NO.
Amoco Canada Ltd.	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

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

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-1000	17
2	Emsco	D-700	16

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO.

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	7 5/8		29.7 N80	240	8210		8210
			33.7 N80				
			47.1 P110				

SIZE 15/16 — NO. LINES 10 — 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	8	5½	4½
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG		1½	3½
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY		1	
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'N/T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. STRAIGHT'N'L			
G.			
TOTALS	8	8	8

COMPLETION

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	114
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT [illegible]	.15 FT.	BIT NO.	31
1	S.A.V.B.	5.62	SIZE	8 11/16
1	SPB RMR [illegible] OD	21.76 FT.	MFG.	[illegible]
1	D.C. ID 2 1/2 OD	30.17 FT.	TYPE	HWJ 331
1	STB RMR [illegible] OD	21.7 FT.	JETS 1 32"	
11	D.C. ID [illegible] OD	340.13 FT.	SER. NO.	E-55420
1	STB RMR 7 5/8 OD	2.10 FT.	DEPTH OUT	
			DEPTH IN	8235
			TOTAL FTG.	116
			TOTAL HRS. RUN	14½
82	STANDS DP	7621.14 FT.	COND. 1/8's T/B. GAGE	1-1-1/16
2	SINGLES DP	63.04 FT.	GPM/ PD-PSI	/
	KELLY DOWN	40.00 FT.		
	TOTAL	8316.00 FT.		
WT. OF STRING	201,000 LBS.			

MUD RECORD			
TIME	0100	0630	0630
WEIGHT	9.5	9.5	1.4
PRESSURE GRADIENT	4.15	4.15	
VISC.-SEC.	37	37	45
PV/YP	17/3	/	/
GELS.	1/2	/	/
WL -CC'S.	10.0	10.	
pH	10.0	10.	10.5
SOLIDS %	9		
Sand,	.15		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
X-B2-G	30 sax		

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT ◇	.75 FT.	BIT NO.	31
1	3 Pt NMR	5.13	SIZE	8 11/16
1	STB RMR [illegible] OD	21.76 FT.	MFG.	SMITH
1	D.C. ID 2 1/2 OD	30.77 FT.	TYPE	HWJ331
1	STB RMR [illegible] OD	2.19 FT.	JET 1/32"	
19	D.C. ID 6 1/2 OD	570.13 FT.	SER. NO.	E-55421
	STB. RMR OD	FT.	DEPTH OUT	
1	C/L	2.50	DEPTH IN	8235
			TOTAL FTG.	146
			TOTAL HRS. RUN	16
83	STANDS DP	7733.77 FT.	COND. 1/8's T/B. GAGE	1-1-1/16
1	SINGLES DP	30.61 FT.	GPM/ PD-PSI	/
	KELLY DOWN	34.52 FT.		
	TOTAL	7965.00 FT.		
WT. OF STRING	205000 LBS.			

MUD RECORD			
TIME	0500	1000	1800
WEIGHT	9.5	9.4	1.4
PRESSURE GRADIENT			
VISC.-SEC.	40	41	46
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	9.5	9.5	10.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT ◇	.75 FT.	BIT NO.	31
1	3 Pt NMR	5.62	SIZE	8 11/16
1	SPB RMR [illegible] OD	21.76 FT.	MFG.	SMITH
1	D.C. ID 2 1/2 OD	30.77 FT.	TYPE	HWJ331
1	STB RMR [illegible] OD	2.19 FT.	JETS 1 32"	
11	D.C. ID 6 1/2 OD	340.13 FT.	SER. NO.	E-55420
1	STB RMR 7 5/8 OD	2.10 FT.	DEPTH OUT	
			DEPTH IN	8235
			TOTAL FTG.	116
			TOTAL HRS. RUN	14½
82	STANDS DP	7621.14 FT.	COND. 1/8's T/B. GAGE	1-1-1/16
2	SINGLES DP	63.04 FT.	GPM/ PD-PSI	/
	KELLY DOWN	40.00 FT.		
	TOTAL	8316.00 FT.		
WT. OF STRING	201,000 LBS.			

MUD RECORD			
TIME	0100	0630	0630
WEIGHT	9.5	9.5	1.4
PRESSURE GRADIENT	4.15	4.15	
VISC.-SEC.	37	37	45
PV/YP	17/3	/	/
GELS.	1/2	/	/
WL -CC'S.	10.0	10.	
pH	10.0	10.	10.5
SOLIDS %	9		
Sand,	.15		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
X-B2-G	30 sax		

FOOTAGE FROM	FOOTAGE TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHLUM. PARFL-P COMP.-C
8323	8396	D		73	80	30	1900	5½		5½	58	S
										5½		S

DEVIATION RECORD

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	0930	8		Drlg F/ 8396

DRILLER

DAY TOUR

FOOTAGE FROM	FOOTAGE 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 SCHLUM. PARFL-P COMP.-C
8375	8431	D			75	30	1500			5½	55	S
					80	30	1700					

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
8375	3¾	N82E						

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	0830	½	2	Drilling F/ 8396
0830	0930	1	10	Survey
0930	1000	½	8	Work on shale shaker
1000	1430	4½	2	Drilling F/ 8431
1430	1530	1	5	Work on D-700
1530	1700	1½	2	Drilling F/ 8500

DRILLER

EVENING TOUR

FOOTAGE FROM	FOOTAGE 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 SCHLUM. PARFL-P COMP.-C
8431	8492	D		21	80	30	1900	5½	55	5½	59	S
					80	30	1900	5½	55			S

DEVIATION RECORD

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1700	1745	2¾	2	Drilling F/ 8492
1745	1900	1¼	6	Hook 3 stds into Csg
1900	2230	3½		Change Wash Pipe
2230	2400	1½		Wash 85 to Btm

DRILLER

FORM 3T6 — APPROVED — APPROVED

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

C 23605

DAILY DRILLING REPORT — REPORT NO. 113

LEASE	WELL NO.	API WELL NUMBER	DATE
Pauley Houston	11-4	A-55-60-30-123-W-45	6/21/76

OPERATOR	CONTRACTOR	RIG NO.
Mitchell Energy Co.	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Al Lockhart

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO.

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
5"	19.50	E	6 5/8	H-90	1	1	Emsco	D-1000	16"
						2	Emsco	D-700	16"

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
13 3/8		61 K-55	240	9210		9220
		54.5 K-55				
		47 S-95				

WIRE LINE RECORD: SIZE 1 3/4 — NO. LINES 10 — FT. SLIPPED 88 — FT. CUT OFF 86 — 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		6 3/4
3. REAMING			1
4. CORING			
5. CONDITION MUD & CIRCULATE			4
6. TRIPS	2 1/4	1	
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE		1 1/2	
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.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21. Trips		1/2	
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	5	2	7

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	113
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT		.30 FT.
1			2.94
1	STB RMR	OD	2.76 FT.
1	D.C. ID	OD	30.17 FT.
1	STB RMR	OD	2.67 FT.
11	D.C. ID	OD	310.63 FT.
	STB RMR	OD	FT.
1			2.50
73	STANDS DP		7384.44 FT.
2	SINGLES DP		13.13 FT.
	KELLY DOWN		23.23 FT.
	TOTAL		7420.80 FT.

WT. OF STRING 220 000 LBS.

BIT RECORD

BIT NO.	31
SIZE	9 7/8
MFG.	HTC
TYPE	J-22
JETS 1/32"	3 3 3
SER. NO.	112 491
DEPTH OUT	9235'
DEPTH IN	9210'
TOTAL FTG.	75'
TOTAL HRS. RUN	15 1/4
COND. 1/8's T/B GAGE	3 1 1
GPM/ PD-PSI	

MUD RECORD

TIME	0230	0800	0700
WEIGHT	1.3	1.2	9.2
PRESSURE GRADIENT			
VISC.-SEC.	38	39	31
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	11.5	11.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	15		
XP-20	25		
	3		
	2		

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL.-S PAR.-P COM.-C
9260	9295'	D		35'	35	25	1500	6 3/4	36			S
										5 1/2		S

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
9280	9	N HTF						

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
2001	0715	7 1/4		Drlg [illegible]
0715	0745	1/2		Circ & Surv @ 9280' - 9° - S. 1° W.
0745	0800	1/4		Drlg [illegible]

DRILLER [illegible]

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT		75' FT.
1	3 Pt.		5.12
1	STB RMR	OD	2.76 FT.
1	D.C. ID	OD	30.17 FT.
1	STB RMR	OD	2.67 FT.
11	D.C. ID	OD	310.63 FT.
	STB RMR	OD	FT.
1			2.50
81	STANDS DP		1250.- FT.
3	SINGLES DP		13.- FT.
	KELLY DOWN		05.- FT.
	TOTAL		2168.76 FT.

WT. OF STRING 160 000 LBS.

BIT RECORD

BIT NO.	31
SIZE	9 7/8
MFG.	HTC
TYPE	J-22
JETS 1/32"	
SER. NO.	112 491
DEPTH OUT	
DEPTH IN	9235'
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B GAGE	
GPM/ PD-PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL.-S PAR.-P COM.-C
9295'												

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
0600	1100	3	2	Hole Fm 2
1100	1130	1/2	21	Circ & Surv. Pull 3 Pt Rr & Rotating Subs
1130	1230	1	1	R/U to Log - TD 9295'
1230	1400	1 1/2	7	Slm & Log. Dual Ind
1400	1600	2	1	R/U to Lay D.P.

DRILLER [illegible]

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT		.15 FT.
1	3 Pt.		5.12
1	STB RMR	OD	2.76 FT.
1	D.C. ID	OD	30.17 FT.
1	STB RMR	OD	2.67 FT.
11	D.C. ID	OD	310.63 FT.
1	STB RMR	OD	2.50 FT.
82	STANDS DP		7621.14 FT.
	SINGLES DP		FT.
	KELLY DOWN		30.76 FT.
	TOTAL		8323.00 FT.

WT. OF STRING 206 000 LBS.

BIT RECORD

BIT NO.	31
SIZE	9 7/8
MFG.	HTC
TYPE	J-22
JETS 1/32"	
SER. NO.	112 491
DEPTH OUT	
DEPTH IN	9235'
TOTAL FTG.	38
TOTAL HRS. RUN	1 1/2
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME		0100	2330
WEIGHT	9.2	9.4	9.4
PRESSURE GRADIENT			
VISC.-SEC.	37	37	38
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	11.5	11.5	11.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL.-S PAR.-P COM.-C
9295'	9323	D		38'	25	30	2000			5 1/2	52	S

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
1600	1900	1	3	Rm in Fillups To 9295'
1900	1930	1/2	5	Circ & Rig off BTM
1930	2400	4 1/2		Drilling 8 3/4" Hole

DRILLER [illegible]

C 23604

DAILY DRILLING REPORT — REPORT NO. 112

LEASE	WELL NO.	API WELL NUMBER	DATE
Federal [illegible]	1-4	N.M.-05-10-30-123-4-45	12/29/74

OPERATOR	CONTRACTOR	RIG NO.
Amoco Canada Pet. Co.	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [illegible]

LEGAL LAND DESCRIPTION

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

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-375	16"
2	Emsco	D-375	16"

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13 3/8		54.5 K-55	240	9210		9210
			47 N-80				

WIRE LINE RECORD — REEL NO.

SIZE 1 3/4 — NO. LINES 10 — 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	18
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS	14	2	
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.	24		
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21. OTHER		12	14
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

NO. OF DAYS FROM SPUD: 112

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT	.80 FT.	
1	Bit Sub	2.84	
1	STB RMR Monel OD	31.76 FT.	
1	D.C. ID 6 1/2 OD	30.17 FT.	
1	STB RMR OD	2.67 FT.	
17	D.C. ID 6 1/2 OD	539.13 FT.	
	STB RMR OD	FT.	
1	X/O Sub	2.10	
61	STANDS DP	FT.	
	SINGLES DP	FT.	
	KELLY DOWN	FT.	
	TOTAL	FT.	
WT. OF STRING		LBS.	

BIT RECORD

BIT NO.	31
SIZE	8 3/4
MFG.	Hughes
TYPE	XDV
JETS 1 32"	13 13 13
SER. NO.	111 172
DEPTH OUT	
DEPTH IN	9210
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8"s T/B GAGE	
GPM/ PD-PSI	/ /

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR..D RM–R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL–S PAR'L–P COMP'D–C
9210								6 1/2				
										6 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
0001				Pressure Test Manifold, Kelly, Kelly Cocks, Pipe Rams To 5,000 Hold
	0600			5 Min Each, Pressure Test Casing &
	0615	1/4		Blind Rams To 4600 P.S.I. Held 1/2 Hr
0615				Ran Up Pressured Sub Stabilizer Trouble-Shot Micro D.T. Motor Sub
	0700	1/4		& Rotating Jt.

DRILLER: [illegible]

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT F11	.80 FT.	
1	Bit Sub	2.84	
1	STB RMR Monel OD	31.76 FT.	
1	D.C. ID 6 1/2 OD	30.17 FT.	
1	STB RMR Monel OD	2.67 FT.	
17	D.C. ID 6 1/2 OD	539.13 FT.	
	STB RMR OD	FT.	
1	X/O Sub	2.10	
61	STANDS DP	7534.42 FT.	
	SINGLES DP	FT.	
	KELLY DOWN	1800 FT.	
	TOTAL	9212.89 FT.	
WT. OF STRING		205000 LBS.	

BIT RECORD

BIT NO.	31
SIZE	8 3/4
MFG.	Hughes
TYPE	XDV
JET 1/32"	13 13 13
SER. NO.	111 172
DEPTH OUT	
DEPTH IN	9210
TOTAL FTG.	2
TOTAL HRS. RUN	1 1/4
COND. 1/8"s T/B GAGE	2 1
GPM/ PD-PSI	/ /

MUD RECORD

TIME		2pm	10P
WEIGHT	9.1	9.1	9.1
PRESSURE GRADIENT		1170	
VISC.-SEC.		30	30
PV/YP	/	/	/
GELS	/	/	F
WL -CC'S			
pH		10.5	10.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	175	Soda	
Fil-x	35	Soda	
Lignox	1	Caus.	
Soda	10	Soda	

DISCARD

FOOTAGE

FROM	TO	DR..D RM–R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL–S PAR'L–P COMP'D–C
9210	9212	D		Chert Dk Gray Cock &	30	12/20	1100	6 1/2	48			5
				Pyr Rocks								

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
0001	0600	6	6	Rig Up Tear Out
0600	0630	1/2		Rig Up
0630	1430	8		Drill F/ 9210 T/ 9212 Bit Stalling (Top Hung 8135)
1430	1500	1/2		Drill F/ 9212 T/ 9212 Bit Stalling (Top Shoe @ 9210)

DRILLER: [illegible]

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT F11	.80 FT.	
1	Bit Sub	2.84	
1	STB RMR Monel OD	31.76 FT.	
1	D.C. ID 6 1/2 OD	30.17 FT.	
1	STB RMR OD	2.67 FT.	
17	D.C. ID 6 1/2 OD	539.13 FT.	
	STB RMR OD	FT.	
1	X/O Sub	2.10	
61	STANDS DP	7534.42 FT.	
1	SINGLES DP	31.51 FT.	
	KELLY DOWN	23.97 FT.	
	TOTAL	9250.00 FT.	
WT. OF STRING		205000 LBS.	

BIT RECORD

BIT NO.	31
SIZE	8 3/4
MFG.	Hughes
TYPE	XDV
JETS	13 13 13
SER. NO.	111 172
DEPTH OUT	
DEPTH IN	9210
TOTAL FTG.	40
TOTAL HRS. RUN	11
COND. 1/8"s T/B GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	11pm	2000	2130
WEIGHT	9.1	9.1	9.1
PRESSURE GRADIENT			
VISC.-SEC.	34	34	40
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH	9.5	10.5	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR..D RM–R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL–S PAR'L–P COMP'D–C
9212	9250	D		38	35	25	1350	6 1/4	56			5
										5 1/2		5

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
1100	1645	5 1/4	2	Drilling 8 3/4 Hole
1645	1715	1/2	5	Circ 1 Hole
1715	1800	3/4	21	Take Feed Rate on Formation
1800	2400	6		Drilling 8 3/4 Hole

DRILLER: [illegible]

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

FORM 3T6 — APPROVED — APPROVED

C 23603

DAILY DRILLING REPORT

REPORT NO. 111

LEASE	WELL NO.	API WELL NUMBER	DATE
Point 3 Gas Station	A-4	A-55-(2-30-123 W1-45	6/11/74

OPERATOR	CONTRACTOR	RIG NO.
Amoco Canada Ltd.	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

Al Lunsbolt

LEGAL LAND DESCRIPTION

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

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-1000	18
2	Emsco	D-700	16

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	7 5/8		K-55 NEW	2-0	7210	0	7210
			K-55 NEW	30			
			K-55 USED	15			

WIRE LINE RECORD REEL NO.

SIZE 1 3/4 NO. LINES 10 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 U B.O.P.	4	7	
15.	TEST B.O.P.		5	
16.	DRILL STEM TEST			
17.	PLUG BACK			
18.	SQUEEZE CEMENT			
19.	FISHING			
20.	DIR. WORK			
21.		3	3	
22.				
23.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		3	17	4

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	111
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

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

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL–S PAR–P COM–C
5210								6 1/2		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
0001	0500	5		Moving Rig
				Laying in Hydril Line
				Build New K.L. Line
				Rig Down

DRILLER

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	
JET 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B GAGE	/ /
GPM/ PD–PSI	/ /

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL–S PAR–P COM–C
5210												

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
0500	1100	6	14	Nipple up

DRILLER

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 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	/ /
GPM/ PD–PSI	/ /

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

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

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1100	1900	8		Pick up Diamond's cont. 12-1/4 DCs
1900				Rig to Pressure up 3/8 – Pressure Test
				BOP, KF To Stump – Not Holding
	2400	5		Trouble Shoot Leaks

DRILLER

C 23602

DAILY DRILLING REPORT

REPORT NO. 110

LEASE	WELL NO.	API WELL NUMBER	DATE
POINTED MOUNTAIN	A-4	A-55-(C-30-12?-W-W5	6-18/74

OPERATOR	CONTRACTOR	RIG NO.
AMOCO CANADA LTD.	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

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

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	D-1000	18
2	EMSCO	D-700	16

LEGAL LAND DESCRIPTION

WIRE LINE RECORD REEL NO.

SIZE 1 3/4 NO. LINES 10 FT. SLIPPED

FT. CUT OFF PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	7 5/8		29.7 N80	24	9210	8	9210
			33.7 N80				
			47 S00-95				

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			
WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.	8	8	8
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	110
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1 32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 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.

FOOTAGE

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 SCHLS PAPER-P CORE-C
9210								6 1/2		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
0001	0800	8		[illegible]

DRILLER [illegible]

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	
JET 1/32"	
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.

FOOTAGE

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 SCHLS PAPER-P CORE-C
9210												

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
						5		

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0800	1300	5		[illegible]

DRILLER [illegible]

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 1/32"	
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.

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHLS PAPER-P CORE-C
9210								6 1/2		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
1300	2400	11		Tripping Out

DRILLER [illegible]

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

FORM 3T6 APPROVED APPROVED

C 23601

DAILY DRILLING REPORT

REPORT NO. 109

LEASE	WELL NO.	API WELL NUMBER	DATE
[illegible]	D-1	42-10-30-122-[illegible]	1-17-[illegible]

OPERATOR	CONTRACTOR	RIG NO.
[illegible]	LOFFLAND BROTHERS COMPANY	#2

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
	R. L. Loffland

LEGAL LAND DESCRIPTION [illegible] D-1

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	9⅝		40 N80	240	8210		8210
			43.5 N80				
			47 S-95				

WIRE LINE RECORD — REEL NO.
SIZE 7/8 — NO. LINES 10 — FT. SLIPPED
FT. CUT OFF — PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5"	16.60	E	6 5/8	H-90	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	[illegible]	[illegible]	10
2	[illegible]	[illegible]	10

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	8	8	
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
	TOTALS	8	8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	109
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

DRILLING ASSEMBLY (At end of tour) / BIT RECORD / MUD RECORD

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

MORNING TOUR

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

DAY TOUR

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

EVENING TOUR

MORNING TOUR

FOOTAGE FROM	FOOTAGE 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
8210										5½		

DEVIATION RECORD

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001				[illegible] F Clean Clean [illegible] C.C.
				W.O.C

DRILLER J. Loffland

DAY TOUR

FOOTAGE FROM	FOOTAGE 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
210								6½		5½		

DEVIATION RECORD

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0900	1400	6		W.O.C.
1400	1600	2		Set Slips for Casing Rig Released

DRILLER [illegible]

EVENING TOUR

FOOTAGE FROM	FOOTAGE 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
8210												

DEVIATION RECORD

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1600	2400	8	14	[illegible] C. [illegible]

DRILLER [illegible]

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

C - 23600

DAILY DRILLING REPORT

REPORT NO. 105

LEASE	WELL NO.	API WELL NUMBER	DATE
[illegible]	2-4	05-10-30-123-4045	6-11-74

OPERATOR	CONTRACTOR	RIG NO.
[illegible]	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [illegible]

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
E	16.60	E	6 5/8	4 IF	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	D-375	16
2	EMSCO	D-375	16

LEGAL LAND DESCRIPTION: [illegible]

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB TO CSG. FLG.	SET AT
LAST CASING TUBING OR LINER	13 3/8						2503
	5 1/2						8210

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED
7/8	12	

PT. 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	TRIPS			
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT	8	5	
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8	8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	108
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

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

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]	[illegible]	[illegible]	[illegible]

MORNING TOUR

FOOTAGE

FROM	TO	DR.D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL-S PARTEE-P COMPLEC
8210								6 3/4		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
0000	0800	8		RUNNING 5½ CSG. [illegible]

DRILLER: [illegible]

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

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

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

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 SCHL-S PARTEE-P COMPLEC
8210												

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
0400	1200	4		Finish Running Casing
1200	1500	3		Circ Bottoms Up Test Lines to 1500 PSI. Cmt Csg
1500	1600	1		Displacing Cmt Casing

DRILLER: [illegible]

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

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

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL-S PARTEE-P COMPLEC
8210								6 3/4		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
1600	2000	4		Circulating Cmt Casing
2000	2400	4		[illegible]
				W.O.C

DRILLER: [illegible]

EVENING TOUR

FORM 376 APPROVED APPROVED

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

99

DAILY DRILLING REPORT — REPORT NO. 16

WELL NO.	API WELL NUMBER	DATE
2-4	30-015-[illegible]	1-15-74

CONTRACTOR: LOFFLAND BROTHERS COMPANY — RIG NO.

RATOR'S REPRESENTATIVE — SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [illegible]

LEGAL LAND DESCRIPTION: [illegible]

	GRADE	TOOL J O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
	[illegible]							

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13 3/8						9503

WIRE LINE RECORD — REEL NO.
SIZE 1/8 — NO. LINES 10 — FT. SLIPPED
FT. CUT OFF — PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS

TION - HOURS

MORN.	DAY	EVE.
	7	
	22	
	4	8
	4	

C 23598

DAILY DRILLING REPORT

REPORT NO. 1-6

LEASE	WELL NO.	API WELL NUMBER	DATE
PINTO MOUNTAIN	2-4	05-045-[illegible]	1-14-74

OPERATOR	CONTRACTOR	RIG NO.
—	LOFFLAND BROTHERS COMPANY	7

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

LEGAL LAND DESCRIPTION

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
5						1		D-[illegible]	
						2		D-[illegible]	

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
13⅜						253

WIRE LINE RECORD — REEL NO.

SIZE 7/8 — NO. LINES 10 — 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		4	
5.	CONDITION MUD & CIRCULATE		[illegible]	[illegible]
6.	TRIPS	13	14	1
7.	LUBRICATE RIG			
8.	REPAIR RIG			
9.	CUT OFF DRILLING LINE			
10.	DEVIATION SURVEY			
11.	WIRE LINE LOGS	6		
12.	RUN CASING & CEMENT			
13.	WAIT ON CEMENT			
14.	NIPPLE UP B.O.P.			
15.	TEST B.O.P.			
16.	DRILL STEM TEST			
17.	PLUG BACK			
18.	SQUEEZE CEMENT			
19.	FISHING			
20.	DIR. WORK			
21.	[illegible]			
22.				
23.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		6	4	5

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 1-6

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)			BIT RECORD		MUD RECORD		
1	BIT [illegible]		[illegible] FT.	BIT NO. [illegible]	30	TIME		
1	[illegible]		[illegible]	SIZE	12¼	WEIGHT		
6	STB RMR [illegible]	OD	1767 FT.	MFG.	[illegible]	PRESSURE GRADIENT		
1	D.C. ID [illegible]	OD	145 FT.	TYPE	[illegible]	VISC.-SEC.		
4	STB RMR [illegible]	OD	[illegible] FT.	JETS 1 32"	[illegible]	PV/YP	/	/
1	D.C. ID [illegible]	OD	[illegible] FT.	SER. NO.	[illegible]	GELS	/	/
	STB RMR	OD	FT.	DEPTH OUT	[illegible]	WL-CC'S		
9	[illegible]		283.52	DEPTH IN	[illegible]	pH		
[illegible]	[illegible]		2.80	TOTAL FTG.	49	SOLIDS %		
				TOTAL HRS. RUN	[illegible]			
81	STANDS DP		[illegible] FT.	COND. 1/8" T/B GAGE	1 / 1	MUD & CHEMICALS ADDED		
1	SINGLES DP		31.54 FT.	GPM/ PD-PSI	/	TYPE	AMT.	TYPE AMT.
	KELLY DOWN		[illegible] FT.					
	TOTAL		[illegible] FT.					
WT. OF STRING [illegible]			LBS.					

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)			BIT RECORD		MUD RECORD		
1	BIT [illegible]		[illegible] FT.	BIT NO.	2 [illegible]	TIME	1100	1400
1	[illegible]		[illegible]	SIZE	[illegible]	WEIGHT	11.5	11.5
6	STB RMR [illegible]	OD	[illegible] FT.	MFG.	[illegible]	PRESSURE GRADIENT		
1	D.C. ID [illegible]	OD	145 FT.	TYPE	[illegible]	VISC.-SEC.	43	43
4	STB RMR [illegible]	OD	[illegible] FT.	JET 1/32"	[illegible]	PV/YP	/	/
1	D.C. ID [illegible]	OD	[illegible] FT.	SER. NO.	[illegible]	GELS.	/	/
	STB RMR	OD	FT.	DEPTH OUT	[illegible]	WL-CC'S.	[illegible]	[illegible]
1	[illegible]		[illegible]	DEPT-H IN	[illegible]	pH	7.0	[illegible]
1	[illegible]		25	TOTAL FTG.	47	SOLIDS %		
				TOTAL HRS. RUN	[illegible]			
1	STANDS DP		75-42 FT.	COND. 1/8" T/B GAGE	[illegible]	MUD & CHEMICALS ADDED		
1	SINGLES DP		[illegible] FT.	GPM/ PD-PSI	/	TYPE	AMT.	TYPE AMT.
	KELLY DOWN		[illegible] FT.					
	TOTAL		[illegible] FT.					
WT. OF STRING			LBS.					

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)			BIT RECORD		MUD RECORD		
1	BIT [illegible]		[illegible] FT.	BIT NO. [illegible]	[illegible]	TIME	2030	2200
1	[illegible]		[illegible]	SIZE	[illegible]	WEIGHT	11.2+	11.2+
6	STB RMR [illegible]	OD	[illegible] FT.	MFG.	[illegible]	PRESSURE GRADIENT		
1	D.C. ID [illegible]	OD	[illegible] FT.	TYPE	[illegible]	VISC.-SEC.	105	93
4	STB RMR [illegible]	OD	[illegible] FT.	JETS 1/32"	[illegible]	PV/YP	/	/
1	D.C. ID [illegible]	OD	[illegible] FT.	SER. NO.	[illegible]	GELS.	/	/
	STB RMR	OD	FT.	DEPTH OUT	9210	WL-CC'S.		
9	[illegible]		[illegible]	DEPTH IN	[illegible]	pH		
1	[illegible]		[illegible]	TOTAL FTG.	[illegible]	SOLIDS %		
				TOTAL HRS. RUN	14			
81	STANDS DP		[illegible] FT.	COND. 1/8" T/B/ GAGE	1 / 1	MUD & CHEMICALS ADDED		
1	SINGLES DP		31.54 FT.	GPM/ PD-PSI	/	TYPE	AMT.	TYPE AMT.
	KELLY DOWN		[illegible] FT.			WATER GELEX		
	TOTAL		[illegible] FT.					
WT. OF STRING			LBS.					

MORNING TOUR

FOOTAGE FROM	FOOTAGE TO	DR..D RM-R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL-S PARFL-P COMPL-C
9210								1¾		5½		

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
						5		

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
[illegible]	[illegible]	5¾		[illegible]
[illegible]	[illegible]	¼		[illegible]
[illegible]	[illegible]	5¾		[illegible]

DRILLER [illegible]

DAY TOUR

FOOTAGE FROM	FOOTAGE TO	DR..D RM-R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL-S PARFL-P COMPL-C
9210							1900	1¾	50	5½		S

DEVIATION RECORD

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0600	1100	5		[illegible]
1100	1400	3		[illegible]

DRILLER [illegible]

EVENING TOUR

FOOTAGE FROM	FOOTAGE TO	DR..D RM-R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL-S PARFL-P COMPL-C
9210							1900	1¾	50	5½		S

DEVIATION RECORD

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1100	1200	1		[illegible]
1200	1400	2		[illegible]

DRILLER [illegible]

FORM 3T6

APPROVED

APPROVED

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

C 23597

DAILY DRILLING REPORT

REPORT NO. 15

LEASE	WELL NO.	API WELL NUMBER	DATE
[illegible]	2-4	[illegible]	6-13-[illegible]

OPERATOR	CONTRACTOR	RIG NO.
[illegible]	LOFFLAND BROTHERS COMPANY	12

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER [illegible]

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

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]

LEGAL LAND DESCRIPTION [illegible]

WIRE LINE RECORD REEL NO.

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13⅜						253

SIZE [illegible] NO. LINES 10 FT. SLIPPED

FT. CUT OFF PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION - HOURS

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

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO. D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	185
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)			BIT RECORD	
1	BIT [illegible]	[illegible]	FT.	BIT NO.	30
	[illegible]	[illegible]		SIZE	12"
2	STB RMR OD	[illegible]	FT.	MFG.	H-W
1	D.C. ID OD	256	FT.	TYPE	X-44
1	STB RMR OD	[illegible]	FT.	JETS 1 32"	16 16 14
1	D.C. ID OD	[illegible]	FT.	SER. NO.	KM 225
1	STB RMR OD	[illegible]	FT.	DEPTH OUT	
1	CR	1.71		DEPTH IN	[illegible]
9	[illegible]	250.52		TOTAL FTG.	19
1	[illegible]	2.50		TOTAL HRS. RUN	14
81	STANDS DP	7234.46	FT.	COND. 1 8's T 8 GAGE	1 1 1
1	SINGLES DP	31.54	FT.	GPM PD-PSI	
	KELLY DOWN		FT.		
	TOTAL	[illegible]	FT.		
WT. OF STRING	[illegible]		LBS.		

MUD RECORD				
TIME				
WEIGHT	LOGGING			
PRESSURE GRADIENT				
VISC.-SEC.				
PV YP	/	/	/	
GELS	/	/	/	
WL-CC'S	PIT TANK			
pH	VIS-[illegible]			
SOLIDS %	WT-13.3			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible] MAT	144 SKS		
SALEX	10-185		
GEL	5-SKS		

NO.	DRILLING ASSEMBLY (At end of tour)			BIT RECORD	
1	BIT		FT.	BIT NO.	
				SIZE	
2	STB RMR OD		FT.	MFG.	
1	D.C. ID OD		FT.	TYPE	
1	STB RMR OD		FT.	JETS 1 32"	
1	D.C. ID OD		FT.	SER. NO.	
1	STB RMR OD		FT.	DEPTH OUT	
1				DEPTH IN	
1				TOTAL FTG.	
1				TOTAL HRS. RUN	
81	STANDS DP		FT.	COND. 1 8's T 8 GAGE	
1	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..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCR. PAR. FL-P COM. REC
9210				SERVICE & CHECK ALL FIRE EXT. & GUISHERS JUNE 13-1174				6¾		6¼		

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
0001	0600	6		[illegible] SECURE RIG [illegible]
[illegible]	[illegible]	[illegible]		[illegible] CREW [illegible]

DUMP & CLEAN #1 SETTLING COMP

DRILLER [illegible]

DAY TOUR

FOOTAGE FROM	TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCR. PAR. FL-P COM. REC
9210								6¾		6¼		
										[illegible]		5
										[illegible]		5

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
[illegible]	[illegible]	[illegible]		[illegible]

DRILLER [illegible]

EVENING TOUR

FOOTAGE FROM	TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCR. PAR. FL-P COM. REC
9210								6¾		[illegible]		
										5½		

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
1600	2245	6¾		[illegible]
2245	2400	1¼		[illegible]

DRILLER [illegible]

FORM 3T6 APPROVED APPROVED

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

C - 23596

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	

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

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

LEGAL LAND DESCRIPTION

WIRE LINE RECORD REEL NO.

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

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.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS				

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

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

MUD RECORD

TIME	0001	0300	0500
WEIGHT	11.3	11.3	11.3+
PRESSURE GRADIENT	.585	.585	.588
VISC.-SEC.	85	73	67
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S	9.1		
pH	9.0	11.0	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
CAUSTIC	2 SKS	H2O	4 GPM
X-PEL-GEL	4 SKS		
LIGNITE	60 SKS		
CELLEX	4 LBS		

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL.-S PART.-P COMP.-C
9433	9504	71		DESANDER - 10 HP								S
				DESILTER - 5½ GPM								
				MF - 14.9								
				VF - 11.2+								

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
0500	0700	2		

DRILLER

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 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T B GAGE	
GPM/ PD-PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
CAUSTIC			

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
9210	9433	D										S
												S

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
0700	1130	4½		
1130	1300	1½		

DRILLER

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 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
9433		D										

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1600	1915	2¾		
1915				

DRILLER

C 23595

DAILY DRILLING REPORT REPORT NO. 103

LEASE	WELL NO.	API WELL NUMBER	DATE
[illegible]	2-4	42-1-30 23-WILE	01-11-74

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	52

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER [illegible]

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
5"	19.5								

LEGAL LAND DESCRIPTION [illegible]

WIRE LINE RECORD REEL NO.

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13 3/8"						2503

SIZE 13/8 NO. LINES 16 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. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE	1/4		
6. TRIPS	1/2	7 3/4	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. DIR. WORK			
21. C[illegible]		4	
22.			
23.			

COMPLETION

A. PERF'R'T'N	
B. TBG TRIPS	
C. TREATING	
D. SWABBING	
E. TESTING	
F. ADDIT'N'L	
G.	

TOTALS	8	7	3/4

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	103
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)			BIT RECORD	
1	BIT [illegible]		FT.	BIT NO.	[illegible]
	[illegible]			SIZE	
9	STB RMR OD		FT.	MFG.	
1	D.C. ID OD		FT.	TYPE	
1	STB RMR OD		FT.	JETS 1 32"	
1	D.C. ID OD		FT.	SER. NO.	
1	STB RMR OD		FT.	DEPTH OUT	
	[illegible]			DEPTH IN	
9	[illegible]			TOTAL FTG.	173
				TOTAL HRS. RUN	2 1/2
9	STANDS DP		FT.	COND. 1/8" T/B GAGE	7 - 7
2	SINGLES DP		FT.	CPM PD–PSI	/ /
	KELLY DOWN		FT.		
	TOTAL		FT.		
WT. OF STRING			LBS.		

MUD RECORD			
TIME	0001	0400	0600
WEIGHT	11.3	11.2+	11.2+
PRESSURE GRADIENT	.585		
VISC.–SEC.	47	68	64
PV/YP	/	/	/
GELS	/	/	/
WL –CC'S	9.6		
pH	7.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]	74 SKS		
[illegible]	4 LBS		
[illegible]	4 SKS		
H_2O	40 BBL		

NO.	DRILLING ASSEMBLY (At end of tour)			BIT RECORD	
1	BIT		FT.	BIT NO.	
				SIZE	
	STB RMR OD		FT.	MFG.	
	D.C. ID OD		FT.	TYPE	
	STB RMR OD		FT.	JET 1 32"	
	D.C. ID OD		FT.	SER. NO.	
	STB RMR OD		FT.	DEPTH OUT	
				DEPTH IN	
				TOTAL FTG.	
				TOTAL HRS. RUN	
	STANDS DP		FT.	COND. 1/8" T/B 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	FOOTAGE TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL.–S PAR.–P COMP.–C
0	816			DESANDER – TOP								
				DIS – 6 PITS	50	45	700	5 1/2	50	6 1/2		S
				MUD – 15.2								
				MUD – 11.2								

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	910	1/2	S 58 E						

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0600	0700	1		[illegible]
0700	0900	2		[illegible]
0900	1000	1		[illegible]
1000	1200	2		[illegible]

DRILLER [illegible]

DAY TOUR

FOOTAGE FROM	FOOTAGE TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S. P. M.	METHOD RUN SCL.–S PAR.–P COMP.–C
816								5 1/2				5
									42			

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1200	1330	1 1/2		STRAP OUT
1330	1415	3/4		[illegible]
1415	1800	3 3/4		[illegible]
				Mud – 11.2
				S.L.M. 2166.6
				4 1/4 DP no Cleaner

DRILLER [illegible]

EVENING TOUR

FOOTAGE FROM	FOOTAGE TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL.–S PAR.–P COMP.–C
816	5193	D			50	45	700	5 1/2	50			S
										6 1/2		

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1800	1715	1 1/4		Finish Running 4 1/2 Csg. Cmt. w/ 400 sks and W.T.O.
1715				Clean Out to 4041 and W.T.O.
	1945	1 2		From 4041 to 5161 push Basket (No Fill)
1945	2120	1 2		Circ. 125 Bbls. On Btm.
2120	2400	2 1/2		Work on Slips
2400	2441	3		Trying to Work

DRILLER [illegible]

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

C 23594

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
			10

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

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

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13⅜						252

WIRE LINE RECORD REEL NO.

SIZE	NO. LINES	FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	5	8	9
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.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	5	8	9

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	112
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	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.
1	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

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

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE / FORMATION

FROM	TO	DR.–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL–S PAR'L–P COMP'L–C

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT		FT.
	STB RMR OD		FT.
2	D.C. 'D' OD		FT.
1	STB RMR OD		FT.
	D.C. ID OD		FT.
1	STB RMR OD		FT.
	STANDS DP	74 40-49	FT.
1	SINGLES DP	31.55	FT.
	KELLY DOWN	40.94	FT.
	TOTAL	8130.00	FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JET 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	1.62
TOTAL HRS. RUN	3
COND. 1/8's T.B. GAGE	
GPM/ PD–PSI	

MUD RECORD

TIME	0800	1200	1430
WEIGHT	11.1+	11.2+	11.2+
PRESSURE GRADIENT			
VISC.–SEC.	67	76	79
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.	8.9		
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
WT MAT	87SK		
X-PEL-G	4-SXS		
GELEX	4 LBS		
CAUSTIC	2-SXS		

FOOTAGE / FORMATION

FROM	TO	DR.–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL–S PAR'L–P COMP'L–C
9130	9430	23		DISCHARGE – 15565 BBL WE – 15.6 OF – 11.1+	50	45	1900	6½	50	6½		S

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
0600	0605	5		

DRILLER

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT		FT.
1			
2	STB RMR OD		FT.
1	D.C. ID OD		FT.
4	STB RMR OD		FT.
1	D.C. ID OD		FT.
4	STB RMR OD		FT.
1			
1			
1			
30	STANDS DP	7440-49	FT.
2	SINGLES DP	62.40	FT.
	KELLY DOWN	29.11	FT.
	TOTAL	8130.60	FT.
WT. OF STRING		210000	LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	7738
TOTAL FTG.	162
TOTAL HRS. RUN	45½
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	

MUD RECORD

TIME	1800	2000	2200
WEIGHT	11.2+	11.3+	11.3+
PRESSURE GRADIENT			
VISC.–SEC.	73	62	64
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE / FORMATION

FROM	TO	DR.–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL–S PAR'L–P COMP'L–C
9130	9150	D		20	50	45	1100	6½	50			S
										6½		

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
1800	2400	6		

DRILLER

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

C 23593

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE

OPERATOR

CONTRACTOR: LOFFLAND BROTHERS COMPANY — RIG NO.

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO.

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	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

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

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.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS				

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. W/O D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
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 1 32"	
	D.C. ID OD	FT.	SER. NO.	
	STB RMR OD	FT.	DEPTH OUT	
			DEPTH IN	
			TOTAL FTG.	
	STANDS DP	FT.	TOTAL HRS. RUN	
	SINGLES DP	FT.	COND. 1-8's T B GAGE	
	KELLY DOWN	FT.	GPM PD-PSI	
	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	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL-S PARFL-P COMPL-C

DEVIATION RECORD

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

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

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.	JET 1 32"	
	D.C. ID OD	FT.	SER. NO.	
	STB RMR OD	FT.	DEPTH OUT	
			DEPTH IN	
			TOTAL FTG.	
	STANDS DP	FT.	TOTAL HRS. RUN	
	SINGLES DP	FT.	COND. 1-8's T B GAGE	
	KELLY DOWN	FT.	GPM PD-PSI	
	TOTAL	FT.		
WT. OF STRING		LBS.		

MUD RECORD			
TIME	0800	1200	1430
WEIGHT	11.2+	11.2	11.2
PRESSURE GRADIENT	.583	.580	.580
VISC.-SEC.	78	76	74
PV/YP	/	/	/
GELS	/	/	/
WL-CC'S	8.4		
pH	9.5	9.0	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
X-TEND G	4 SKS		
WL 100	2 SKS	HPL	
CAUSTIC	2 SKS		

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL-S PARFL-P COMPL-C
				DESANDER - 1 BBL DISCHARGE - 7 GPM								
				11.2 14.9								
				11.2 11.2								

DEVIATION RECORD

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

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

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 1/32"	
	D.C. ID OD	FT.	SER. NO.	
	STB RMR OD	FT.	DEPTH OUT	
			DEPTH IN	
			TOTAL FTG.	
	STANDS DP	FT.	TOTAL HRS. RUN	
	SINGLES DP	FT.	COND. 1-8's T/B/ GAGE	
	KELLY DOWN	FT.	GPM/ PD-PSI	
	TOTAL	FT.		
WT. OF STRING		LBS.		

MUD RECORD			
TIME	1600		
WEIGHT	11.2		
PRESSURE GRADIENT	.580		
VISC.-SEC.	77		
PV/YP	/	/	/
GELS	/	/	/
WL-CC'S	7.8		
pH	9.5		
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL-S PARFL-P COMPL-C

DEVIATION RECORD

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

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

DRILLER

FORM 3T6 — APPROVED — APPROVED

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

C 23592

DAILY DRILLING REPORT

REPORT NO. 10C

LEASE	WELL NO.	API WELL NUMBER	DATE
Penn Ranch	H-4	42-501-30113-1453	1-2-74

OPERATOR	CONTRACTOR	RIG NO.
Bruce Crain Ltd	LOFFLAND BROTHERS COMPANY	2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: Mike

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [illegible]

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5"	19.50	E	6 1/4	H-90	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-375	16"
2	Emsco	D-375	16"

LEGAL LAND DESCRIPTION: Pampa Dist. H-54

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13 3/8						563

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED

FT. CUT OFF: — PRESENT LENGTH:

TON MI. OR TRIPS SINCE LAST CUT:

CUMULATIVE TON MI. OR TRIPS:

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	5	8	2 1/4
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			1/2
6	TRIPS			2 1/2
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	DIR. WORK			
21	CTHR			3/4
22				
	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
	TOTALS	5	8	5

COMPLETION

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	10C
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 12 1/4	1.00	FT.
1	R. S. 3	41.10	
1	STB RMR OD	7.11	FT.
1	D.C. ID OD	30.18	FT.
1	STB RMR OD	7.81	FT.
4	D.C. ID OD	119.25	FT.
1	STB RMR OD	7.43	FT.
4	[illegible]	116.11	
1	[illegible]	32.52	
1	[illegible]	2.50	
28	STANDS DP	7252.35	FT.
3	SINGLES DP	13.[illegible]	FT.
	KELLY DOWN	[illegible]	FT.
	TOTAL	7782.15	FT.
WT. OF STRING	215,000		LBS.

BIT RECORD

BIT NO.	28
SIZE	12 1/4
MFG.	Reed
TYPE	S136 J
JETS 1/32"	14 14 15
SER. NO.	823493
DEPTH OUT	
DEPTH IN	7165
TOTAL FTG.	301
TOTAL HRS. RUN	57 1/2
COND. 1/8's T/B GAGE	8 8 WT
GPM/ PD-PSI	/

MUD RECORD

TIME	0001	0300	0600
WEIGHT	11.2	11.2	11.2
PRESSURE GRADIENT			
VISC.-SEC.	40	45	41
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.			
pH	9.5	10.5	10.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 12 1/4	1.00	FT.
1	Smith	29.40	
2	STB RMR OD	14.75	FT.
1	D.C. ID OD	2.96	FT.
4	STB RMR OD	114.70	FT.
1	D.C. ID OD	1.45	FT.
4	STB RMR OD	116.61	FT.
1	C/O	1.70	
9	1/2 D.C.	250.52	
1	C/O	2.50	
29	STANDS DP	7345.94	FT.
	SINGLES DP		FT.
	KELLY DOWN	19.00	FT.
	TOTAL	7909.00	FT.
WT. OF STRING	205,000		LBS.

BIT RECORD

BIT NO.	28
SIZE	12¼
MFG.	Reed
TYPE	S136 J
JETS 1/32"	14 15 16
SER. NO.	823493
DEPTH OUT	
DEPTH IN	7165
TOTAL FTG.	331
TOTAL HRS. RUN	16 1/2
COND. 1/8's T/B GAGE	A C W A I N G
GPM/ PD-PSI	/

MUD RECORD

TIME	0800	1200	1400
WEIGHT	11.0+	11.2	11.2
PRESSURE GRADIENT	.573	.580	.580
VISC.-SEC.	70	66	59
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.	8.1		
pH	10.0	10.0	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
WTMAT	110 SKS		
GEL	3 SKS		
CELEX	6 LBS		

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 12 1/4	1.00	FT.
1	R. S. 3	41.10	
1	STB RMR OD	7.11	FT.
2	D.C. ID OD	60.20	FT.
1	STB RMR OD	7.81	FT.
4	D.C. ID OD	119.25	FT.
1	STB RMR OD	7.43	FT.
4	[illegible]	116.11	
1	[illegible]	32.52	
1	[illegible]	2.50	
28	STANDS DP	7252.35	FT.
3	SINGLES DP	13.[illegible]	FT.
	KELLY DOWN	[illegible]	FT.
	TOTAL	7782.15	FT.
WT. OF STRING	215,000		LBS.

BIT RECORD

BIT NO.	28	27
SIZE	12¼	12¼
MFG.	REED	SMITH
TYPE	S136 J	SVH
JETS 1/32"	16 16 14	15 15 14
SER. NO.	823493	RX434
DEPTH OUT	7965	
DEPTH IN	7830	7965
TOTAL FTG.	335	
TOTAL HRS. RUN	68 3/4	
COND. 1/8's T/B/ GAGE	5 3 1	
GPM/ PD-PSI	/	/

MUD RECORD

TIME	1600		
WEIGHT	11.2		
PRESSURE GRADIENT			
VISC.-SEC.	65		
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.	8.0		
pH	9.5		
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
CAUSTIC	2 SKS		

FOOTAGE / FORMATION

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
7112	7955	D			50	45	1400	6 3/4	50			S

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
0001	0600	6	1	Drilling 12¼" hole

DRILLER [illegible]

DAY TOUR

FOOTAGE / FORMATION

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
7952	7991	2			50	45	1400	6 3/4	50	6 1/4		S

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
0001	1100	11	1	Drilling 12¼" hole

DRILLER [illegible]

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. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
7991	7985	D			50	45	1400	6 3/4	50	6 1/4		S

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
7985	3	NE 3E						

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1100	1515	2 1/4	2	DRILLING 12¼" HOLE
1515	1830	3/4	10	WIRE LINE SURVEY
1830	1945	1/4	5	MIX 30 BBL WT. PILL
1945	2300	4 1/4	6	HOIST PIPE FOR BIT TRIP
2300	2345	3/4	21	CHANGE BIT - RETRIEVE SURVEY - CHECK BLIND RAMS
2345	2400	1/4	6	RUN IN WITH BIT #2

DRILLER [illegible]

C 23591

DAILY DRILLING REPORT REPORT NO. 21

LEASE	WELL NO.	API WELL NUMBER	DATE
[illegible]	[illegible]	[illegible]	[illegible]

OPERATOR	CONTRACTOR	RIG NO.
[illegible]	LOFFLAND BROTHERS COMPANY	[illegible]

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
5	[illegible]	E	[illegible]	[illegible]	1	1	[illegible]	[illegible]	[illegible]
						2	[illegible]	[illegible]	[illegible]

LEGAL LAND DESCRIPTION [illegible]

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13 3/8						1253

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	[illegible]	[illegible]	[illegible]
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY		[illegible]	
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		[illegible]	[illegible]	[illegible]

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	11		
CUMULATIVE ROTATING HRS.			
TOTAL MUD COST			

MORNING TOUR

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

BIT RECORD	
BIT NO.	22
SIZE	12 1/4
MFG.	R.
TYPE	S.J.C. 3
JETS 1/32"	[illegible]
SER. NO.	[illegible]
DEPTH OUT	
DEPTH IN	4455
TOTAL FTG.	2[illegible]
TOTAL HRS. RUN	35 1/2
COND. 1/8's T/B GAGE	[illegible]
GPM/ PD-PSI	/ /

MUD RECORD			
TIME	[illegible]	[illegible]	[illegible]
WEIGHT	[illegible]	[illegible]	[illegible]
PRESSURE GRADIENT			
VISC.-SEC.	[illegible]	[illegible]	[illegible]
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.			
pH	[illegible]	[illegible]	[illegible]
SOLIDS %			

MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AMT.
[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	

NO.	DRILLING ASSEMBLY (At end of tour)		
1	BIT [illegible]	4.10	FT.
1	[illegible]	[illegible]	
2	STB RMR [illegible] OD	[illegible]	FT.
1	D.C. ID [illegible] OD	[illegible]	FT.
4	STB RMR [illegible] OD	[illegible]	FT.
1	D.C. ID [illegible] OD	[illegible]	FT.
9	[illegible]	[illegible]	
1	[illegible]	2.50	
75	STANDS DP	[illegible]	FT.
	SINGLES DP		FT.
	KELLY DOWN	[illegible]	FT.
	TOTAL	[illegible]	FT.
WT. OF STRING	[illegible]		LBS.

BIT RECORD	
BIT NO.	25
SIZE	12
MFG.	[illegible]
TYPE	S.J.C. 3
JET 1/32"	[illegible]
SER. NO.	[illegible]
DEPTH OUT	
DEPTH IN	[illegible]
TOTAL FTG.	232
TOTAL HRS. RUN	42 1/2
COND. 1/8's T/B GAGE	[illegible]
GPM/ PD-PSI	/ /

MUD RECORD			
TIME	0800	1200	1400
WEIGHT	11.1+	11.2+	11.2+
PRESSURE GRADIENT	.577		
VISC.-SEC.	77	77	76
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.	8.6		
pH	10.0	10.0	10.0
SOLIDS %			

MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AMT.
X-TEL-G	4 SKS		
WL-100	2 SKS		
H2O	50 BBL		

NO.	DRILLING ASSEMBLY (At end of tour)		
1	BIT [illegible]	[illegible]	FT.
1	[illegible]	4.10	
1	STB RMR [illegible] OD	[illegible]	FT.
2	D.C. ID [illegible] OD	[illegible]	FT.
1	STB RMR [illegible] OD	[illegible]	FT.
4	D.C. ID [illegible] OD	[illegible]	FT.
1	STB RMR [illegible] OD	[illegible]	FT.
4	[illegible]	[illegible]	
1	[illegible]	1.71	
1	[illegible]	[illegible]	
75	STANDS DP	[illegible]	FT.
1	SINGLES DP	[illegible]	FT.
	KELLY DOWN	[illegible]	FT.
	TOTAL	[illegible]	FT.
WT. OF STRING	[illegible]		LBS.

BIT RECORD	
BIT NO.	23
SIZE	12 1/4
MFG.	REED
TYPE	S.J.C. 3
JETS 1/32"	14 14 15
SER. NO.	[illegible]
DEPTH OUT	
DEPTH IN	7160
TOTAL FTG.	207
TOTAL HRS. RUN	50 1/2
COND. 1/8's T/B/ GAGE	[illegible]
GPM/ PD-PSI	[illegible]

MUD RECORD			
TIME	1600		
WEIGHT	11.2		
PRESSURE GRADIENT			
VISC.-SEC.	70		
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.			
pH	9.5		
SOLIDS %			

MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AMT.
[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	

DAY TOUR

EVENING TOUR

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL.-S PAR.-P COM.-C
[illegible]	[illegible]	D			50	40	[illegible]	[illegible]	[illegible]			S

DEVIATION RECORD

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

DRILLER [illegible]

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL.-S PAR.-P COM.-C
7350	7392	32'		DESILTER - TUFF.	50	45	1500	6 3/4	50	6 1/4		S
				DISCHARGE - 5 1/2 GPM								
				MF - 14.4 - 13.8								
				CF 11.2								

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
7360	1 3/4	S90E						

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0500	1430	9 1/2		TRIP IN W/ 12 1/4 BIT
1430	1530	1		WASH & REAM 30' TO BTM
1530	1600	1/2		DRLG 12 1/4 HOLE 7360 - 7392

DRILLER J. Hammond

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL.-S PAR.-P COM.-C
7382	7417	D			50	45	1500	6 3/4	50	6 1/4		S

DEVIATION RECORD

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1600				
7382	7417	2		DRLG 12 1/4 HOLE

DRILLER [illegible]

Form 3T6 APPROVED APPROVED

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

C 23590

DAILY DRILLING REPORT

REPORT NO. 12

LEASE	WELL NO.	API WELL NUMBER	DATE
			6-1-78

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

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

LEGAL LAND DESCRIPTION 12 - [illegible]

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
13⅜						302

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	6	9½	9
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY		¾	
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
	TOTALS	6	18	

COMPLETION

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	12
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

DRILLING ASSEMBLY (At end of tour) / BIT RECORD / MUD RECORD

MORNING TOUR

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

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	MUD RECORD			
1	BIT 12¼	1.00 FT.	BIT NO.	28	TIME	6000	13:00	[illegible]
1	BIT SUB	4.10	SIZE	12¼	WEIGHT	11.3	11.4	11.3
2	STB RMR OD	FT.	MFG.	REED	PRESSURE GRADIENT			
2	D.C. ID OD	FT.	TYPE	S3GJ	VISC.-SEC.	68	73	72
1	STB RMR OD	FT.	JET 1/32"	16 15 15	PV/YP	/	/	/
12	D.C. ID OD	FT.	SER. NO.	533453	GELS.	/	/	/
1	STB RMR OD	1.71 FT.	DEPTH OUT		WL -CC'S.			
9	[illegible]	280.52	DEPTH IN	7650	pH	9.5	9.5	9.5
1	[illegible]	2.50	TOTAL FTG.		SOLIDS %			
			TOTAL HRS. RUN	17¾				
	STANDS DP	FT.	COND. 1/8's T/B GAGE		MUD & CHEMICALS ADDED			
	SINGLES DP	FT.	GPM/ PD-PSI	/ / /	TYPE	AMT.	TYPE	AMT.
	KELLY DOWN	40.59 FT.			[illegible]	[illegible]		
	TOTAL	FT.			[illegible]	5 GPM		
WT. OF STRING		LBS.						

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	MUD RECORD			
1	BIT [illegible]	FT.	BIT NO.	25	TIME	[illegible]	[illegible]	[illegible]
			SIZE	12¼	WEIGHT	11.3+	[illegible]	[illegible]
	STB RMR OD	FT.	MFG.	[illegible]	PRESSURE GRADIENT			
2	D.C. ID OD	FT.	TYPE	S3GJ	VISC.-SEC.	74	[illegible]	[illegible]
	STB RMR OD	FT.	JETS 1/32"	[illegible]	PV/YP	/	[illegible]	/
12	D.C. ID OD	FT.	SER. NO.	533453	GELS.	/	/	/
1	STB RMR OD	FT.	DEPTH OUT		WL -CC'S.			
			DEPTH IN	[illegible]	pH	9.0	[illegible]	
			TOTAL FTG.	[illegible]	SOLIDS %			
			TOTAL HRS. RUN	[illegible]				
	STANDS DP	FT.	COND. 1/8's T/B GAGE		MUD & CHEMICALS ADDED			
	SINGLES DP	FT.	GPM/ PD-PSI	/ / /	TYPE	AMT.	TYPE	AMT.
	KELLY DOWN	FT.			[illegible]	[illegible]		
	TOTAL	FT.			[illegible]	5 GPM		
WT. OF STRING		LBS.						

FOOTAGE / FORMATION / PUMP / DEVIATION RECORD / TIME LOG

MORNING TOUR

FOOTAGE FROM	FOOTAGE TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL-S PAR'L-P COMP'D-C
7615	7710	D			50	45	1400	6½	50	6¼		S

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
[illegible]	[illegible]	5	2	D[illegible]
				/

DRILLER [illegible]

DAY TOUR

FOOTAGE FROM	FOOTAGE TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL-S PAR'L-P COMP'D-C
7720		D		DESILTER - 2 HRS FIRING DISCHARGE - 5 GPM WE - 15.2 WF - 11.1+	50	45	1400	6½	50	6¼		S

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	7710	13°	S 7° E						

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0600	[illegible]	[illegible]		DRLG 12¼ HOLE
[illegible]	[illegible]	[illegible]		[illegible]

DRILLER [illegible]

EVENING TOUR

FOOTAGE FROM	FOOTAGE TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL-S PAR'L-P COMP'D-C
7720	7820	D		DESILTER - 5 GPM DISCHARGE - 5 GPM WE - 15.0 WF - 11.1+	50	45	1400	6½	50	6¼		S

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
[illegible]	[illegible]	[illegible]		[illegible]

DRILLER [illegible]

FORM 3T6 — APPROVED — APPROVED

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

C 23589

DAILY DRILLING REPORT

REPORT NO. 74

LEASE	WELL NO.	API WELL NUMBER	DATE
P. K. [illegible]	2-4	43-[illegible]	4-[illegible]-74
OPERATOR	**CONTRACTOR**		**RIG NO.**
[illegible]	LOFFLAND BROTHERS COMPANY		71
SIGNATURE OF OPERATOR'S REPRESENTATIVE	**SIGNATURE OF CONTRACTOR'S TOOL PUSHER**		
[illegible]	[illegible]		

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
5	19.50	E	6 5/8	[illegible]	1	1	[illegible]	D-[illegible]	16
						2	[illegible]	D-[illegible]	16

LEGAL LAND DESCRIPTION [illegible]

WIRE LINE RECORD REEL NO.

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13 3/8						15.3

SIZE | NO. LINES | FT. SPARED

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	13½		4
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE	4	1½	1
6. TRIPS	1	6	1
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. OTHERS		½	1
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADD'IT'N'L			
G.			
TOTALS		8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.			
HRS. W/OPR. D.P.			
HRS. WO/D.P.			
HRS. STANDBY			
TOTAL DAY WORK			
NO. OF DAYS FROM SPUD	97		
CUMULATIVE ROTATING HRS.			
TOTAL MUD COST			

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD		
1	BIT 12¼	[illegible] FT.	BIT NO.	27	TIME	[illegible]	[illegible]
1	[illegible]	[illegible]	SIZE	12¼	WEIGHT	[illegible]	[illegible]
1	STB RMR [illegible] OD	[illegible] FT.	MFG.	[illegible]	PRESSURE GRADIENT		
9	D.C. ID [illegible] OD	[illegible] FT.	TYPE	[illegible]	VISC.–SEC.	[illegible]	[illegible]
	STB RMR [illegible] OD	[illegible] FT.	JETS 1 32"	[illegible]	PV/YP	[illegible]	[illegible]
4	D.C. ID [illegible] OD	[illegible] FT.	SER. NO.	[illegible]	GELS	[illegible]	[illegible]
1	STB RMR [illegible] OD	[illegible] FT.	DEPTH OUT	7650	WL –CC'S		
21	STANDS DP	[illegible] FT.	DEPTH IN	7151	pH	[illegible]	[illegible]
1	SINGLES DP	[illegible] FT.	TOTAL FTG.	499	SOLIDS %		
	KELLY DOWN	[illegible] FT.	TOTAL HRS. RUN	[illegible]	MUD & CHEMICALS ADDED		
	TOTAL	[illegible] FT.	COND. 1/8's T/B GAGE	[illegible]	TYPE	AMT.	TYPE AMT.
WT. OF STRING	[illegible]	LBS.	GPM/ PD–PSI	[illegible]	[illegible]	[illegible]	[illegible]

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD		
1	BIT 12¼	161 FT.	BIT NO.	28	TIME		
1	DITCH	4.11	SIZE	12¼	WEIGHT		
1	STB RMR [illegible] OD	29.40 FT.	MFG.	REED	PRESSURE GRADIENT		
2	D.C. ID [illegible] OD	62.70 FT.	TYPE	S6GJ	VISC.–SEC.		
1	STB RMR [illegible] OD	2.31 FT.	JET 1/32"	14 15 15	PV/YP	/	/ /
4	D.C. ID [illegible] OD	[illegible] FT.	SER. NO.	873482	GELS	/	/ /
2	STB RMR [illegible] OD	[illegible] FT.	DEPTH OUT		WL –CC'S		
9	[illegible]	252.24	DEPTH IN	7650	pH		
1		2.52	TOTAL FTG.		SOLIDS %		
			TOTAL HRS. RUN		MUD & CHEMICALS ADDED		
25	STANDS DP	6974.16 FT.	COND. 1/8's T/B GAGE	6 6 6	TYPE	AMT.	TYPE AMT.
1	SINGLES DP	20.64 FT.	GPM/ PD–PSI	/			
	KELLY DOWN	21.12 FT.					
	TOTAL	[illegible] FT.					
WT. OF STRING	[illegible]	LBS.					

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD		
1	BIT 12¼	[illegible] FT.	BIT NO.	28	TIME		
1	[illegible]	[illegible]	SIZE	[illegible]	WEIGHT		
1	STB RMR [illegible] OD	[illegible] FT.	MFG.	[illegible]	PRESSURE GRADIENT		
9	D.C. ID [illegible] OD	[illegible] FT.	TYPE	[illegible]	VISC.–SEC.		
1	STB RMR [illegible] OD	[illegible] FT.	JETS 1/32"	[illegible]	PV/YP	/	/ /
4	D.C. ID [illegible] OD	119.72 FT.	SER. NO.	[illegible]	GELS	/	/ /
1	STB RMR [illegible] OD	[illegible] FT.	DEPTH OUT		WL –CC'S		
7	[illegible]	[illegible]	DEPTH IN	7650	pH		
1	[illegible]	[illegible]	TOTAL FTG.	19	SOLIDS %		
1	[illegible]	9.50	TOTAL HRS. RUN	4	MUD & CHEMICALS ADDED		
25	STANDS DP	[illegible] FT.	COND. 1/8's T/B/ GAGE	[illegible]	TYPE	AMT.	TYPE AMT.
5	SINGLES DP	[illegible] FT.	GPM/ PD–PSI	/			
	KELLY DOWN	[illegible] FT.					
	TOTAL	[illegible] FT.					
WT. OF STRING	[illegible]	LBS.					

DAY TOUR

FOOTAGE FROM	FOOTAGE TO	DR.D RIL.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHLUM PARFIL PROD CORE
7113	7650				55	45	[illegible]	6½	50			S

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	0245	2¾	2	Drill [illegible]
0245	0300	¼	5	Circ [illegible]
0300	0301	1	1	Rig [illegible]

DRILLER [illegible]

FOOTAGE FROM	FOOTAGE TO	DR.D RIL.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
7650	TD											

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0900	1100	2		FIRST FOR BIT #27
1100	1130	½	21	SELECT & MAKE UP BIT
1130	[illegible]	[illegible]		RUN IN 2700' CHANGES & GET GAS KICK
	1300	1½		MIX MT HAT & KILL KICK
1300				RUN INTO 4713 & BREAK CIRC
	1600	3		GAS OUT

DRILLER [illegible]

EVENING TOUR

FOOTAGE FROM	FOOTAGE TO	DR.D RIL.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
7650	7713	D			50	45	1M	6½	50			S

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1600	1800	2	5	Circ Gas Out & Condition Mud
1800	1900	1	1	Rig [illegible]
1900	2400	5	21	Trip for Bit
2400	2400	4	2	Drill

DRILLER [illegible]

C 23588

DAILY DRILLING REPORT REPORT NO. 11

LEASE	WELL NO.	API WELL NUMBER	DATE

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	22

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

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

LEGAL LAND DESCRIPTION

WIRE LINE RECORD REEL NO.

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

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

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

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.			
HRS. W/OPR. D.P.			
HRS. WO/D.P.			
HRS. STANDBY			
TOTAL DAY WORK			
NO. OF DAYS FROM SPUD	11		
CUMULATIVE ROTATING HRS.			
TOTAL MUD COST			

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD				
	BIT	FT.	BIT NO.	27	TIME				
			SIZE		WEIGHT				
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT				
	D.C. ID OD	FT.	TYPE		VISC.–SEC.				
	STB RMR OD	FT.	JETS 1/32"		PV/YP				
	D.C. ID OD	FT.	SER. NO.		GELS				
	STB RMR OD	FT.	DEPTH OUT		WL –CC'S				
			DEPTH IN		pH				
			TOTAL FTG.		SOLIDS %				
			TOTAL HRS. RUN						
	STANDS DP	FT.	COND. 1/8's T.B. GAGE		MUD & CHEMICALS ADDED				
	SINGLES DP	FT.	GPM/ PD–PSI		TYPE	AMT.	TYPE	AMT.	
	KELLY DOWN	FT.							
	TOTAL	FT.							
	WT. OF STRING	LBS.							

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD				
	BIT	FT.	BIT NO.	27	TIME				
			SIZE	12¼	WEIGHT				
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT				
	D.C. ID OD	FT.	TYPE		VISC.–SEC.				
	STB RMR OD	FT.	JET 1/32"		PV/YP				
	D.C. ID OD	FT.	SER. NO.		GELS				
	STB RMR OD	FT.	DEPTH OUT		WL –CC'S				
			DEPTH IN		pH				
			TOTAL FTG.		SOLIDS %				
			TOTAL HRS. RUN						
	STANDS DP	FT.	COND. 1/8's T.B. GAGE		MUD & CHEMICALS ADDED				
	SINGLES DP	FT.	GPM/ PD–PSI		TYPE	AMT.	TYPE	AMT.	
	KELLY DOWN	FT.							
	TOTAL	FT.							
	WT. OF STRING	LBS.							

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD				
1	BIT 12¼	1.60 FT.	BIT NO.	27	TIME	6			2200
1	DIT SHE	4.10	SIZE	12¼	WEIGHT				
1	STB RMR 9" OD	29.60 FT.	MFG.	SOUTH	PRESSURE GRADIENT				
21	D.C. ID 9" OD	62.70 FT.	TYPE	SDGH	VISC.–SEC.	72			65
1	STB RMR BLADE OD	3.36 FT.	JETS 1/32"	14 14 15	PV/YP				
4	D.C. ID 8" OD	114.70 FT.	SER. NO.	RU-815	GELS				
1	STB RMR 9" OD	1:45 116.6 FT.	DEPTH OUT		WL –CC'S				
9	2 jts DC	1:71 280.52	DEPTH IN	7151	pH	9.5			
1	1 jt	2.50	TOTAL FTG.	432	SOLIDS %				
35		6971.76	TOTAL HRS. RUN	87¼					
58	STANDS DP	6974.98 FT.	COND. 1/8's T/B/ GAGE	RUN	MUD & CHEMICALS ADDED				
	SINGLES DP	FT.	GPM/ PD–PSI		TYPE	AMT.	TYPE	AMT.	
	KELLY DOWN	21.12 FT.							
	TOTAL	7613 FT.							
	WT. OF STRING	199,000 LBS.							

FOOTAGE FROM	FOOTAGE 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 SCHLUM. PARM. C.P. COMP. C.
7-1	7530	D		31'	60	40	1100	6	30	6		5

DEVIATION RECORD

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
2001	2400	8		

DRILLER

DAY TOUR

FOOTAGE FROM	FOOTAGE 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 SCHLUM. PARM. C.P. COMP. C.
7530	7548	3			50	45	1900	6	50			

DEVIATION RECORD

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	1100	8	2	DRLG 12¼ HOLE

DRILLER

EVENING TOUR

FOOTAGE FROM	FOOTAGE 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 SCHLUM. PARM. C.P. COMP. C.
7568	7613	D			50	45	1900	6¼	50	6¼		5

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
7543	1¾	S-68-E						

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1100	2330	5 ½		DRLG 12¼ HOLE
2330	2215	¾		EASTMAN SURVEY - 7593
2215	2400	1 ¾		DRLG 12¼ HOLE

DRILLER

C 23587

DAILY DRILLING REPORT

REPORT NO. 15

LEASE	WELL NO.	API WELL NUMBER	DATE
	1-10		6/13/74

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

LEGAL LAND DESCRIPTION

WIRE LINE RECORD REEL NO.

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
5		E	6 5/8	XH	1	1		D	11
						2		D-31	

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
13 3/8						2503

WIRE LINE RECORD: SIZE 1/2 | NO. LINES 10 | 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	4	7	8
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
COMPLETION B. TBG TRIPS			
COMPLETION C. TREATING			
COMPLETION D. SWABBING			
COMPLETION E. TESTING			
COMPLETION F. ADDIT'N'L			
COMPLETION 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	15
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT		FT.
1			
2	STB RMR OD	6 7/8	FT.
1	DVC ID OD	2 1/4	FT.
4	STB RMR OD	6 7/8	FT.
1	DVC ID OD	6 1/4	FT.
4	STB RMR OD	6 7/8	FT.
1			FT.
			FT.
1			FT.
30	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	27
SIZE	7 7/8
MFG.	
TYPE	J
JETS 1 32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1-8's T-B GAGE	
GPM/ PD-PSI	/ /

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCH.-S PART.-P CONTR.-C
7314	7420	D		37	50	45	1100	6 1/4	50			S
										6 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

DRILLER

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT		FT.
1	STB RMR OD		FT.
2	D.C. ID OD		FT.
1	STB RMR OD		FT.
4	D.C. ID OD		FT.
1	STB RMR OD		FT.
4			
1			
30	STANDS DP		FT.
1	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

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

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

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 SCH.-S PART.-P CONTR.-C
7452					50	45	1100	6 1/4	50			S

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
0600	1230	6 1/2	1	Drill 7314 to 7452
1230	1245	1/4	5	Circ. B.P.
1245	Rig	3 1/4		Drop Tool Hole

DRILLER

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT		FT.
1	STB RMR OD		FT.
2	D.C. ID OD		FT.
1	STB RMR OD		FT.
4	D.C. ID OD		FT.
1	STB RMR OD		FT.
4			
1			
30	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

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

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCH.-S PART.-P CONTR.-C
7452	7471	D			50	45	1100	6 1/4	50			S
										6 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
1800	2015	4 1/4		Drill 7452 to 7471
2045	2145	1		Circ. & Cond. Mud
2145	2400	2 1/4		Drop Tool Hole

DRILLER

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

C 23586

DAILY DRILLING REPORT

REPORT NO. 74

LEASE	WELL NO.	API WELL NUMBER	DATE
[illegible]	#1-4	[illegible]	6-2-74

OPERATOR	CONTRACTOR	RIG NO.
[illegible]	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

LEGAL LAND DESCRIPTION

WIRE LINE RECORD REEL NO.

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	[illegible]						2503

WIRE LINE RECORD: SIZE 1/4 | NO. LINES 10 | FT. SLIPPED | FT. CUT OFF | PRESENT LENGTH | TON MI. OR TRIPS SINCE LAST CUT | CUMULATIVE TON MI. OR TRIPS

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
5"	19.50	E	6 1/4	[illegible]	1	1	[illegible]	[illegible]	18
						2	[illegible]	[illegible]	16

TIME DISTRIBUTION — HOURS

CODE NO. — OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	8	7½	8
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE		½	
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRLG LINE			
10. DEVIATION SURVEY		½	
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	74
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT	FT.	BIT NO.	37
1	[illegible]	FT.	SIZE	[illegible]
2	STB RMR OD	FT.	MFG.	[illegible]
1	D.C. ID OD	FT.	TYPE	[illegible]
4	STB RMR OD	FT.	JETS 1 32"	[illegible]
1	D.C. ID OD	FT.	SER. NO.	[illegible]
4	STB RMR OD	FT.	DEPTH OUT	
1	[illegible]		DEPTH IN	7361
1	[illegible]		TOTAL FTG.	127
1	[illegible]		TOTAL HRS. RUN	2 3/4
71	STANDS DP	FT.	COND. 1/8's T/B. GAGE	
2	SINGLES DP	FT.	GPM/ PD-PSI	
	KELLY DOWN 27.67	FT.		
	TOTAL	FT.		
WT. OF STRING		LBS.		

MUD RECORD			
TIME	[illegible]		
WEIGHT	[illegible]		
PRESSURE GRADIENT			
VISC.-SEC.	67	2	
PV/YP	1	1	1
GELS	1	1	1
WL -CC'S	[illegible]		
pH	[illegible]		
SOLIDS %	[illegible]		
MUD & CHEMICALS ADDED	TYPE	AMT.	TYPE AMT.

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT [illegible]	FT.	BIT NO.	37
1	[illegible]	FT.	SIZE	[illegible]
1	STB RMR OD	FT.	MFG.	[illegible]
1	D.C. ID OD	FT.	TYPE	[illegible]
1	STB RMR OD	FT.	JET 1/32"	[illegible]
2	D.C. ID OD	FT.	SER. NO.	[illegible]
1	STB RMR OD	FT.	DEPTH OUT	
2	[illegible]		DEPTH IN	7361
1	[illegible]		TOTAL FTG.	161
1	[illegible]		TOTAL HRS. RUN	3?
72	STANDS DP 11935'	FT.	COND. 1/8's T/B. GAGE	
	SINGLES DP	FT.	GPM/ PD-PSI	
	KELLY DOWN 31'	FT.		
	TOTAL 7534.67	FT.		
WT. OF STRING [illegible]		LBS.		

MUD RECORD			
TIME	[illegible]		
WEIGHT	[illegible]		
PRESSURE GRADIENT			
VISC.-SEC.	[illegible]	[illegible]	5
PV/YP	[illegible]		
GELS	[illegible]		
WL -CC'S	[illegible]		
pH	[illegible]		
SOLIDS %			
MUD & CHEMICALS ADDED	TYPE	AMT.	TYPE AMT.

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT	FT.	BIT NO.	37
1	[illegible]	FT.	SIZE	[illegible]
2	STB RMR OD	FT.	MFG.	[illegible]
1	D.C. ID OD	FT.	TYPE	[illegible]
4	STB RMR OD	FT.	JETS 1/32"	[illegible]
1	D.C. ID OD	FT.	SER. NO.	[illegible]
4	STB RMR OD	FT.	DEPTH OUT	
1	[illegible]		DEPTH IN	7361
1	[illegible]		TOTAL FTG.	200
1	[illegible]		TOTAL HRS. RUN	41
72	STANDS DP [illegible]	FT.	COND. 1/8's T/B. GAGE	
1	SINGLES DP	FT.	GPM/ PD-PSI	
	KELLY DOWN	FT.		
	TOTAL 7561.00	FT.		
WT. OF STRING 176000		LBS.		

MUD RECORD			
TIME	[illegible]		
WEIGHT	[illegible]		
PRESSURE GRADIENT			
VISC.-SEC.	75	75	75
PV/YP	[illegible]		
GELS	[illegible]		
WL -CC'S			
pH	9.5	9.5	9.5
SOLIDS %			
MUD & CHEMICALS ADDED	TYPE	AMT.	TYPE AMT.

MORNING TOUR

FOOTAGE FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL.-S PAR.-P COMP.-C
7267	7308	D		31	50	45	1100	6 1/2	50			S
										4 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
6 AM	7300	4		[illegible]

DRILLER

DAY TOUR

FOOTAGE FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL.-S PAR.-P COMP.-C
7308	7361	D		31	50	45	1100	6 1/2	50			S
										4 1/2		

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
7265	2	[illegible]						

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
6 AM	11 AM	3	2	Drilling 7 7/8 Hole
11 AM	11:30	1/2	10	Survey Circ. Hole for Wire Line Survey
11:30	11:45	1/2	10	Survey
11:45	[illegible]	3 1/2	2	Drilling 7 7/8 Hole

DRILLER [illegible]

EVENING TOUR

FOOTAGE FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL.-S PAR.-P COMP.-C
7342	7361	D		31	50	45	1100	6 1/2	50			S
										6 1/2		S

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	2							

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
18:00	24:00	6		Drilling 7 7/8 Hole

DRILLER [illegible]

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

C 23585

DAILY DRILLING REPORT — REPORT NO. 13

LEASE	WELL NO.	API WELL NUMBER	DATE
Pawnee Mountain	A-4	A-15-60 30-12S-W-25	6-1-74

OPERATOR	CONTRACTOR	RIG NO.
Amoco Canada Ltd.	LOFFLAND BROTHERS COMPANY	

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER — P. A. Todd

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO.

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

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

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13 3/8						2503

WIRE LINE RECORD: SIZE 1/2 — NO. LINES 10 — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH — TON MI. OR TRIPS SINCE LAST CUT — CUMULATIVE TON MI. OR TRIPS 1

TIME DISTRIBUTION – HOURS

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

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

NO. OF DAYS FROM SPUD 15

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 12 1/4		FT.
1	[illegible]	31.60	
2	STB RMR 12 1/4 OD	2.20	FT.
1	DC. ID 5 1/2 OD	2.46	FT.
4	STB RMR 12 1/4 OD	114.70	FT.
1	DC. ID 5 1/2 OD	1.45	FT.
4	STB RMR 12 1/4 OD	5.01	FT.
1	[illegible]	1.21	
1	[illegible]	[illegible]	
1	[illegible]	2.21	
70	STANDS DP	2142.82	FT.
1	SINGLES DP		FT.
	KELLY DOWN	32.06	FT.
	TOTAL	7171.50	FT.

WT. OF STRING [illegible] LBS.

BIT RECORD

BIT NO.	27
SIZE	12 1/4
MFG.	Smith
TYPE	F-2
JETS 1 32"	16 16 16
SER. NO.	RV815
DEPTH OUT	
DEPTH IN	7151
TOTAL FTG.	16
TOTAL HRS. RUN	1 1/4
COND. 1/8's T/B/ GAGE	[illegible]
GPM/ PD-PSI	/ /

MUD RECORD

TIME			0630
WEIGHT		11.1	11.1
PRESSURE GRADIENT			
VISC.-SEC.		47	60
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			11.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
- C	10 sks		

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHLUM. PARFL-P COMPLEX
7151	7191	D		10	50	45	1100	6 1/2	50			S
							1700			6 1/2	62	S

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
0001	0215	2 1/2		[illegible]
0215	0245	1/2		[illegible] 7040 - (U. MUD B.I.T.)
0245	0615	3 1/2		[illegible] T. BOTTOM, REAM 7060 TO 7151 (SPOTTY)
0615	0900	1 1/2		[illegible]

DRILLER [illegible]

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 12 1/4	1.00	FT.
1	[illegible]	4.10	
1	STB RMR [illegible] OD	27.60	FT.
2	D.C. ID 7" OD	62.71	FT.
1	STB RMR [illegible] OD	2.81	FT.
4	D.C. ID 7" OD	114.70	FT.
1	STB RMR 8 1/2 OD	1.45	FT.
4	7" DCS	116.41	
1	[illegible]	32.52	
1	8 1/2	2.50	
76	STANDS DP	2511.22	FT.
2	SINGLES DP	61.23	FT.
	KELLY DOWN	41.40	FT.
	TOTAL	7231.17	FT.

WT. OF STRING 175.000 LBS.

BIT RECORD

BIT NO.	27
SIZE	12 1/4
MFG.	Smith
TYPE	F-2
JET 1/32"	16 16 16
SER. NO.	RV815
DEPTH OUT	
DEPTH IN	7151
TOTAL FTG.	80
TOTAL HRS. RUN	7 3/4
COND. 1/8's T/B/ GAGE	Rec
GPM/ PD-PSI	/ /

MUD RECORD

TIME	1800	1400	1500
WEIGHT	11.1	11.1	11.1
PRESSURE GRADIENT			
VISC.-SEC.	49	51	53
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	9.5	11.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Lit Mor Vis	SAS		
[illegible]	SAS		
[illegible]	Sta		

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHLUM. PARFL-P COMPLEX
7191	7231	D			50	45	1800	14	50			S

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
0600	Mor	6	1	Drlg 13 1/4 Hole

DRILLER [illegible]

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 12 1/4	1.00	FT.
1	[illegible]	2.10	
2	STB RMR 12 1/4 OD	12.70	FT.
1	DC. ID 5 1/2 OD	2.96	FT.
4	STB RMR 12 1/4 OD	114.70	FT.
1	DC. ID 5 1/2 OD	1.45	FT.
4	STB RMR 12 1/4 OD	111.11	FT.
1	[illegible]	4.41	
1	[illegible]	[illegible]	
1	[illegible]	2.50	
71	STANDS DP	2382.38	FT.
1	SINGLES DP	12.23	FT.
	KELLY DOWN	13.27	FT.
	TOTAL	7261.00	FT.

WT. OF STRING 175000 LBS.

BIT RECORD

BIT NO.	27
SIZE	12 1/4
MFG.	Smith
TYPE	F-2
JETS 1/32"	16 16 16
SER. NO.	RV815
DEPTH OUT	
DEPTH IN	7151
TOTAL FTG.	99
TOTAL HRS. RUN	12 1/4
COND. 1/8's T/B/ GAGE	[illegible]
GPM/ PD-PSI	/ /

MUD RECORD

TIME	1800	0030	0600
WEIGHT	11.1	11.2	11.1
PRESSURE GRADIENT			
VISC.-SEC.	45	63	62
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.		10.4	
pH	9.5	9.0	9.5
SOLIDS %	Run DC	Drlg Mud	
	11.9	12.0	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Caustic	2 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. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHLUM. PARFL-P COMPLEX
7231	7269	D		38	50	45	1800	6 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
1600	2400	8		Drlg 13 1/4 Hole

DRILLER [illegible]

FORM 3T6

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

C 23584

DAILY DRILLING REPORT

REPORT NO. 12

LEASE	WELL NO.	API WELL NUMBER	DATE

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	

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

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
						2			

LEGAL LAND DESCRIPTION

WIRE LINE RECORD REEL NO.

	SIZE	JAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	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	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	7½	6	2½
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			4½
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			½
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO. D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	12
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

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

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

DAY TOUR

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

EVENING TOUR

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

MORNING TOUR

FOOTAGE FROM	FOOTAGE 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
7170	7235	D										

DEVIATION RECORD

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

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

DRILLER

DAY TOUR

FOOTAGE FROM	FOOTAGE 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
7125	7148	D			50	45	1000	6¾	50			S

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
1100	1100	8	2	Drlg 125' Hr. Pump 2 @ 2025 & 7137

DRILLER

EVENING TOUR

FOOTAGE FROM	FOOTAGE 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
7125	7191	D			50	45	1000	6¾	50			S

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
7170	¼	N 77E						

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1100	1830	5½	2	Drlg 125' Hr.
1830	1900	½		Circ. & Surv. @ 7170'
1900	2330	4½		Hole for Bit Trip. Pump 2 @ 2025 & 7137
2330	2400	½		Finish Surv. & Circ. Hole Clean

DRILLER

FORM 3T6 APPROVED APPROVED

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

C 23583

DAILY DRILLING REPORT

REPORT NO. 71

LEASE	WELL NO.	API WELL NUMBER	DATE
			7-31-74

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	72

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

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

LEGAL LAND DESCRIPTION

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

WIRE LINE RECORD — REEL NO.

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

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. PISHING			
20. DIR. WORK			
21.			
22.			
COMPLETION A. PERF'R'T'N			
COMPLETION B. TBG TRIPS			
COMPLETION C. TREATING			
COMPLETION D. SWABBING			
COMPLETION E. TESTING			
COMPLETION F. ADDIT'N'L			
COMPLETION G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	11
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD		
1	BIT	FT.	BIT NO.	2	TIME		
			SIZE		WEIGHT		
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT		
	D.C. ID OD	FT.	TYPE		VISC.-SEC.	30	
	STB RMR OD	FT.	JETS 1/32"		PV/YP	/	/ /
	D.C. ID OD	FT.	SER. NO.		GELS	/	/ /
	STB RMR OD	FT.	DEPTH OUT		WL -CC'S		
			DEPTH IN		pH		
			TOTAL FTG.		SOLIDS %		
			TOTAL HRS. RUN		MUD & CHEMICALS ADDED		
	STANDS DP	FT.	COND. 1/8's T.B. GAGE		TYPE	AMT.	TYPE AMT.
	SINGLES DP	FT.	GPM/ PD-PSI	/			
	KELLY DOWN	FT.					
	TOTAL	FT.					
WT. OF STRING		LBS.					

DAY TOUR

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

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD			
1	BIT	FT.	BIT NO.	21	TIME			
			SIZE		WEIGHT			
2	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT			
1	D.C. ID OD	FT.	TYPE		VISC.-SEC.	61	64	3
4	STB RMR OD	FT.	JETS 1/32"		PV/YP	/	/	/
1	D.C. ID OD	FT.	SER. NO.		GELS	/	/	/
4	STB RMR OD	FT.	DEPTH OUT		WL -CC'S			
1			DEPTH IN	1606	pH	7.5	7.5	7.5
1			TOTAL FTG.	265	SOLIDS %			
1			TOTAL HRS. RUN	3 3/4	MUD & CHEMICALS ADDED			
11	STANDS DP	FT.	COND. 1/8's T/B/ GAGE		TYPE	AMT.	TYPE	AMT.
	SINGLES DP	FT.	GPM/ PD-PSI	/				
	KELLY DOWN	FT.						
	TOTAL	FT.						
WT. OF STRING		LBS.						

MORNING TOUR

FOOTAGE FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCH-S PAR-P HEL-H COM-C

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

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

DRILLER

DAY TOUR

FOOTAGE FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCH-S PAR-P HEL-H COM-C
1112	1312	D			50	45	1200	134	52			S

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
0700	1100	8	2	Drilling 12¼" Hole

DRILLER

EVENING TOUR

FOOTAGE FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCH-S PAR-P HEL-H COM-C
7090	7096	D		56'	50	45	1200	134	52	6¼		S

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
1100	2400	13		Drilling 12¼" Hole

DRILLER

C 23582

DAILY DRILLING REPORT — REPORT NO. 90

LEASE	WELL NO.	API WELL NUMBER	DATE
Pearl Unit	9-4	4-125-20-30-12-W-55	5-21-74

OPERATOR	CONTRACTOR	RIG NO.
Pan American Co.	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO.

	D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
	5"					

	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
	2			

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	13 3/8						239

WIRE LINE RECORD: SIZE 1 3/4 — NO. LINES 10 — 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	1	7 3/4	7
3.	REAMING			
4.	CORING			
5.	CONDITION MUD & CIRCULATE			
6.	TRIPS	5 1/4		
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.		1/4	
16.	DRILL STEM TEST			
17.	PLUG BACK			
18.	SQUEEZE CEMENT			
19.	FISHING			
20.	DIR. WORK			
21.	CORE		14 1/2	
22.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS				

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	10
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT		FT.
1			
1	STB RMR	OD	FT.
1	D.C. ID	OD	FT.
4	STB RMR	OD	FT.
1	D.C. ID	OD	FT.
4	STB RMR	OD	FT.
1			
1			
1			
12	STANDS DP		FT.
1	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	26
SIZE	12 1/4
MFG.	
TYPE	
JETS 1 32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	5
TOTAL HRS. RUN	1
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.

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT		FT.
1			
1	STB RMR	OD	FT.
2	D.C. ID	OD	FT.
1	STB RMR	OD	FT.
4	D.C. ID	OD	FT.
1	STB RMR	OD	FT.
4			
1			
1			
17	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	25
SIZE	12 1/4
MFG.	
TYPE	
JETS 1 32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	1866
TOTAL FTG.	65
TOTAL HRS. RUN	8 1/4
COND. 1'8's T.B GAGE	
GPM/ PD-PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT		FT.
1			
2	STB RMR	OD	FT.
1	D.C. ID	OD	FT.
4	STB RMR	OD	FT.
1	D.C. ID	OD	FT.
4	STB RMR	OD	FT.
1			
1			
1			
17	STANDS DP		FT.
1	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	24
SIZE	12 1/4
MFG.	
TYPE	
JETS 1 32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1'8's T.B GAGE	
GPM/ PD-PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

FOOTAGE / FORMATION

FROM	TO	DR'D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
1495	1513	D			50	45	1100	6 3/4	50	6 1/2		S

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
0001	0530	5		
0530	0600	1/2		
0600	0610	1/2		
0610	0700	1		
0700	0701	1		

DRILLER

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR'D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
1513	1563				50	45	1100	6 3/4	50			S

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
0600	0745	1 3/4	2	Drilling 12 1/4 Hole
0745	1230	4 1/4	15	Hand Pipe Rams
1230	1530	5 1/2	3	Drilling 12 1/4 Hole
1530	1701	1 1/2	21	Circulate Trip T.B. Decide

DRILLER

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR'D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
1612	1652	D			50	45	1150	6 3/4	50			S

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
1800	2300	5		Drilling 12 1/4 Hole

DRILLER

Form 3T6 — APPROVED — APPROVED

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

C 23581 Sc.

DAILY DRILLING REPORT — REPORT NO. 89

LESSE	WELL NO.	API WELL NUMBER	DATE
POINTED MTN A-4	A-4	A-55-60-30-123-W5	5-28-74

OPERATOR	CONTRACTOR	RIG NO.
AMOCO CANADA LTD	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER — M Lindkvist

LEGAL LAND DESCRIPTION POINTED MTN A-55

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

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	D-1000	18"
2	EMSCO	D-700	16"

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
13 3/8						2503

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

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 89
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT SUB		4.10 FT.
1	MONEL		29.60
2	STB RMR 12"	D.C. 6 1/4" OD	62.07 FT.
1	D.C. 6 1/4" ID	2 1/4" OD	2.86 FT.
4	STB RMR 12"	D.C. OD	114.70 FT.
4	D.C. ID 7"	OD	FT.
1	STB RMR 12"	SUB OD	1.75 FT.
3	6 1/2 IF		280.52
1	10" SUB		2.50
65	STANDS DP		6044.37 FT.
2	SINGLES DP		61.7 FT.
	KELLY DOWN		22.3 FT.
	TOTAL		6745 FT.

WT. OF STRING 186 000 LBS.

BIT RECORD

BIT NO.	25
SIZE	12 1/4
MFG.	SMITH
TYPE	5 DDJ
JETS 1 32"	14 14 15
SER. NO.	KU 255
DEPTH OUT	
DEPTH IN	6339
TOTAL FTG.	406
TOTAL HRS. RUN	76
COND. 1/8's T/B GAGE	N/A
GPM/ PD–PSI	

MUD RECORD

TIME	0100	0300	0600
WEIGHT	11.2	11.1	11.1
PRESSURE GRADIENT			.577
VISC.–SEC.	68	72	65
PV/YP	/	/	24/28
GELS	/	/	4/36
WL –CC'S			8
pH	10	10	10
SOLIDS %			15%
SAND			30%

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
CAUSTIC	50		

FOOTAGE / FORMATION

FROM	TO	DR.D RM–R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SG–S PA–FL–P CO–DC
6705	6745	D		DRAINDER								
				DISCHARGE – 5½ gpm	50	45	1900	6 3/4	50	6 1/4		S
				HF – 13.1								
				OF – 11.0°F								

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
0001	0800	8		DRLG 12¼ HOLE

DRILLER M. Lindkvist

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT		FT.
	STB RMR	OD	FT.
1	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	D.C. ID	OD	FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.

WT. OF STRING LBS.

BIT RECORD

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

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

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 SG–S PA–FL–P CO–DC
1745		D			50	45	1100	6 3/4	50			S

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

DRILLER

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 12¼		FT.
1	BIT SUB		FT.
1	STB RMR 12"	OD	FT.
2	D.C. ID	OD	FT.
1	STB RMR	OD	FT.
4	D.C. ID 7"	OD	114.70 FT.
1	STB RMR 12"	SUB OD	1.75 FT.
4	6 1/2 IF		280.52
1	10" SUB		2.50
64	STANDS DP		6135.04 FT.
1	SINGLES DP		30.41 FT.
	KELLY DOWN		35.41 FT.
	TOTAL		6745.37 FT.

WT. OF STRING 182000 LBS.

BIT RECORD

BIT NO.	25
SIZE	12¼
MFG.	SMITH
TYPE	5 DDJ
JETS 1/32"	14 14 15
SER. NO.	KU 255
DEPTH OUT	6745
DEPTH IN	6339
TOTAL FTG.	406
TOTAL HRS. RUN	76 1/4
COND. 1/8's T/B GAGE	1 0 1
GPM/ PD–PSI	

MUD RECORD

TIME			
WEIGHT			11.1
PRESSURE GRADIENT			
VISC.–SEC.			65
PV/YP	/	/	/
GELS	/	/	/
WL –CC'S			
pH			9.5
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. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SG–S PA–FL–P CO–DC
1745	6745	D			50	45	1900	6 3/4	50			S

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
6745	1							

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1100	2245	6 3/4	2	Drlg 12¼ hole
2245	2300	1/4		Circ & cond f/ POOH for bit
2300	2400	1		Hoist for BT

DRILLER

FORM 3T6 — APPROVED — APPROVED

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

C 23580

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
POINTED MTN	A-4	A-55-60-30-123-W45	5-27-74

OPERATOR	CONTRACTOR	RIG NO.
AMOCO CANADA LTD	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

LEGAL LAND DESCRIPTION POINTED MTN A-55

WIRE LINE RECORD REEL NO.

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

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	D-1000	18"
2	EMSCO	D-700	17"

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13 3/8						2503

WIRE LINE RECORD: SIZE 13/8 — NO. LINES 10 — 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	8	8	7
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			1
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				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.

HRS. W/OPR. D.P.

HRS. WO. D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD 88

CUMULATIVE ROTATING HRS.

TOTAL MUD COST $66723.53

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT Smith	4.10 FT.	BIT NO.	25
1	Monel	29.60	SIZE	12 1/4
2	STB RMR OD	63.07 FT.	MFG.	SMITH
41	D.C. ID OD	1145.71 FT.	TYPE	SDGH
1	STB RMR OD	1.45 FT.	JETS 1 32nds	10 10 10
4	D.C. ID OD	116.81 FT.	SER. NO.	MJ955
1	STB RMR OD	1.71 FT.	DEPTH OUT	
9	6 1/2 DC	280.52	DEPTH IN	6339
1	Sub	2.50	TOTAL FTG.	291
	Total	617.12	TOTAL HRS. RUN	53
64	STANDS DP	5152.95 FT.	COND. 1/8's T/B/ GAGE	RUNNING
1	SINGLES DP	22.18 FT.	GPM/ PD-PSI	
	KELLY DOWN	39.65 FT.		
	TOTAL	6031.90 FT.		

WT. OF STRING 181000 LBS.

MUD RECORD			
TIME	0100	0300	0600
WEIGHT	11.1	11.1+	11.1
PRESSURE GRADIENT			
VISC.-SEC.	65	62	59
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	10.0	10.0	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Wtmat.	00000#	CAUSTIC	150#
Gelex	4 #	H2O	5 gpm
XP-20	150#		
Gel	100#		

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
6516	6628	D		DESANDER								
				Discharge - 5 1/2 gpm	50	45	1100	6 3/4		6 1/4	60	5
				MF - 14.7+								
				SF - 11.0+								

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
0001	0820	8		DRLG 12 1/4 HOLE

DRILLER

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
	BIT	FT.	BIT NO.	
			SIZE	
	STB RMR OD	FT.	MFG.	
1	D.C. ID OD	FT.	TYPE	
4	STB RMR OD	FT.	JET 1/32nds	
1	D.C. ID OD	FT.	SER. NO.	
	STB RMR OD	FT.	DEPTH OUT	
1			DEPTH IN	
2			TOTAL FTG.	
1			TOTAL HRS. RUN	61
64	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 RECORD			
TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
6129	6630	D		SAND	50	45	1100	6 3/4	50			5
										6 1/4	60	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

DRILLER

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT SUB	4.10 FT.	BIT NO.	25
1	MONEL	29.60	SIZE	12 1/4
2	STB RMR OD	63.07 FT.	MFG.	SMITH
1	D.C. STB OD	2.86 FT.	TYPE	SDGH
4	STB RMR OD	114.70 FT.	JETS 1/32nds	10 10 10
1	D.C. STB OD	116.41 FT.	SER. NO.	MJ955
1	STB RMR OD	1.71 FT.	DEPTH OUT	
9	6 1/2 DC	280.52	DEPTH IN	6339
1	SUB	2.50	TOTAL FTG.	306
	TOOLS	617.12	TOTAL HRS. RUN	58
65	STANDS DP	6704.88 FT.	COND. 1/8's T/B/ GAGE	RUNNING
1	SINGLES DP	20.75 FT.	GPM/ PD-PSI	
	KELLY DOWN	13.76 FT.		
	TOTAL	6757 FT.		

WT. OF STRING 185000 LBS.

MUD RECORD			
TIME			2200
WEIGHT			11.1+
PRESSURE GRADIENT			
VISC.-SEC.			59
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	10.1	10.0	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	120#		
Gelex	6#		
XP-20	150#		

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
6630	6705	D			50	45	1900	6 3/4	50	6 1/4		5

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
6694	1°	N 7 E						

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1800	1845	6 3/4		
1845	2345	5		EASTMAN SURVEYS COMM.
2345	2400	1/4		DRLG 12 1/4 HOLE

DRILLER

FORM 3T6 APPROVED APPROVED

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

C 23580

DAILY DRILLING REPORT REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
POINTED MTN	A-4	A-55-60-30-123-W45	5-27-74

OPERATOR	CONTRACTOR	RIG NO.
AMOCO CANADA LTD	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

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

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	D-1000	18"
2	EMSCO	D-700	17"

LEGAL LAND DESCRIPTION POINTED MTN A-55

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13 3/8						2503

WIRE LINE RECORD REEL NO.

SIZE 13/8 NO. LINES 10 FT. SLIPPED

FT. CUT OFF PRESENT DEPTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	8	8	7
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			1
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.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.

HRS. W/OPR. D.P.

HRS. W/O D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD 88

CUMULATIVE ROTATING HRS.

TOTAL MUD COST $ 66723.53

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 2 SUB		4.10 FT.
1	MONELS		29.60
2	STB RMR 9" OD		62.07 FT.
4	D.C. ID 9" OD		114.70 FT.
1	STB RMR 9" OD		1.45 FT.
4	D.C. ID 7" OD		116.61 FT.
1	STB RMR 9" OD		1.71 FT.
9	6 1/2 D.C.'s		280.52
1	9" SUB		2.50
	TOOLS		67.12
	TOTAL		677.12
60	STANDS DP		5952.05 FT.
1	SINGLES DP		29.78 FT.
	KELLY DOWN		29.05 FT.
	TOTAL		6038 FT.

WT. OF STRING 181000 LBS.

BIT RECORD

BIT NO.	25
SIZE	12 1/4
MFG.	SMITH
TYPE	SDGH
JETS 1/32"	14 14 15
SER. NO.	MF455
DEPTH OUT	
DEPTH IN	6339
TOTAL FTG.	289
TOTAL HRS. RUN	53
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

	0100	0300	0600
TIME			
WEIGHT	11.1	11.1+	11.1
PRESSURE GRADIENT			
VISC-SEC.	65	62	59
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	10.0	10.0	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Wt mat.	8000#	CAUSTIC	50#
Gelex	4+#	H2O	5 gpm
XP-20	150#		
Gel	100#		

FOOTAGE

FROM	TO	DR.D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL-S DART-D COMP-C
6590	6628	D		DESANDER								
				Discharge - 5+ gpm	50	45	#a	6 1/4		6 1/4	60	S
				VF - 14.7								
				OF - 11.0+								

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
0001	0800	8		DRLG 12 1/4 HOLE

DRILLER

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT		FT.
2	STB RMR OD		FT.
1	D.C. ID OD		FT.
4	STB RMR OD		FT.
1	D.C. ID OD		FT.
4	STB RMR OD		FT.
1			
1			
60	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.

WT. OF STRING LBS.

BIT RECORD

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

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL-S DART-D COMP-C
1623	1170	D		42	50		1100	6 1/4	50			S
										6 1/4	60	

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
0600	1800	12		DRLG 12 1/4 HOLE

DRILLER

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT SUB		4.10 FT.
1	MONEL		29.60
2	STB RMR 9" DC OD		62.07 FT.
1	D.C. BLADE STB OD		2.86 FT.
4	STB RMR 9" DC OD		114.70 FT.
1	D.C. 9" TO 7" DC OD		116.61 FT.
1	STB RMR 9" SUB OD		1.71 FT.
9	6 1/2 DC's		280.52
1	9" SUB		2.50
	TOOLS		67.12
65	STANDS DP		6704.88 FT.
1	SINGLES DP		29.75 FT.
	KELLY DOWN		12.76 FT.
	TOTAL		6847 FT.

WT. OF STRING 185000 LBS.

BIT RECORD

BIT NO.	25
SIZE	12 1/4
MFG.	SMITH
TYPE	SDGH
JETS 1/32"	14 14 15
SER. NO.	MF455
DEPTH OUT	
DEPTH IN	6339
TOTAL FTG.	506
TOTAL HRS. RUN	68
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

	1700	2000	2200
TIME			
WEIGHT	11.1+	11.1+	11.1+
PRESSURE GRADIENT			
VISC-SEC.	62	59	59
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	10.1	10.0	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1700#		
Gelex	6#		
XP-20	150#		

FOOTAGE

FROM	TO	DR.D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL-S DART-D COMP-C
1672	6705	D			50	45	1900	6 3/4	50	6 1/4		S

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
6694	1° 1/4	N 77 E						

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1800	2345	5 3/4		DRLG 12 1/4 HOLE
2345	2345	1		EASTMAN SURVEY: CONN
2345	2400	1/4		DRLG 12 1/4 HOLE

DRILLER

FORM 3T6 APPROVED APPROVED

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

C 23579

DAILY DRILLING REPORT — REPORT NO. 27

LEASE	WELL NO.	API WELL NUMBER	DATE
POINTED MTN	A-4	A-55-60-30-123-W45	5-26-74

OPERATOR	CONTRACTOR	RIG NO.
AMOCO CANADA LTD	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER — A Lindsay

LEGAL LAND DESCRIPTION: A-55-60-30-123-W45

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

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	D-100C	18"
2	EMSCO	D-700	16"

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
13 3/8						2503

WIRE LINE RECORD — REEL NO.

SIZE 1 3/8 | NO. LINES 10 | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	5 3/4	7	8
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY	2 1/4	1	
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				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8	8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

NO. OF DAYS FROM SPUD: 27

CUMULATIVE ROTATING HRS.:

TOTAL MUD COST: $65,001.93

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT SUB	1.00	4.10 FT.
1	MONEL	29.60	
2	STB RMR 12" OD BLADED	22.67	2.15 FT.
4	D.C. 9" OD 2 13/16" ID	114.76	FT.
1	STB RMR 12" OD	6.45	FT.
4	D.C. 7" OD 2 13/16" ID	160.61	FT.
1	STB RMR 12" OD	6.71	FT.
9	6 1/2 DC'S	288.52	
1	7/8 SUB	2.50	
		617.12	
63	STANDS DP	5857.53	FT.
—	SINGLES DP	31.74	FT.
	KELLY DOWN	38.3	FT.
	TOTAL	6543	FT.

WT. OF STRING 178000 LBS.

BIT RECORD

BIT NO.	25
SIZE	12 1/4
MFG.	SMITH
TYPE	SDGH
JETS 1 32"	14 14 15
SER. NO.	KV-455
DEPTH OUT	
DEPTH IN	6339
TOTAL FTG.	184 104 ft
TOTAL HRS. RUN	30
COND. 1/8's T/B/ GAGE	RUN
GPM/ PD-PSI	

MUD RECORD

TIME	0100	0330
WEIGHT	11.1+	11.1
PRESSURE GRADIENT		
VISC.-SEC.	64	74
PV/YP	/	/ /
GELS.	/	/ /
WL -CC'S.		
pH	9.5	10.0
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
XP-20	150#		
WL-100	50#		
CAUSTIC	100#		

FOOTAGE

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 SCHL-S PAR-EL-P COMPL-C
6492	6528	D		DESANDER								
	6577			DISCHARGE - 5 JPM	50	45	1600	6 3/4		6 1/4	60	S
				UF - 14.0+								
				OF - 11.0								

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
6477								

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	0445	4 3/4		DRLG 12 1/4 HOLE
0445	0700	2 1/4		SURVEY (MISS) & WORK ON PUMP
0700	0700	1		DRLG

DRILLER: A. Stella

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT		FT.
1	[illegible]	21.40	
2	STB RMR [illegible] OD	120.73	FT.
1	D.C. ID [illegible] OD	2.35	FT.
4	STB RMR [illegible] OD	114.70	FT.
1	D.C. ID [illegible] OD	1.71	FT.
4	STB RMR [illegible] OD	114.61	FT.
1	[illegible]	1.71	
1	[illegible]	[illegible]	
1	[illegible]	2.50	
63	STANDS DP	5857.53	FT.
2	SINGLES DP	63.12	FT.
	KELLY DOWN	11.23	FT.
	TOTAL	6543	FT.

WT. OF STRING 180000 LBS.

BIT RECORD

BIT NO.	25
SIZE	12 1/4
MFG.	SMITH
TYPE	SDGH
JETS 1 32"	14 14 15
SER. NO.	KV-455
DEPTH OUT	6339
DEPTH IN	6537
TOTAL FTG.	204
TOTAL HRS. RUN	37
COND. 1/8's T/B/ GAGE	RUN
GPM/ PD-PSI	

MUD RECORD

TIME	[illegible]	[illegible]
WEIGHT	11.0	11.1
PRESSURE GRADIENT		
VISC.-SEC.	60	[illegible]
PV/YP	/	/ /
GELS.	/	/ /
WL -CC'S.		9.2
pH	10.0	10
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]	[illegible]		
[illegible]	10 [illegible]		
[illegible]	[illegible]		

FOOTAGE

FROM	TO	DR'D RM'R CORE'C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL-S PAR-EL-P COMPL-C
[illegible]	[illegible]	D		31	[illegible]	[illegible]		[illegible]				S
							1600			6 [illegible]	6 [illegible]	S

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
[illegible]	[illegible]	[illegible]						

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
[illegible]	[illegible]			[illegible]
[illegible]	[illegible]	1		[illegible]
[illegible]	[illegible]	1		[illegible]

DRILLER: [illegible]

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT SUB	1.00	4.10 FT.
1	MONEL	29.60	
2	STB RMR 12" OD	22.67	FT.
1	D.C. ID [illegible] OD	2.86	FT.
4	STB RMR 9" OD	114.70	FT.
1	D.C. [illegible] OD	1 [illegible]	FT.
18	STB RMR 6 1/2 DC'S OD	260.52	FT.
1	7/8	2.50	
		617.12	
62	STANDS DP	5-152.05	FT.
	SINGLES DP		FT.
	KELLY DOWN	22.5	FT.
	TOTAL	6540	FT.

WT. OF STRING 180000 LBS.

BIT RECORD

BIT NO.	[illegible]
SIZE	[illegible]
MFG.	[illegible]
TYPE	[illegible]
JETS 1/32"	[illegible]
SER. NO.	[illegible]
DEPTH OUT	[illegible]
DEPTH IN	[illegible]
TOTAL FTG.	266
TOTAL HRS. RUN	38 45
COND. 1/8's T/B/ GAGE	RUN
GPM/ PD-PSI	

MUD RECORD

TIME	[illegible]	2000	2200
WEIGHT	11.2	11.1	11.1
PRESSURE GRADIENT			
VISC.-SEC.	60	59	61
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	9.2		
pH	10.0	10.0	10.0
SOLIDS %	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]	8000#		
[illegible]	2000#		
[illegible]	14 #		
[illegible]	150 #		

FOOTAGE

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 SCHL-S PAR-EL-P COMPL-C
[illegible]	6590	D						6 3/4				
							1600			6 [illegible]	6 [illegible]	S

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
[illegible]	2400	8		[illegible]

DRILLER: [illegible]

FORM 3T6 — APPROVED — APPROVED

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

C 23578

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
POINTED MTN	A-4	A-55-00-30-123-W45	5-25-74

OPERATOR: AMOCO CANADA LTD

CONTRACTOR: LOFFLAND BROTHERS COMPANY — RIG NO. 72

SIGNATURE OF OPERATOR'S REPRESENTATIVE:

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Al Burkhalter

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

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-IIIC	18"
2	Emsco	D-IIC	16"

LEGAL LAND DESCRIPTION: POINTED MTN A-55

WIRE LINE RECORD — REEL NO. — SIZE 1 3/8 — NO. LINES 10 — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH — TON MI. OR TRIPS SINCE LAST CUT — CUMULATIVE TON MI. OR TRIPS

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
13 3/8						2503

TIME DISTRIBUTION – HOURS

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

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

MRS. W/CONTR. D.P.

MRS. W/OPR. D.P.

MRS. WO/D.P.

MRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD: 86

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

NO. 1 — DRILLING ASSEMBLY (At end of tour)

1	BIT	1.00 FT.	
1	Bit Sub	4.10	
1	STB RMR Monitor	29.60 FT.	
2	D.C. #10 OD 9" ID	62.07 FT.	
1	STB RMR Bench OD	2.86 FT.	
4	D.C. #10 OD 9" ID	114.17 FT.	
1	STB RMR 6/0 OD	1.45 FT.	
4	D.C. #10 OD 7" ID	116.61 FT.	
9	6 1/2 D.C. #10 OD	280.52	
1	6/0	2.50	
61	STANDS DP	5674.17 FT.	
2	SINGLES DP	61.24 FT.	
	KELLY DOWN	43.39 FT.	
	TOTAL	6356 FT.	

WT. OF STRING 176000 LBS.

BIT RECORD

BIT NO.	25
SIZE	12 1/4
MFG.	SMITH
TYPE	SDGH
JETS 1/32"	14 14 15
SER. NO.	RV-955
DEPTH OUT	
DEPTH IN	6339
TOTAL FTG.	47
TOTAL HRS. RUN	9 1/2
COND. 1/8's T.B. GAGE	K I N
GPM/ PD-PSI	/ /

MUD RECORD

TIME	0100	0300	0600
WEIGHT	11.2	11.2	11.1
PRESSURE GRADIENT			
VISC.-SEC.	55	57	58
PV/YP	/	/	/
GELS	/	/	/
WL-CC'S			
pH	10	10	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	1000#		
SELEX	4 SXS		
X-TEX-6	150#		
H2O	56BM		

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. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHLUM'S PARTIAL OR COMPLETE
6349	6396	D		DISCHARGE - 6 1/2 GPM	50	45	1900	6 3/4	50	6 1/4		S
				UF - 14.4	50	43	1900	6 3/4	50			
				CF - 11.0								

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
0001	0800	8		DRLG 12 1/4 HOLE

DRILLER

NO. 2 — DRILLING ASSEMBLY (At end of tour)

1	BIT	1.00 FT.	
1	Bit Sub	4.10	
1	STB RMR Monitor OD	29.60 FT.	
2	D.C. #10 OD 9" ID	62.07 FT.	
1	STB RMR Bench OD	2.86 FT.	
4	D.C. #10 OD 9" ID	114.17 FT.	
1	STB RMR 6/0 OD	1.45 FT.	
4	D.C. #10 OD 7" ID	116.61 FT.	
9	6 1/2 D.C. #10 OD	280.52	
1	6/0	2.50	
61	STANDS DP	5674.17 FT.	
2	SINGLES DP	61.24 FT.	
	KELLY DOWN	43.39 FT.	
	TOTAL	6356 FT.	

WT. OF STRING 176000 LBS.

BIT RECORD

BIT NO.	25
SIZE	12 1/4
MFG.	SMITH
TYPE	SDGH
JETS 1/32"	14 14 15
SER. NO.	RV-955
DEPTH OUT	
DEPTH IN	6339
TOTAL FTG.	47
TOTAL HRS. RUN	9 1/2
COND. 1/8's T.B. GAGE	K I N
GPM/ PD-PSI	/ /

MUD RECORD

TIME	0100	0300	0600
WEIGHT	11.2	11.2	11.1
PRESSURE GRADIENT			
VISC.-SEC.	55	57	58
PV/YP	/	/	/
GELS	/	/	/
WL-CC'S			
pH	10	10	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	1000#		
SELEX	4 SXS		
X-TEX-6	150#		
H2O	56BM		

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. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHLUM'S PARTIAL OR COMPLETE
1211	1451	D		[illegible]	50	45						
										6 1/4	60	S

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		

DRILLER

NO. 3 — DRILLING ASSEMBLY (At end of tour)

1	BIT	1.00 FT.	
1	Bit Sub	4.10	
1	STB RMR Monitor OD	29.60 FT.	
2	D.C. #10 OD 9" ID	62.07 FT.	
1	STB RMR Bench OD	2.86 FT.	
4	D.C. #10 OD 7" ID	114.36 FT.	
1	STB RMR 6/0 OD	1.45 FT.	
4	D.C. #10 OD 7" ID	116.61 FT.	
9	6 1/2 DCS	280.52	
1	6/0	2.50	
		617.12	
62	STANDS DP	5857.53 FT.	
3	SINGLES DP	17.35 FT.	
	KELLY DOWN	43.92 FT.	
	TOTAL	6492 FT.	

WT. OF STRING 176000 LBS.

BIT RECORD

BIT NO.	25
SIZE	12 1/4
MFG.	SMITH
TYPE	SDGH
JETS 1/32"	14 14 15
SER. NO.	RV-955
DEPTH OUT	6396
DEPTH IN	6349
TOTAL FTG.	153
TOTAL HRS. RUN	24 1/4
COND. 1/8's T.B. GAGE	K I N
GPM/ PD-PSI	/ /

MUD RECORD

TIME	1730	1730	22:00
WEIGHT	11.2	11.2	11.1
PRESSURE GRADIENT			
VISC.-SEC.	65	69	72
PV/YP	/	/	/
GELS	/	/	/
WL-CC'S			
pH	10	10	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	1000#		
Gelex	4#		

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. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHLUM'S PARTIAL OR COMPLETE
1451	6491	D					1600	6 3/4		6 1/4	60	S

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
1730	2145	5 3/4		[illegible]
2145	2300	1 1/4		EASTMAN SURVEY – MISSRUN
2300		1		DRLG 12 1/4 HOLE

DRILLER

FORM 3T6 — APPROVED — APPROVED

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

C 23577

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
POINTED MTN	A-41	A-55-60-30-123-W45	5-24-74

OPERATOR	CONTRACTOR	RIG NO.
AMOCO CANADA LTD	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [illegible]

LEGAL LAND DESCRIPTION: POINTED MTN A-55

D.P. SIZE	WT./FT.	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	D-1000	18"
2	EMSCO	D-700	16"

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
13 3/8						253

WIRE LINE RECORD — REEL NO.

SIZE 1 3/8 — NO. LINES 18 — FT. SLIPPED

FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRISUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1.	RIG UP AND TEAR DOWN			
2.	DRILL ACTUAL	7	3 1/2	1 1/2
3.	REAMING	1		2 1/2
4.	CORING			
5.	CONDITION MUD & CIRCULATE		1/2	
6.	TRIPS		2 1/2	2 1/2
7.	LUBRICATE RIG			
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.			
16.	DRILL STEM TEST			
17.	PLUG BACK			
18.	SQUEEZE CEMENT			
19.	FISHING			
20.	DIR. WORK			
21.	OTHER			1/2
22.	OTHER			1/2
23.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8	5	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: 85

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT	4.10 FT.	BIT NO.	24
1	MONEL	29.60	SIZE	12 1/4
1	STB RMR OD	6.07 FT.	MFG.	SMITH
4	D.C. ID OD	114.46 FT.	TYPE	SDGH
4	STB RMR 7 5/8 OD	116.61 FT.	JETS 1/32"	15 14 14
1	D.C. ID OD	1.71 FT.	SER. NO.	RY-006
9	STB RMR 7 1/8 OD	280.51 FT.	DEPTH OUT	
1	7 1/8	2.55	DEPTH IN	5850
		617.12	TOTAL FTG.	456
			TOTAL HRS. RUN	99
61	STANDS DP	5674.17 FT.	COND. 1/8's T/B GAGE	RUN
—	SINGLES DP	FT.	GPM/ PD-PSI	/
	KELLY DOWN	FT.		34.71
	TOTAL	FT.		6326

WT. OF STRING 176000 LBS.

MUD RECORD			
TIME	0100	0400	0600
WEIGHT	11.4	11.1	11.5
PRESSURE GRADIENT			
VISC.-SEC.	53	55	55
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	9.5	9.5	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
X-PEL-G	150 #		

FOOTAGE FROM	FOOTAGE TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
6292	6326	D		DESANDER – DISCHARGE – 5 GPM	50	45	1900	6 3/4	50	6 1/2		5
				UF – 13.4								
				OF – 11.0+								

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
0001	0230	2 1/2		DRLG 12 1/4 HOLE
0230	0330	1		REAM BACK TO BOTTOM – 6' OF FILL ON BTM
0330	0800	4 1/2		DRLG 12 1/4 HOLE

DRILLER: [illegible]

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT	4.10 FT.	BIT NO.	24
1	[illegible]		SIZE	12 1/4
1	STB RMR OD	FT.	MFG.	SMITH
2	D.C. ID OD	FT.	TYPE	SDGH
1	STB RMR OD	FT.	JET 1/32"	15 14 14
1	D.C. ID OD	FT.	SER. NO.	RY-006
1	STB RMR OD	FT.	DEPTH OUT	
1			DEPTH IN	5850
1			TOTAL FTG.	48
1			TOTAL HRS. RUN	1 1/2
61	STANDS DP	5674.17 FT.	COND. 1/8's T/B GAGE	3 6 1
1	SINGLES DP	29.83 FT.	GPM/ PD-PSI	/
	KELLY DOWN	17.72 FT.		
	TOTAL	FT.		

WT. OF STRING 176000 LBS.

MUD RECORD			
TIME	[illegible]		
WEIGHT	11.2	11.2	
PRESSURE GRADIENT			
VISC.-SEC.	53	49	
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	10.0	10.2	
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]			

FOOTAGE FROM	FOOTAGE TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
1325	6326	D		[illegible]	50	45	1900	6 3/4	50			5
							1900			6 1/2	50	5

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
6326	1	[illegible]						

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	1130	3 1/2		[illegible]
1130	1200	1/2		CIRCULATE
1200	1230	1/2		[illegible]
1230	1400	1 1/2		STRAP OUT OF HOLE TO 6326

DRILLER: [illegible]

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
	BIT	FT.	BIT NO.	25
	[illegible]		SIZE	12 1/4
	STB RMR OD	FT.	MFG.	SMITH
	D.C. ID OD	FT.	TYPE	SDGH
	STB RMR OD	FT.	JETS 1/32"	14 14 14
	D.C. ID OD	FT.	SER. NO.	RY-005
	STB RMR OD	FT.	DEPTH OUT	
			DEPTH IN	6339
	TOOLS	617.12	TOTAL FTG.	10
			TOTAL HRS. RUN	
61	STANDS DP	5674.17 FT.	COND. 1/8's T/B GAGE	RUN
1	SINGLES DP	29.83 FT.	GPM/ PD-PSI	/
	KELLY DOWN	27.78 FT.		
	TOTAL	FT.	6349	

WT. OF STRING 176000 LBS.

MUD RECORD			
TIME			2300
WEIGHT			11.2
PRESSURE GRADIENT			
VISC.-SEC.			58
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	FOOTAGE 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
1325	6349	D										

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1800	1830	1/2		FINISH OUT
1830	1700	1/2	21	CHANGE OUT MUD ENGINE SWIVEL PACKING
1700	1715	2 1/4		RUN IN W/ BIT #5
1715	1745	1/2	22	UNLOAD D.P. IN HOLE
1745	2230	2 3/4		CLEAN TO BOTTOM FROM 6326 TO 6339 – 13'
2230	2400	1 1/2		DRLG – 12 1/4 HOLE

DRILLER: [illegible]

C 23576

DAILY DRILLING REPORT REPORT NO. 84

LEASE	WELL NO.	API WELL NUMBER	DATE
PUNTED MTN	A-4	A-55-10-3C-123-W145	05-23-74

OPERATOR	CONTRACTOR	RIG NO.
AMOCO CANADA LTD	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

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

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	D-1000	18"
2	EMSCO	D-700	18"

LEGAL LAND DESCRIPTION PUNTED MTN A-55

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
13 3/8						225.3

WIRE LINE RECORD REEL NO.

SIZE 13/8 NO. LINES 10 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	8	7	8
3.	REAMING			
4.	CORING			
5.	CONDITION MUD & CIRCULATE			
6.	TRIPS			
7.	LUBRICATE RIG			
8.	REPAIR RIG			
	CUT OFF DRILLING LINE			
10.	DEVIATION SURVEY			
11.	WIRE LINE LOGS			
12.	RUN CASING & CEMENT			
13.	WAIT ON CEMENT			
14.	NIPPLE UP B.O.P.			
15.	TEST B.O.P.			
16.	DRILL STEM TEST			
17.	PLUG BACK			
18.	SQUEEZE CEMENT			
19.	FISHING			
20.	DIR. WORK			
21.				
22.				
23.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8	9	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 84

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT SUB	1.00	FT.
1	MONEL	29.60	
2	STB RMR 9" DC OD	62.67	FT.
5	DC BEVEL ID 7" DC OD	3.96	FT.
4		116.70	FT.
1	STB RMR 6 1/8 OD	6.45	FT.
4	DC ID 7" DC OD	116.61	FT.
1	STB RMR 6 1/8 OD	1.71	FT.
9	6 1/2 DC's	280.52	
1	6 5/8 SUB	2.50	
		617.12	FT.
60	STANDS DP	5580.88	FT.
—	SINGLES DP		FT.
	KELLY DOWN	19.93	FT.
	TOTAL	6222	FT.
WT. OF STRING		175000	LBS.

BIT RECORD

BIT NO.	2H
SIZE	12 1/4
MFG.	SMITH
TYPE	SDGH
JETS 1 32"	15 14 14
SER. NO.	RECORD
DEPTH OUT	
DEPTH IN	5850
TOTAL FTG.	372
TOTAL HRS. RUN	7¼
COND. 1/8's T/B GAGE	K U N
GPM/ PD-PSI	/

MUD RECORD

TIME	[illegible]	[illegible]	[illegible]
WEIGHT	[illegible]	[illegible]	[illegible]
PRESSURE GRADIENT			
VISC.-SEC.	64	52	[illegible]
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH	[illegible]	[illegible]	9.0
SOLIDS %	[illegible]		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
X-TEND	150 #		
W-LOSS	50 #		
H.D.	[illegible]		

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
6127	6222	D			50	45	1000	6 3/4	50	6 1/4		S

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
0001	0800	8		DRLG 12 1/4 HOLE

DRILLER

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT		FT.
	STB RMR OD		FT.
1	D.C. ID OD		FT.
4	STB RMR OD		FT.
1	D.C. ID OD		FT.
4	STB RMR OD		FT.
1			
10	STANDS DP		FT.
1	SINGLES DP		FT.
	KELLY DOWN	10.11	FT.
	TOTAL	120.50	FT.
WT. OF STRING		175000	LBS.

BIT RECORD

BIT NO.	[illegible]
SIZE	[illegible]
MFG.	[illegible]
TYPE	[illegible]
JET 1/32"	[illegible]
SER. NO.	[illegible]
DEPTH OUT	
DEPTH IN	6350
TOTAL FTG.	411
TOTAL HRS. RUN	94
COND. 1/8's T/B GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME	[illegible]	[illegible]	[illegible]
WEIGHT	[illegible]	[illegible]	[illegible]
PRESSURE GRADIENT			
VISC.-SEC.	[illegible]	[illegible]	[illegible]
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH	10.0		
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]			
[illegible]			
[illegible]			

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
12	[illegible]	D		[illegible]	50	45	1150	6 3/4	50			S
							[illegible]			6 1/4	60	S

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
[illegible]	1100	5		[illegible]

DRILLER

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT	1	FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
60	STANDS DP	5580.88	FT.
1	SINGLES DP	13.07	FT.
	KELLY DOWN	20.44	FT.
	TOTAL	6282	FT.
WT. OF STRING		176000	LBS.

BIT RECORD

BIT NO.	2H
SIZE	12 1/4
MFG.	SMITH
TYPE	SDGH
JETS 1/32"	14 14 14
SER. NO.	RX-[illegible]
DEPTH OUT	
DEPTH IN	6350
TOTAL FTG.	432
TOTAL HRS. RUN	92
COND. 1/8's T/B GAGE	K U N
GPM/ PD-PSI	/

MUD RECORD

TIME	[illegible]	[illegible]	[illegible]
WEIGHT	[illegible]	[illegible]	[illegible]
PRESSURE GRADIENT			
VISC.-SEC.	49	49	45
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S	9.2		
pH	10.0	5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
12	6292	D		[illegible]	50	45	1150	6 3/4	50	6 1/4		S
				[illegible]	50	45	1600	[illegible]	[illegible]	6 1/4	60	S
					50	45	1450	6 3/4	50			S

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
	2400	8		[illegible]

DRILLER

FORM 3T6 APPROVED APPROVED

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

C 23575

DAILY DRILLING REPORT — REPORT NO. 83

LEASE	WELL NO.	API WELL NUMBER	DATE
[illegible]	2-4	0-56-40-38-123-W45	05-22-74

OPERATOR	CONTRACTOR	RIG NO.
[illegible]	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

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

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

LEGAL LAND DESCRIPTION: Pinto area 2-56

WIRE LINE RECORD — REEL NO.

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING, TUBING OR LINER	8 5/8						3503

SIZE 7/16 — NO. LINES 10 — 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	8	8	7
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			1
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				
COMPLETION	A. PERF'R'T'N			
	B. TBG STRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.

HRS. W/OPR. D.P.

HRS. WO/D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD: 93

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 12 1/4	4.16	FT.
1	[illegible]	29.66	
2	STB RMR 12 OD	12.17	FT.
1	D.C. ID 6 1/4 OD	2.86	FT.
4	STB RMR 12 OD	16.76	FT.
1	D.C. ID 6 1/4 OD	1.46	FT.
4	STB RMR 12 OD	4.11	FT.
	[illegible]	1.00	
9	[illegible]	90.2	
1	[illegible]	2.50	
56	STANDS DP	5342.21	FT.
2	SINGLES DP	363.82	FT.
	KELLY DOWN	38.81	FT.
	TOTAL	6112	FT.

WT. OF STRING 174,000 LBS.

BIT RECORD

BIT NO.	24
SIZE	12 1/4
MFG.	Security
TYPE	S 33
JETS 1 32"	14 14 14
SER. NO.	834166
DEPTH OUT	
DEPTH IN	5750
TOTAL FTG.	262
TOTAL HRS. RUN	53
COND. 1/8's T-B GAGE	RUN
GPM/ PD-PSI	/ /

MUD RECORD

TIME	2001	0300	0600
WEIGHT	11.3+	11.3	11.3
PRESSURE GRADIENT			
VISC.-SEC.	57	55	56
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH	10.0	10.0	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
X-DEL-G	150#		
H2O	4 BBLS		

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT		FT.
	[illegible]		
	STB RMR OD		FT.
1	D.C. ID OD		FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1		1.01	
1			
5	STANDS DP		FT.
1	SINGLES DP		FT.
	KELLY DOWN	13.60	FT.
	TOTAL	[illegible]	FT.

WT. OF STRING [illegible] LBS.

BIT RECORD

BIT NO.	[illegible]
SIZE	[illegible]
MFG.	[illegible]
TYPE	[illegible]
JET 1/32"	14 14 14
SER. NO.	[illegible]
DEPTH OUT	
DEPTH IN	5750
TOTAL FTG.	213
TOTAL HRS. RUN	6 1
COND. 1/8's T.B GAGE	
GPM/ PD-PSI	/ /

MUD RECORD

TIME	[illegible]	[illegible]	1530
WEIGHT	[illegible]	[illegible]	[illegible]
PRESSURE GRADIENT			
VISC.-SEC.	[illegible]	4	[illegible]
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.			
pH	[illegible]	[illegible]	[illegible]
SOLIDS %	[illegible]	[illegible]	[illegible]

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]			

DRILLING ASSEMBLY (At end of tour)

NO.			
[illegible]	BIT	1	FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
	D.C. ID OD	8	FT.
	STB RMR OD		FT.
		3	
	TOOLS	617.12	
57	STANDS DP	5486.41	FT.
2	SINGLES DP	62.1	FT.
	KELLY DOWN	38.86	FT.
	TOTAL	6187	FT.

WT. OF STRING 175000 LBS.

BIT RECORD

BIT NO.	[illegible]
SIZE	[illegible]
MFG.	[illegible]
TYPE	[illegible]
JETS 1/32"	[illegible]
SER. NO.	[illegible]
DEPTH OUT	[illegible]
DEPTH IN	5750
TOTAL FTG.	337
TOTAL HRS. RUN	65
COND. 1/8's T/B/ GAGE	RUN
GPM/ PD-PSI	/ /

MUD RECORD

TIME	[illegible]	[illegible]	[illegible]
WEIGHT	[illegible]	[illegible]	[illegible]
PRESSURE GRADIENT			
VISC.-SEC.	[illegible]	45	[illegible]
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.			
pH	10.0	[illegible]	[illegible]
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

MORNING TOUR

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL.-S PAN-EL-P COM.-C
5773	6112	39			50	45	1900	6 3/4	50	6 1/4		S

DEVIATION RECORD

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	0800	8		[illegible]

DRILLER [illegible]

DAY TOUR

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL.-S PAN-EL-P COM.-C
6112	[illegible]						1200					S

DEVIATION RECORD

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
[illegible]	[illegible]			[illegible]

DRILLER [illegible]

EVENING TOUR

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL.-S PAN-EL-P COM.-C
6123	6187	D			50	45	1900	6 3/4	50	6 1/2		S

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
6177	2°	S 32 W						

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1600	2145	5 3/4		[illegible]
2145	2245	1		ERICKSON SURVEY & CORE @ 6177'
2245	2400	1 1/4		DRLG 12 1/4 HOLE

DRILLER [illegible]

C 23574

DAILY DRILLING REPORT

REPORT NO. 53

LEASE	WELL NO.	API WELL NUMBER	DATE
Pierce Unit	A-4	15-055-00343-0001	5-21-71

OPERATOR	CONTRACTOR	RIG NO.
Amoco Production Co.	LOFFLAND BROTHERS COMPANY	1

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
J. L. Cates	O. E. Burkett

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5"	19.5	E	6 5/8	H-90	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-375	16"
2	Emsco	D-375	16"

LEGAL LAND DESCRIPTION: Pierce Field Area A-55

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13 3/8						3552

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TOH MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1.	RIG UP AND TEAR DOWN			
2.	DRILL ACTUAL	5	7½	4
3.	REAMING			
4.	CORING			
5.	CONDITION MUD & CIRCULATE			
6.	TRIPS			
7.	LUBRICATE RIG			
8.	REPAIR RIG			
9.	CUT OFF DRILLING LINE			
10.	DEVIATION SURVEY		½	
11.	WIRE LINE LOGS			
12.	RUN CASING & CEMENT			
13.	WAIT ON CEMENT			
14.	NIPPLE UP B.O.P.			
15.	TEST B.O.P.			
16.	DRILL STEM TEST			
17.	PLUG BACK			
18.	SQUEEZE CEMENT			
19.	FISHING			
20.	DIR. WORK			
21.				
22.				
23.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		5	8	4

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: 53

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT 12¼	1,000 FT.	BIT NO.	24
1	9 DC 8"	277	SIZE	12¼
1	STB RMR OD 12"	FT.	MFG.	Smith
9	D.C. ID 2¼ OD 8"	FT.	TYPE	DGJ
1	STB RMR OD 12"	FT.	JETS 1/32"	14 14 14
9	D.C. ID 2¼ OD 8"	FT.	SER. NO.	RX-11
1	STB RMR OD 12"	FT.	DEPTH OUT	
9	9 DC 8"	277 FT.	DEPTH IN	5550
1	11	1.00	TOTAL FTG.	152
1	12"	2.00	TOTAL HRS. RUN	37
47	STANDS DP	5,350 FT.	COND. 1/8's T/B/ GAGE	1-1-I
	SINGLES DP	41.50 FT.	GPM/ PD-PSI	/
	KELLY DOWN	32 FT.		
	TOTAL	5,550 FT.		
WT. OF STRING	170,000	LBS.		

MUD RECORD			
TIME	0600	1100	0600
WEIGHT	11.2	11.2	11.2
PRESSURE GRADIENT			
VISC.-SEC.	45	49	50
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	10.5	10.5	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Lignite	150#		
Caustic	100#		

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT 12¼	1,550 FT.	BIT NO.	24
1	DP 5"	2,000	SIZE	12¼
2	STB RMR OD 12"	62.47 FT.	MFG.	Smith
1	D.C. ID 2¼ OD 8"	29.96 FT.	TYPE	SDGH
4	STB RMR OD 12"	14.77 FT.	JET 1/32"	16 16 16
1	D.C. ID 2¼ OD 8"	1.06 FT.	SER. NO.	RX-11
4	STB RMR OD 12"	14.01 FT.	DEPTH OUT	
1	DP 5"	4.71	DEPTH IN	5550
3	DP 5"	1052	TOTAL FTG.	142
1	DP 5"	2.50	TOTAL HRS. RUN	37
55	STANDS DP	5350.00 FT.	COND. 1/8's T/B/ GAGE	RUN
	SINGLES DP	27.42 FT.	GPM/ PD-PSI	/
	KELLY DOWN	32.88 FT.		
	TOTAL	6002.00 FT.		
WT. OF STRING	172,000	LBS.		

MUD RECORD			
TIME	0800	1100	1520
WEIGHT	11.3	11.2	11.2
PRESSURE GRADIENT			
VISC.-SEC.	53	52	50
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	10.0	10.0	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	100#		
CMC-LV	4#		
SODA ASH	300#		
H2O	10 BPH		

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT 12¼	1,073 FT.	BIT NO.	24
1	DP 5"	2,000	SIZE	12¼
2	SYB RMR OD 12"	62.07 FT.	MFG.	Smith
1	D.C. ID 2¼ OD 8"	29.96 FT.	TYPE	SDGH
4	SYB RMR OD 12"	14.70 FT.	JETS 1/32"	16 16 16
1	D.C. ID 2¼ OD 8"	1.06 FT.	SER. NO.	RX-11
4	SYB RMR OD 12"	14.01 FT.	DEPTH OUT	
1	DP 5"	4.71	DEPTH IN	5550
3	DP 5"	1052	TOTAL FTG.	142
1	DP 5"	2.50	TOTAL HRS. RUN	37
55	STANDS DP	5350.00 FT.	COND. 1/8's T/B/ GAGE	RUN
1	SINGLES DP	27.42 FT.	GPM/ PD-PSI	/
	KELLY DOWN	32.88 FT.		
	TOTAL	6002.00 FT.		
WT. OF STRING	172,000	LBS.		

MUD RECORD			
TIME	1600	2000	2300
WEIGHT	11.2	11.1	11.2
PRESSURE GRADIENT			
VISC.-SEC.	50	47	49
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	10.0	10.0	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Material	70 SX		
Caustic	2 SX		
H2O			

DAY TOUR

FOOTAGE: FROM 5552 TO 6002 — DR.-D RM.-R CORE-C: D — CORE NO.: — FORMATION (SHOW CORE RECOVERY): — ROTARY RPM: 55 — WT. ON BIT 1000#: 4-7 — PUMP PRESS: 1600 — PUMP NO. 1: LINER SIZE 6½ — S.P.M. 120 — PUMP NO. 2: LINER SIZE 6½ — S.P.M. 50 — METHOD RUN: SCHLUM. FARMER P COMPCO: 5

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
0001	2400	5	2	Drilling 12¼ hole

DRILLER: [illegible]

FOOTAGE: FROM 5552 TO 6042 — DR.-D RM.-R CORE-C: D — CORE NO.: — FORMATION (SHOW CORE RECOVERY): Wood River Clean Nor Settles — ROTARY RPM: 55 — WT. ON BIT 1000#: 4-5 — PUMP PRESS: 1900 — PUMP NO. 1: LINER SIZE 6½ — S.P.M. 60 — PUMP NO. 2: LINER SIZE 6½ — S.P.M. — METHOD RUN: SCHLUM. FARMER P COMPCO: 5

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
1400	3	S5°W						

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	0600	6	2	Drilling 12¼ hole
0600	1100	5	5	Circulate & condition mud for logs
1100	1600	4½	11	Run DIL, Sonic, Density, Caliper logs

DRILLER: [illegible]

EVENING TOUR

FOOTAGE: FROM 6042 TO 6073 — DR.-D RM.-R CORE-C: D — CORE NO.: — FORMATION (SHOW CORE RECOVERY): — ROTARY RPM: — WT. ON BIT 1000#: 31 — PUMP PRESS: — PUMP NO. 1: LINER SIZE 6½ — S.P.M. — PUMP NO. 2: LINER SIZE — S.P.M. — METHOD RUN: SCHLUM. FARMER P COMPCO:

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
1600	2400	8	2	Drilling 12¼ hole

DRILLER: [illegible]

FORM 3T6

APPROVED — APPROVED

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

C 23573

DAILY DRILLING REPORT — REPORT NO. 21

LEASE	WELL NO.	API WELL NUMBER	DATE
Pioneer Nuclear	B-4	17-55-6-36-133 45	5-22-74

OPERATOR — SIGNATURE OF OPERATOR'S REPRESENTATIVE

CONTRACTOR: LOFFLAND BROTHERS COMPANY — RIG NO. 72

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

LEGAL LAND DESCRIPTION: Pioneer Nuclear A-55

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5	19.50	E	6 5/8	NC 50	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Ellis	D-1600	12"
2	Ellis	D-1600	11"

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13 3/8						2553

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	6¾	8	11½
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE	3¼		
6. TRIPS	1¾		
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			¼
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)
HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD 21
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
1	BIT 12¼	1.00	FT.
1	Bit Sub	4.1	
1	STB RMR 11 7/8 OD	27.46	FT.
2	D.C. ID 3 OD	62.07	FT.
1	STB RMR 9 7/8 OD	3.21	FT.
9	D.C. ID OD	274.26	FT.
1	STB RMR 9 7/8 OD	3.45	FT.
44	4 1/2 XH 14.00	1311.11	
1	4 1/2 XH 16.60	25.32	
1		2.50	
56	STANDS DP	5211.76	FT.
1	SINGLES DP	31.74	FT.
	KELLY DOWN	39.00	FT.
	TOTAL	5925.00	FT.
WT. OF STRING	170,000		LBS.

BIT RECORD	
BIT NO.	23
SIZE	12¼
MFG.	Smith
TYPE	SDGH
JETS 1/32"	16 16 16
SER. NO.	RX006
DEPTH OUT	
DEPTH IN	5560
TOTAL FTG.	35
TOTAL HRS. RUN	5¼
COND. 1/8's T.B. GAGE	2 1 WT
GPM/ PD-PSI	

MUD RECORD			
TIME	0730	0900	0930
WEIGHT	11.0	11.2	11.2
PRESSURE GRADIENT			
VISC.-SEC.	53	44	45
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S			
pH	10.1		10.1
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
X-PEL-G	11	Lig	

FOOTAGE FROM	TO	DR.D RM-R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
5550	5605	D			50	45	1400	6¼	50			S

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
0001	0115	1 1/4	6	Run in w/B.T. & DP
0115	0200	¾	3	Drlg 12¼ Hole
0200	0245	¾	5	Circ & Cond Mud System
0245	0500	5 1/4	2	Drlg 12¼ Hole

DRILLER F. L.

NO.	DRILLING ASSEMBLY (At end of tour)		
1	BIT 12¼	1.00	FT.
1	Monel	30.66	
2	STB RMR 11 7/8 OD	62.07	FT.
1	D.C. ID 3 OD	2.86	FT.
6	STB RMR 9 7/8 OD	180.70	FT.
12	D.C. ID OD	1.45	FT.
4	STB RMR 9 7/8 OD	111.11	FT.
1	Cir	1.71	
9	4 1/2 XH 16.60	258.52	
1	Cir	2.50	
56	STANDS DP	5207.76	FT.
2	SINGLES DP	62.21	FT.
	KELLY DOWN	41.72	FT.
	TOTAL	5925.00	FT.
WT. OF STRING	170,000		LBS.

BIT RECORD	
BIT NO.	24
SIZE	12¼
MFG.	Smith
TYPE	SDGH
JET 1/32"	16 16 16
SER. NO.	RX006
DEPTH OUT	
DEPTH IN	5560
TOTAL FTG.	27
TOTAL HRS. RUN	4¾
COND. 1/8's T/B/ GAGE	2 1 WT
GPM/ PD-PSI	

MUD RECORD			
TIME	0900	1200	1500
WEIGHT	11.3	11.3	11.3+
PRESSURE GRADIENT			
VISC.-SEC.	50	49	54
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S			
pH	10.0	10.0	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
X-PEL-G	150#		
W. MAT	3000#		

May 19/74

FOOTAGE FROM	TO	DR.D RM-R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
5550	5927	42			50	45	1900	6¼	50	6¼		S

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
0001	1100	11		Drlg 12¼ Hole

DRILLER L. Lovelace

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
1	BIT 12¼	1.00	FT.
1	Bit Sub	4.1	
1	STB RMR 11 7/8 OD	27.46	FT.
2	D.C. ID 3 OD	62.07	FT.
1	STB RMR 9 7/8 OD	3.21	FT.
11	D.C. ID 3 OD	337.96	FT.
1	STB RMR 9 7/8 OD	1.45	FT.
4	4 1/2 XH 16.60	116.41	
1	Cir	1.71	
17	4 1/2 XH 16.60	440.52	
1	Cir	2.50	
59	STANDS DP	5491.42	FT.
1	SINGLES DP	31.74	FT.
	KELLY DOWN	39.00	FT.
	TOTAL	5925.00	FT.
WT. OF STRING	190,000		LBS.

BIT RECORD	
BIT NO.	24
SIZE	12¼
MFG.	Smith
TYPE	SDGH
JETS 1/32"	15 14 14
SER. NO.	RX006
DEPTH OUT	
DEPTH IN	5560
TOTAL FTG.	113
TOTAL HRS. RUN	21½
COND. 1/8's T/B/ GAGE	2 1 WT
GPM/ PD-PSI	

MUD RECORD			
TIME	1600	1830	
WEIGHT	11.3+	11.1	
PRESSURE GRADIENT			
VISC.-SEC.	55	60	
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S			
pH	10.0	10.0	
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	TO	DR.D RM-R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
5927	5713				50	45	1900	6¼	50	6¼		S

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
5910	34	S56W						

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1600	1615	¼	2	Drlg 12¼ Hole
1615	1645	½	16	Erratic Surv
1645	2400	7 1/4	2	Drlg 12¼ Hole

DRILLER L. Lovelace

Form 3T6 — APPROVED — APPROVED

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

C 23572

DAILY DRILLING REPORT — REPORT NO. 2

LEASE	WELL NO.	API WELL NUMBER	DATE
Pullen Ellen	2-4	42-55-11 20-102 HE	6-5-11

OPERATOR: [illegible]

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

CONTRACTOR: **LOFFLAND BROTHERS COMPANY** — RIG NO. 44

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Bill Hooker

LEGAL LAND DESCRIPTION: Pullen Ellen [illegible]

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5"	19.50	E	6-5/8	4H FH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	[illegible]	D-[illegible]	12
2	[illegible]	D-[illegible]	12

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13 3/8						227'

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. ON TRIPS

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	5	7½	3½
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			1½
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY		½	
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			1½
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21	[illegible]			½
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		5	9	5

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT	[illegible]	FT.
1	[illegible]	[illegible]	
1	STB RMR OD	[illegible]	FT.
1	D.C. ID OD	[illegible]	FT.
1	STB RMR OD	[illegible]	FT.
2	D.C. ID OD	[illegible]	FT.
1	STB RMR OD	[illegible]	FT.
	[illegible]	[illegible]	
	[illegible]	[illegible]	
55	STANDS DP	[illegible]	FT.
	SINGLES DP	[illegible]	FT.
	KELLY DOWN	[illegible]	FT.
	TOTAL	[illegible]	FT.
WT. OF STRING	[illegible]		LBS.

BIT RECORD

BIT NO.	25
SIZE	[illegible]
MFG.	[illegible]
TYPE	X DV
JETS 1-32"	[illegible]
SER. NO.	[illegible]
DEPTH OUT	
DEPTH IN	5[illegible]
TOTAL FTG.	[illegible]
TOTAL HRS. RUN	[illegible]
COND. 1/8's T.B. GAGE	[illegible]
GPM/ PD-PSI	/ /

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]		

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
5724	5813	D			50	40	1200	5 3/8	50			S
					50	40	1200			6 1/4	60	S

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
[illegible]	[illegible]	5	2	Drilling [illegible]

DRILLER [illegible]

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT [illegible]	[illegible]	FT.
1	[illegible]	[illegible]	
2	STB RMR OD	[illegible]	FT.
1	D.C. ID OD	[illegible]	FT.
1	STB RMR OD	[illegible]	FT.
1	D.C. ID OD	[illegible]	FT.
1	STB RMR OD	[illegible]	FT.
1	[illegible]	[illegible]	
1	[illegible]	[illegible]	
1	[illegible]	[illegible]	
54	STANDS DP	[illegible]	FT.
1	SINGLES DP	[illegible]	FT.
	KELLY DOWN	[illegible]	FT.
	TOTAL	[illegible]	FT.
WT. OF STRING	[illegible]		LBS.

BIT RECORD

BIT NO.	2
SIZE	[illegible]
MFG.	[illegible]
TYPE	[illegible]
JET 1/32"	[illegible]
SER. NO.	[illegible]
DEPTH OUT	
DEPTH IN	[illegible]
TOTAL FTG.	193
TOTAL HRS. RUN	[illegible]
COND. 1/8's T/B/ GAGE	[illegible]
GPM/ PD-PSI	/ /

MUD RECORD

TIME	[illegible]	1130	[illegible]
WEIGHT	[illegible]	[illegible]	[illegible]
PRESSURE GRADIENT			
VISC.-SEC.	[illegible]	52	53
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]	200#		
[illegible]	150#		
[illegible]	45gal		

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
5813	5921	D		DUMP & CLEAN MUD SYSTEM	50	40	1800	5 3/8	50			S
				RIG REPAIR								

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
5921	3/4	S47W						

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

DRILLER [illegible]

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT [illegible]	[illegible]	FT.
1	[illegible]	[illegible]	
1	STB RMR OD	[illegible]	FT.
1	D.C. ID OD	[illegible]	FT.
1	STB RMR OD	[illegible]	FT.
1	D.C. ID OD	[illegible]	FT.
1	STB RMR OD	[illegible]	FT.
4	[illegible]	[illegible]	
4	[illegible]	[illegible]	
1	[illegible]	[illegible]	
54	STANDS DP	[illegible]	FT.
	SINGLES DP	[illegible]	FT.
	KELLY DOWN	[illegible]	FT.
	TOTAL	[illegible]	FT.
WT. OF STRING	[illegible]		LBS.

BIT RECORD

BIT NO.	23 24
SIZE	[illegible]
MFG.	[illegible]
TYPE	[illegible]
JETS 1/32"	[illegible]
SER. NO.	[illegible]
DEPTH OUT	[illegible]
DEPTH IN	[illegible]
TOTAL FTG.	201
TOTAL HRS. RUN	53
COND. 1/8's T/B/ GAGE	[illegible]
GPM/ PD-PSI	/ /

MUD RECORD

TIME	1700	1900	
WEIGHT	9.4	11.0	
PRESSURE GRADIENT			
VISC.-SEC.	53	53	
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH	9.5	10.0	
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
5902	[illegible]	D				45	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	S

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
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1930	1245	3 1/4	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

DRILLER [illegible]

C 23571

DAILY DRILLING REPORT

REPORT NO. 71

LEASE	WELL NO.	API WELL NUMBER	DATE
Powell Ranch	11-44	42-033-30151	5-12-14

OPERATOR	CONTRACTOR	RIG NO.
Forest Oil Corp.	LOFFLAND BROTHERS COMPANY	12

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

LEGAL LAND DESCRIPTION: Powell Ranch Unit 11-55

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

	D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
	5	19.50	E	6 1/4	NC50	1	1	National	D-375	15
							2	National	D-375	15

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13 3/8						1513

TIME DISTRIBUTION – HOURS

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

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	79
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT 12¼	1513 FT.	BIT NO.	23
1	8 DC 6¼	462	SIZE	12¼
1	STB RMR OD	FT.	MFG.	Hy
	D.C. ID OD	FT.	TYPE	ATM
1	STB RMR OD	FT.	JETS 1 32nds	12 12 14
11	D.C. ID OD	1001.72 FT.	SER. NO.	149851
1	STB RMR OD	1.65 FT.	DEPTH OUT	
30	STANDS DP	3511.11 FT.	DEPTH IN	5140
	SINGLES DP	FT.	TOTAL FTG.	37
1	KELLY DOWN	39.61 FT.	TOTAL HRS. RUN	7.25
43	TOTAL	4550 FT.	COND. 1/8's T/B/ GAGE	1
WT. OF STRING	145,000	LBS.	GPM. PD-PSI	/ /

MUD RECORD			
TIME	0600	1200	1400
WEIGHT	11.1	11.1	11.1
PRESSURE GRADIENT			
VISC.-SEC.	54	53	53
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	10.0	10.0	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
SODA ASH	200#		
WI-100	10 CF		

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT 12¼	1513 FT.	BIT NO.	23
1	8 DC 6¼	462	SIZE	12¼
2	STB RMR OD	FT.	MFG.	Hy
1	D.C. ID OD	FT.	TYPE	ATM
1	STB RMR OD	FT.	JET 1/32"	12 12 14
11	D.C. ID OD	FT.	SER. NO.	149851
1	STB RMR OD	FT.	DEPTH OUT	
1			DEPTH IN	5140
1			TOTAL FTG.	
1			TOTAL HRS. RUN	
50	STANDS DP	FT.	COND. 1/8's T/B/ GAGE	
	SINGLES DP	FT.	GPM/ PD-PSI	/ /
1	KELLY DOWN	FT.		
	TOTAL	FT.		
WT. OF STRING	145,000	LBS.		

MUD RECORD			
TIME	0800	1200	1400
WEIGHT	11.1+	11.1+	11.2
PRESSURE GRADIENT			
VISC.-SEC.	55	53	53
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	10.0	10.0	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT 12¼	1513 FT.	BIT NO.	23
1	8 DC 6¼	462	SIZE	12¼
2	STB RMR OD	FT.	MFG.	Hy
1	D.C. ID OD	FT.	TYPE	ATM
1	STB RMR OD	FT.	JET 1/32"	12 12 14
11	D.C. ID OD	FT.	SER. NO.	149851
1	STB RMR OD	FT.	DEPTH OUT	
1			DEPTH IN	5140
1			TOTAL FTG.	
1			TOTAL HRS. RUN	
50	STANDS DP	FT.	COND. 1/8's T/B/ GAGE	
	SINGLES DP	FT.	GPM/ PD-PSI	/ /
1	KELLY DOWN	FT.		
	TOTAL	FT.		
WT. OF STRING	145,000	LBS.		

MUD RECORD			
TIME	1600	1800	
WEIGHT	11.1+	11.1	
PRESSURE GRADIENT			
VISC.-SEC.	54	51	
PV/YP	/	/	
GELS.	/	/	
WL -CC'S.			
pH	10.0	9.5	
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
X-FEL	6 350		

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR.-P MULT.-M COMP.-C
5275	5321				50	40	1500	6¼	50			S

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	0600	6	2	Drlg 1134 Ft

DRILLER

DAY TOUR

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S. P. M.	METHOD RUN SGL.-S PAR.-P MULT.-M COMP.-C
5275	5357				50	45	1500	6¼	50	6½		S

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	5326	3½	S 37 W						

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0501	1201	7		Drlg 1134 Ft
1201	1231	½		Survey @ 5326' 3½° S 37 W
1231	1700	5½		Drlg 1191 Ft

DRILLER L. Hancock

EVENING TOUR

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL.-S PAR.-P MULT.-M COMP.-C
5357	5521	D			50	45	1500	6¼	50	6¼		

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
									0

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1700	2400	7		Drlg 1191 Ft

DRILLER

Form 3T6 — APPROVED — APPROVED

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

C 23570

DAILY DRILLING REPORT

REPORT NO. 77

LEASE	WELL NO.	API WELL NUMBER	DATE
[illegible]	[illegible]	[illegible]	[illegible]

OPERATOR	CONTRACTOR	RIG NO.
[illegible]	LOFFLAND BROTHERS COMPANY	[illegible]

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
[illegible]	[illegible]

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

LEGAL LAND DESCRIPTION [illegible]

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. NO.	SET AT
	13 3/8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED
[illegible]	[illegible]	[illegible]

FT. CUT OFF [illegible] PRESENT LENGTH [illegible]

TON MI. OR TRIPS SINCE LAST CUT [illegible]

CUMULATIVE TON MI. OR TRIPS [illegible]

TIME DISTRIBUTION – HOURS

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

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	[illegible]		
CUMULATIVE ROTATING HRS.			
TOTAL MUD COST			

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT [illegible]	[illegible]	FT.
1	[illegible]	[illegible]	
1	STB RMR OD	[illegible]	FT.
1	D.C. ID OD	[illegible]	FT.
1	STB RMR OD	[illegible]	FT.
2	D.C. ID OD	[illegible]	FT.
1	STB RMR OD	[illegible]	FT.
[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	
1	[illegible]	[illegible]	
	STANDS DP	[illegible]	FT.
	SINGLES DP		FT.
	KELLY DOWN	[illegible]	FT.
	TOTAL	[illegible]	FT.

WT. OF STRING [illegible] LBS.

BIT RECORD

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

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]	[illegible]	[illegible]	[illegible]

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT [illegible]	[illegible]	FT.
1	[illegible]	[illegible]	
2	STB RMR OD	[illegible]	FT.
1	D.C. ID OD	[illegible]	FT.
1	STB RMR OD	[illegible]	FT.
4	STB RMR OD	[illegible]	FT.
1	[illegible]	[illegible]	
2	[illegible]	[illegible]	
1	[illegible]	[illegible]	
64	STANDS DP	[illegible]	FT.
	SINGLES DP		FT.
	KELLY DOWN	[illegible]	FT.
	TOTAL	[illegible]	FT.

WT. OF STRING [illegible] LBS.

BIT RECORD

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

MUD RECORD

TIME	[illegible]	[illegible]	1600
WEIGHT	[illegible]	[illegible]	11.3
PRESSURE GRADIENT	[illegible]	[illegible]	52
VISC.–SEC.	[illegible]	[illegible]	[illegible]
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.	[illegible]		
pH	[illegible]	[illegible]	10.0
SOLIDS %	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]	[illegible]	[illegible]	[illegible]

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 12 1/4	[illegible]	FT.
1	[illegible]	[illegible]	
1	STB RMR OD	[illegible]	FT.
2	D.C. ID OD	[illegible]	FT.
1	STB RMR OD	[illegible]	FT.
4	D.C. ID OD	[illegible]	FT.
1	STB RMR OD	[illegible]	FT.
[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	
1	[illegible]	[illegible]	
54	STANDS DP	[illegible]	FT.
1	SINGLES DP	[illegible]	FT.
	KELLY DOWN	[illegible]	FT.
	TOTAL	[illegible]	FT.

WT. OF STRING [illegible] LBS.

BIT RECORD

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

MUD RECORD

TIME	1800	[illegible]	0300
WEIGHT	11.2+	11.2	11.2
PRESSURE GRADIENT			
VISC.–SEC.	52	41	[illegible]
PV/YP	/	20/8	/
GELS.	/	1/[illegible]	/
WL –CC'S.	[illegible]	[illegible]	
pH	10.0	[illegible]	
SOLIDS %	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	

MUD & CHEMICALS

TYPE	AMT.	TYPE	AMT.
[illegible]	[illegible]	[illegible]	[illegible]

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. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
5420	5617			[illegible]	50	45	[illegible]	[illegible]	[illegible]			S
[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	5734	3° 4	S 48 W						

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
[illegible]	[illegible]	1	1	Drill 12 1/4 Hole
[illegible]	[illegible]	1/4	10	Surv.
[illegible]	[illegible]	1/4	21	Slip Line & Lub. Rig
[illegible]	[illegible]			Drill 12 1/4 Hole
[illegible]	[illegible]			[illegible]
[illegible]	[illegible]			[illegible]
[illegible]	[illegible]			[illegible]
0700	0900	4 1/2		[illegible]
0900	1000	1		[illegible]

DRILLER [illegible]

FOOTAGE / FORMATION

FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
5100	5115			DUMP & CLEAN MUD SETTLING PIT	50	100	[illegible]	[illegible]	50	6 1/4		S
[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

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
0600	1200	6	1	R.A.
1200	1315	1 1/4	5	C. & C. MUD
1315	1330	1/4	21	S. & C. Line
1330	1345	1/4	2	Trip
1345	1800	4 1/4	1	Drill 12 1/4 Hole
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

DRILLER [illegible]

FOOTAGE / FORMATION

FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
5661	5695	D		[illegible]	52	45	1500	1 3/4	50	6 1/4		S
[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

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
[illegible]	[illegible]	5	2	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

DRILLER [illegible]

Form 3T6

APPROVED APPROVED

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

C 23569

DAILY DRILLING REPORT — REPORT NO. 171

LEASE	WELL NO.	API WELL NUMBER	DATE
Pullen B Fee	11-4	42-165-32-[illegible]-42	3-16-74

OPERATOR: [illegible]

CONTRACTOR: LOFFLAND BROTHERS COMPANY — RIG NO. 12

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [illegible]

LEGAL LAND DESCRIPTION: Pullen Pleasant 11-55

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
5	19.50	E	6 5/8	NC 50	1	1	[illegible]	D-165	16"
						2	[illegible]	D-165	16"

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
13 3/8						2523

WIRE LINE RECORD — REEL NO.

SIZE 1 3/8 — NO. LINES 10 — FT. SLIPPED

FT. CUT OFF — PREV. INT 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			3½
2. DRILL ACTUAL	5	15½	6½
3. REAMING			1½
4. CORING			
5. CONDITION MUD & CIRCULATE			1½
6. TRIPS		1½	1½
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.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	17
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.		OD		
1	BIT		[illegible]	FT.
1	[illegible]		[illegible]	FT.
1	STB RMR	[illegible]	[illegible]	FT.
1	D.C. ID	[illegible]	[illegible]	FT.
1	STB RMR	[illegible]	[illegible]	FT.
11	D.C. ID	[illegible]	[illegible]	FT.
1	STB RMR	[illegible]	[illegible]	FT.
9	[illegible]		[illegible]	FT.
2	[illegible]		[illegible]	FT.
1	[illegible]		[illegible]	FT.
51	STANDS DP		[illegible]	FT.
	SINGLES DP			FT.
	KELLY DOWN		[illegible]	FT.
	TOTAL		[illegible]	FT.

WT. OF STRING [illegible] LBS.

BIT RECORD

BIT NO.	21
SIZE	12 1/4"
MFG.	[illegible]
TYPE	[illegible]
JETS 1/32"	[illegible]
SER. NO.	[illegible]
DEPTH OUT	
DEPTH IN	[illegible]
TOTAL FTG.	371
TOTAL HRS. RUN	5½
COND. 1/8's T/B GAGE	[illegible]
GPM/ PD-PSI	/ /

MUD RECORD

TIME	[illegible]	[illegible]	[illegible]
WEIGHT	11.1	11.2	11.2
PRESSURE GRADIENT			
VISC.-SEC.	45	49	45
PV/YP	/	/	/
GELS	/	/	/
WL-CC'S			
pH	[illegible]	[illegible]	[illegible]
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]			

FOOTAGE / FORMATION

FROM	TO	DR'D RM'R CORE'C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL-S PART'L P COMP'L C
5523	5595	72			60	45	1150			6 1/4	60	S
					50	40	1100	6 1/4	50			S

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
0001	0501	5		Drlg 12¼" Hole

DRILLER

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.		OD		
1	BIT	[illegible]	[illegible]	FT.
1	[illegible]		[illegible]	FT.
9	STB RMR	[illegible]	[illegible]	FT.
1	D.C. ID	[illegible]	[illegible]	FT.
4	STB RMR	[illegible]	[illegible]	FT.
1	D.C. ID	[illegible]	[illegible]	FT.
4	STB RMR	[illegible]	[illegible]	FT.
1	[illegible]		[illegible]	FT.
9	[illegible]		[illegible]	FT.
1	[illegible]		[illegible]	FT.
53	STANDS DP		[illegible]	FT.
1	SINGLES DP		[illegible]	FT.
	KELLY DOWN		[illegible]	FT.
	TOTAL		[illegible]	FT.

WT. OF STRING [illegible] LBS.

BIT RECORD

BIT NO.	22
SIZE	[illegible]
MFG.	[illegible]
TYPE	[illegible]
JETS 1/32"	[illegible]
SER. NO.	[illegible]
DEPTH OUT	
DEPTH IN	[illegible]
TOTAL FTG.	305
TOTAL HRS. RUN	[illegible]
COND. 1/8's T/B GAGE	[illegible]
GPM/ PD-PSI	/ /

MUD RECORD

TIME	0800	1200	1400
WEIGHT	11.2	11.2	11.2
PRESSURE GRADIENT	.580	.580	.580
VISC.-SEC.	51	50	54
PV/YP	/	/	/
GELS	/	/	/
WL-CC'S			
pH	9.5	9.5	9.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
CAUSTIC	2 SXS		

FOOTAGE / FORMATION

FROM	TO	DR'D RM'R CORE'C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL-S PART'L P COMP'L C
5595	5900	36			50	45	1950	6 1/4	50	6 1/4		S

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
0500	[illegible]	[illegible]	1	[illegible]
2	[illegible]			

DRILLER [illegible]

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.		OD		
1	BIT	[illegible]	[illegible]	FT.
1	[illegible]		[illegible]	FT.
9	STB RMR	[illegible]	[illegible]	FT.
1	D.C. ID	[illegible]	[illegible]	FT.
4	STB RMR	[illegible]	[illegible]	FT.
1	D.C. ID	[illegible]	[illegible]	FT.
4	STB RMR	[illegible]	[illegible]	FT.
1	[illegible]		[illegible]	FT.
9	[illegible]		[illegible]	FT.
1	[illegible]		[illegible]	FT.
53	STANDS DP		[illegible]	FT.
1	SINGLES DP		[illegible]	FT.
	KELLY DOWN		[illegible]	FT.
	TOTAL		[illegible]	FT.

WT. OF STRING [illegible] LBS.

BIT RECORD

BIT NO.	22
SIZE	[illegible]
MFG.	[illegible]
TYPE	[illegible]
JETS 1/32"	[illegible]
SER. NO.	[illegible]
DEPTH OUT	
DEPTH IN	[illegible]
TOTAL FTG.	[illegible]
TOTAL HRS. RUN	[illegible]
COND. 1/8's T/B GAGE	[illegible]
GPM/ PD-PSI	/ /

MUD RECORD

TIME	1700		
WEIGHT	11.2		
PRESSURE GRADIENT			
VISC.-SEC.	54		
PV/YP	/	/	/
GELS	/	/	/
WL-CC'S			
pH	9.0		
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
WL-100	1 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. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL-S PART'L P COMP'L C
[illegible]	[illegible]	D			50	45	1950	6 1/4	50			S

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
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	5	[illegible]
[illegible]	[illegible]	6 1/2	[illegible]	[illegible]

DRILLER [illegible]

Form 3T6 — APPROVED — APPROVED

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

C 23568

DAILY DRILLING REPORT

REPORT NO. 72

LEASE	WELL NO.	API WELL NUMBER	DATE
Pioneer Nine	4-4	42-55-20-142	5-15-77

OPERATOR	CONTRACTOR	RIG NO.
Pioneer	LOFFLAND BROTHERS COMPANY	22

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4	16.6	E	6 1/4	NC 46 IF	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-375	16
2	Emsco	D-375	16

LEGAL LAND DESCRIPTION: Pioneer Nine 42-55

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
12 3/4						2523

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	12½	7½	5
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE	1½		
6	TRIPS			
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY		½	
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
	TOTALS	24	24	24

COMPLETION

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: 71

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
1	BIT 12¼	1.00	FT.
1	8 DC	241	
1	STB RMR OD	31.10	FT.
9	D.C. ID 6 OD	59.07	FT.
1	STB RMR OD	3.51	FT.
11	D.C. ID 7 OD	332.21	FT.
1	STB RMR OD	3.05	FT.
4	7 DC	124.44	
9	6 DC	272.41	
1	5 DC	29.55	
51	STANDS DP	4794.31	FT.
3	SINGLES DP	29.11	FT.
	KELLY DOWN	40.00	FT.
	TOTAL	5460.00	FT.
WT. OF STRING	184 M		LBS.

BIT RECORD			
BIT NO.	21		
SIZE	12¼		
MFG.	Smith		
TYPE	F-3		
JETS 1 32"	12 12 12		
SER. NO.	PA2541		
DEPTH OUT			
DEPTH IN	5214		
TOTAL FTG.	156		
TOTAL HRS. RUN	25½		
COND. 1/8's T/B GAGE	2 1 1/16		
GPM/ PD-PSI	/	/	/

MUD RECORD			
TIME	0900	1100	1400
WEIGHT	11.5	11.5	11.5
PRESSURE GRADIENT			
VISC.-SEC.	35	35	35
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH	7.5	7.5	7.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

NO.	DRILLING ASSEMBLY (At end of tour)		
1	BIT 12¼	5.00	FT.
1	8 DC	241	
2	STB RMR 9.20 OD	62.57	FT.
1	D.C. ID 6¼ OD	29.11	FT.
4	STB RMR OD	124.38	FT.
1	D.C. ID 6¼ OD	1.46	FT.
4	STB RMR OD	121.11	FT.
1	6 DC	1.71	
9	6½ DC	280.62	
1	6 DC	2.40	
52	STANDS DP	4854.47	FT.
1	SINGLES DP	32.01	FT.
	KELLY DOWN	12.21	FT.
	TOTAL	5460.00	FT.
WT. OF STRING	184 M		LBS.

BIT RECORD			
BIT NO.	22		
SIZE	12¼		
MFG.	Smith		
TYPE	F-3		
JETS 1/32"	12 12 12		
SER. NO.	PA2541		
DEPTH OUT			
DEPTH IN	5304		
TOTAL FTG.	112		
TOTAL HRS. RUN	30		
COND. 1/8's T/B GAGE	2 1 1/16		
GPM/ PD-PSI	/	/	/

MUD RECORD			
TIME	0900	1100	1400
WEIGHT	11.5	11.2	11.2
PRESSURE GRADIENT			
VISC.-SEC.	51	52	53
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH	9.0	9.5	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
X-TEL-6	3 SXS		
CAUSTIC	1 SX		

NO.	DRILLING ASSEMBLY (At end of tour)		
1	BIT 12¼	1.00	FT.
1	8 DC	241	
2	STB RMR OD	62.57	FT.
1	D.C. ID 6¼ OD	29.11	FT.
4	STB RMR OD	124.38	FT.
1	D.C. ID 6¼ OD	1.46	FT.
4	STB RMR OD	121.11	FT.
1	6 DC	1.71	
9	6½ DC	280.62	
1	6 DC	2.40	
52	STANDS DP	4854.47	FT.
1	SINGLES DP	32.01	FT.
	KELLY DOWN	12.21	FT.
	TOTAL	5460.00	FT.
WT. OF STRING	184 M		LBS.

BIT RECORD			
BIT NO.	22		
SIZE	12¼		
MFG.	Smith		
TYPE	F-3		
JETS 1/32"	12 12 12		
SER. NO.	PA2541		
DEPTH OUT			
DEPTH IN	5304		
TOTAL FTG.	112		
TOTAL HRS. RUN	30		
COND. 1/8's T/B GAGE	2 1 1/16		
GPM/ PD-PSI	/	/	/

MUD RECORD			
TIME	0900	1100	1400
WEIGHT	11.5	11.2	11.2
PRESSURE GRADIENT			
VISC.-SEC.	51	52	53
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH	9.0	9.5	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
X-TEL-6	3 SXS		
CAUSTIC	1 SX		

NO.	DRILLING ASSEMBLY (At end of tour)		
1	BIT 12¼	1.00	FT.
1	8 DC	241	
2	STB RMR OD	62.57	FT.
1	D.C. ID 6¼ OD	29.11	FT.
4	STB RMR OD	124.38	FT.
1	D.C. ID 6¼ OD	1.46	FT.
4	STB RMR OD	121.11	FT.
1	6 DC	1.71	
9	6½ DC	280.62	
1	6 DC	2.40	
52	STANDS DP	4854.47	FT.
1	SINGLES DP	32.01	FT.
	KELLY DOWN	12.21	FT.
	TOTAL	5460.00	FT.
WT. OF STRING	184 M		LBS.

BIT RECORD			
BIT NO.	22		
SIZE	12¼		
MFG.	Smith		
TYPE	F-3		
JETS 1/32"	12 12 12		
SER. NO.	PA2541		
DEPTH OUT			
DEPTH IN	5304		
TOTAL FTG.	112		
TOTAL HRS. RUN	30		
COND. 1/8's T/B GAGE	2 1 1/16		
GPM/ PD-PSI	/	/	/

MUD RECORD			
TIME	0900	1100	1400
WEIGHT	11.5	11.2	11.2
PRESSURE GRADIENT			
VISC.-SEC.	51	52	53
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH	9.0	9.5	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
X-TEL-6	3 SXS		
CAUSTIC	1 SX		

FOOTAGE FROM	FOOTAGE TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
5000	5460	D			50	45	1900	6½	50			S
					50	45	1950			6½	60	S

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	0215	3 1/4	2	Drilling 12¼ hole
0215	0445	1 1/2	5	Circulation trip out 12 Bit. Change BHA & TIH
0445	0800	3 1/4	2	Drilling 12¼ hole

DRILLER

FOOTAGE FROM	FOOTAGE TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
5460	5491	31'			50	45	1900	6½	50	6½		S

DAY TOUR

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	5476	2	S 50W						

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0800	1345	5½	2	Drilling 12¼ hole
1345	1445	1	5	Circulation trip out 12 Bit. Change BHA & TIH
1445	2400	9½	2	Drilling 12¼ hole

DRILLER

FOOTAGE FROM	FOOTAGE TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
5496	5533	37'			50	45	1900	6¾	50	6¼		S
					50	45	1900			6¼	60	S

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

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

EVENING TOUR

DRILLER

Form 3T6

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

C 23567

DAILY DRILLING REPORT REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
OPERATOR		CONTRACTOR LOFFLAND BROTHERS COMPANY	RIG NO.
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	

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

LEGAL LAND DESCRIPTION

WIRE LINE RECORD REEL NO.

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

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.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

NO. OF DAYS FROM SPUD 75

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

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

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

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 SCHL. S PAINT-P COMPLC.

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

DRILLER

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	
JET 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T. B. GAGE	
GPM PD-PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

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 SCHL. S PAINT-P COMPLC.

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

DRILLER

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 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T. B. GAGE	
GPM PD-PSI	

MUD RECORD

TIME	1700		2200
WEIGHT	11.2+	11.2	11.2
PRESSURE GRADIENT		582	580
VISC.-SEC.	53	47	54
PV/YP	/	15/17	/
GELS.	/	4/36	5/14
WL -CC'S.		8.4	8.4
pH	9.5	9.5	10.0
SOLIDS %		15	
SAND		trace	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	10SKS		
GELEX	2 SKS		
CAUSTIC	1 SK		

FOOTAGE

FROM	TO	DR. D RM. R CORE. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL. S PAINT-P COMPLC.
5241	5925	39			50	45	1100	6 1/4	50	6 1/4		

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
5295	1/4	S 25 E						

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1800	1815	3 1/2		DRLG 1341 FT IN
1815	1915	1/2		FOR MUD & SURVEY
1915	2000	1 1/4		TRIP IN & DRLG

DRILLER

FORM 3T6 APPROVED APPROVED

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

C 23566

DAILY DRILLING REPORT — REPORT NO. 74

LEASE	WELL NO.	API WELL NUMBER	DATE
[illegible]	4-4	[illegible]	1-74

OPERATOR	CONTRACTOR	RIG NO.
[illegible]	LOFFLAND BROTHERS COMPANY	7

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [illegible]

LEGAL LAND DESCRIPTION: [illegible]

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
5	[illegible]	E	6	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
13 3/8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	203
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

WIRE LINE RECORD — REEL NO.

SIZE [illegible] NO. LINES 10 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	[illegible]	[illegible]	[illegible]
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			[illegible]
7. LUBRICATE RIG		[illegible]	
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.		[illegible]	
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21. [illegible]			3
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	[illegible]	[illegible]

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	74
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT	[illegible]	FT.
1	[illegible]	[illegible]	FT.
2	STB RMR [illegible] OD	[illegible]	FT.
1	D.C. ID [illegible] OD	[illegible]	FT.
6	STB RMR [illegible] OD	[illegible]	FT.
1	D.C. ID [illegible] OD	[illegible]	FT.
5	STB RMR [illegible] OD	[illegible]	FT.
1	[illegible]	[illegible]	FT.
[illegible]	[illegible]	[illegible]	FT.
1	[illegible]	[illegible]	FT.
4	STANDS DP	[illegible]	FT.
2	SINGLES DP	6	FT.
	KELLY DOWN	[illegible]	FT.
	TOTAL	[illegible]	FT.
WT. OF STRING	[illegible]		LBS.

BIT RECORD

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

MUD RECORD

TIME	[illegible]	0500	0900
WEIGHT	[illegible]	[illegible]	10.3
PRESSURE GRADIENT			
VISC.–SEC.	[illegible]	[illegible]	51
PV/YP	/	/	/
GELS	/	/	/
WL –CC'S			
pH	[illegible]	[illegible]	10
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]	[illegible]		
[illegible]	[illegible]		
[illegible]	[illegible]		

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 12 1/4	[illegible]	FT.
1	[illegible]	[illegible]	FT.
1	STB RMR [illegible] OD	[illegible]	FT.
1	D.C. ID [illegible] OD	[illegible]	FT.
1	STB RMR [illegible] OD	[illegible]	FT.
4	D.C. ID [illegible] OD	[illegible]	FT.
1	STB RMR [illegible] OD	[illegible]	FT.
2	[illegible]	[illegible]	FT.
1	[illegible]	[illegible]	FT.
[illegible]	[illegible]	[illegible]	FT.
50	STANDS DP	[illegible]	FT.
	SINGLES DP		FT.
	KELLY DOWN	[illegible]	FT.
	TOTAL	5311	FT.
WT. OF STRING	[illegible]		LBS.

BIT RECORD

BIT NO.	3
SIZE	12 1/4
MFG.	[illegible]
TYPE	[illegible]
JETS 1/32"	[illegible]
SER. NO.	[illegible]
DEPTH OUT	[illegible]
DEPTH IN	5241
TOTAL FTG.	62
TOTAL HRS. RUN	34 3/4
COND. 1/8's T/B/ GAGE	[illegible]
GPM/ PD–PSI	[illegible]

MUD RECORD

TIME	[illegible]	1300	1100
WEIGHT	11.3	[illegible]	11.5
PRESSURE GRADIENT			
VISC.–SEC.	[illegible]	[illegible]	51
PV/YP	/	/	/
GELS	/	/	/
WL –CC'S			
pH	[illegible]	[illegible]	11.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT [illegible]	[illegible]	FT.
1	[illegible]	[illegible]	FT.
1	STB RMR [illegible] OD	[illegible]	FT.
1	D.C. ID [illegible] OD	[illegible]	FT.
4	STB RMR [illegible] OD	[illegible]	FT.
1	[illegible]	[illegible]	FT.
[illegible]	[illegible]	[illegible]	FT.
9	STANDS DP	[illegible]	FT.
1	SINGLES DP	9	FT.
	KELLY DOWN	[illegible]	FT.
	TOTAL	[illegible]	FT.
WT. OF STRING	[illegible]		LBS.

BIT RECORD

BIT NO.	3
SIZE	12 1/4
MFG.	[illegible]
TYPE	[illegible]
JETS 1/32"	[illegible]
SER. NO.	[illegible]
DEPTH OUT	[illegible]
DEPTH IN	5241
TOTAL FTG.	[illegible]
TOTAL HRS. RUN	[illegible]
COND. 1/8's T/B/ GAGE	[illegible]
GPM/ PD–PSI	[illegible]

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 (SHOW CORE RECOVERY)

FROM	TO	DR.D RM–R CORE..C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
[illegible]	5211	D		11	50	[illegible]	1200	[illegible]		6 1/2	62	[illegible]
				[illegible]								

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
[illegible]	0500	[illegible]		[illegible]

DRILLER: [illegible]

DAY TOUR

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR.D RM–R CORE..C	CORE NO.	FORMATION	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
5211	5312	D			50	45	1500			6 1/4	62	S

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
0500	1215	7 1/4	2	Drilling 12 1/4 Hole
1215	1230	1/4	5	Circ. for Trip
1230	1300	1/2	6	Short Trip 10 Stands
1300	1330	1/2	5	Circ. for Logs
1330	2400	10 1/2	2	Drilling 12 1/4 Hole

DRILLER: [illegible]

EVENING TOUR

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR.D RM–R CORE..C	CORE NO.	FORMATION	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
5312	5320	D		2	50	45	1500			6 1/4	62	S

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
2400	1215	12 1/4	2	Drilling 12 1/4 Hole
1215	1230	1/4	5	Short Trip 10 Stands
1230	2300	4 1/2	6	Circ. for Logs, Trip Out for Logs
2300	2330	1/2	5	Rig up Schlumberger, Log
2330	2400	1/2	6	Run in Hole with Logs

DRILLER: [illegible]

Form 3T6 — APPROVED — APPROVED

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

C 23565

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
OPERATOR		CONTRACTOR LOFFLAND BROTHERS COMPANY	RIG NO.
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	

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

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. 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'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	73
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 32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1-8's T. B. GAGE	
GPM. PD-PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

MORNING TOUR

FOOTAGE / 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 SGL.-S PAR.EL-P COMPL.-C

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

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	
JET 1 32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1-8's T. B GAGE	
GPM. PD-PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

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 SGL.-S PAR.EL-P COMPL.-C

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

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 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1-8's T.B. GAGE	
GPM. PD-PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

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 SGL.-S PAR.EL-P COMPL.-C

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

FORM 3T6 APPROVED APPROVED

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

C 23564

DAILY DRILLING REPORT REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
OPERATOR		CONTRACTOR	RIG NO.
		LOFFLAND BROTHERS COMPANY	
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	

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

LEGAL LAND DESCRIPTION

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

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

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			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	72
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

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

FOOTAGE 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 SCHLUMBERGER PARTEE-P COMPAC

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

DRILLER

DAY TOUR

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

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

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

DRILLER

EVENING TOUR

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

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

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

DRILLER

FORM 3T6 APPROVED APPROVED

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

C 23563

DAILY DRILLING REPORT

REPORT NO. 71

LEASE	WELL NO.	API WELL NUMBER	DATE
OPERATOR		CONTRACTOR LOFFLAND BROTHERS COMPANY	RIG NO.
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	

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

LEGAL LAND DESCRIPTION

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

WIRE LINE RECORD REEL NO.

SIZE	NO. LINES	FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

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			
22.				
23.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS				

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO. D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	71
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

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

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

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

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

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

DEVIATION RECORD

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

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

DRILLER

DAY TOUR

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

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

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

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

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

DEVIATION RECORD

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

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

DRILLER

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN	24.77	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. 150, TOTAL HRS. RUN, COND. 1-8's T-B GAGE, GPM-PD-PSI

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

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

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

DEVIATION RECORD

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

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

DRILLER

FORM 3TG

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

C 23562

DAILY DRILLING REPORT

REPORT NO. 7

LEASE	WELL NO.	API WELL NUMBER	DATE
OPERATOR		CONTRACTOR: LOFFLAND BROTHERS COMPANY	RIG NO.
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
5					1			D	

LEGAL LAND DESCRIPTION:

LAST CASING TUBING OR LINER

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

WIRE LINE RECORD — REEL NO.

SIZE | NO. LINES 10 | 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			
22			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	7
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

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

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	TO	DR..D RM–R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL–S PAR'L–P COM'D–C
1	1	10		22								S

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

DRILLER

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

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

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

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

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

DRILLER

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

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

MUD RECORD

TIME	1930
WEIGHT	11.1
PRESSURE GRADIENT	
VISC.–SEC.	46
PV/YP	13 / 5
GELS.	4 / 33
WL –CC'S.	9.2
pH	9.5
SOLIDS %	15
Sand	1/2 %

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

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

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

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

DRILLER

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

C 23561

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
			5-21-74

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

LEGAL LAND DESCRIPTION

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

LAST CASING, TUBING OR LINER

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

WIRE LINE RECORD REEL NO.

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

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

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
1	BIT	FT.	BIT NO.	11	TIME	
1			SIZE		WEIGHT	
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT	
1	D.C. ID OD	FT.	TYPE		VISC.-SEC.	
4	STB RMR OD	FT.	JETS 1/32"		PV/YP	
1	D.C. ID OD	FT.	SER. NO.		GELS	
2	STB RMR OD	FT.	DEPTH OUT		WL-CC'S	
1			DEPTH IN		pH	
1			TOTAL FTG.		SOLIDS %	
1			TOTAL HRS. RUN			
27	STANDS DP	FT.	COND. 1/8's T B GAGE			
	SINGLES DP	FT.	GPM PD-PSI			
	KELLY DOWN	1598 FT.				
	TOTAL	FT.				
WT. OF STRING		LBS.				

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
1	BIT	FT.	BIT NO.		TIME	
			SIZE		WEIGHT	
1	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT	
1	D.C. ID OD	FT.	TYPE		VISC.-SEC.	
4	STB RMR OD	FT.	JET 1/32"		PV/YP	
	D.C. ID OD	FT.	SER. NO.		GELS	
5	STB RMR OD	FT.	DEPTH OUT		WL-CC'S	
1			DEPTH IN		pH	
1			TOTAL FTG.		SOLIDS %	
1			TOTAL HRS. RUN			
47	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.

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

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 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL-S PARTI-P COMPL-C

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

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

DRILLER

DAY TOUR

FOOTAGE FROM	TO	DR.-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL-S PARTI-P COMPL-C

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

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

DRILLER

EVENING TOUR

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

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

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

DRILLER

FORM 3T6 APPROVED APPROVED

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

C 23560

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	2

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

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

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO.

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	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	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			
22.				
23.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS				

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

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

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE / FORMATION

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL-S PART-L-P COM-D-C

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

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	
JET 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.

FOOTAGE / FORMATION

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL-S PART-L-P COM-D-C

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

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 1/32"	
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.

FOOTAGE / FORMATION

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL-S PART-L-P COM-D-C

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

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 1/32"	
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.

FOOTAGE / FORMATION

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL-S PART-L-P COM-D-C

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

FORM 3T6 — APPROVED — APPROVED

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

C 23559

DAILY DRILLING REPORT — REPORT NO. 15

LEASE	WELL NO.	API WELL NUMBER	DATE
[illegible]	32-11	[illegible]	5-1-74

OPERATOR

SIGNATURE OF OPERATOR'S REPRESENTATIVE

CONTRACTOR: **LOFFLAND BROTHERS COMPANY** — RIG NO. 2

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

LEGAL LAND DESCRIPTION: [illegible] 3-5S

WIRE LINE RECORD — REEL NO.

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
	16.6	E	5 [illegible]	[illegible]	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	[illegible]	[illegible]	8
2	[illegible]	[illegible]	12

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13⅜						2503

WIRE LINE RECORD: SIZE 1⅜ — NO. LINES 10 — 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	0	7½	[illegible]
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	DIH. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		0	[illegible]	

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	17
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO. 1

DRILLING ASSEMBLY (At end of tour)

BIT	[illegible]		FT.
STB RMR	OD	[illegible]	FT.
D.C. ID	OD	[illegible]	FT.
STB RMR	OD	[illegible]	FT.
D.C. ID	OD	[illegible]	FT.
STB RMR	OD	[illegible]	FT.
STANDS DP		[illegible]	FT.
SINGLES	DP		FT.
KELLY DOWN		[illegible]	FT.
TOTAL		[illegible]	FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	19
SIZE	12¼
MFG.	[illegible]
TYPE	J 33
JETS 1 32"	[illegible]
SER. NO.	[illegible]
DEPTH OUT	
DEPTH IN	2122
TOTAL FTG.	181
TOTAL HRS. RUN	[illegible]
COND. T.B.G.	
GPM PD-PSI	/ /

MUD RECORD

TIME	[illegible]		[illegible]
WEIGHT	11.2	11.2	
PRESSURE GRADIENT	[illegible]		
VISC.-SEC.	[illegible]	58	[illegible]
PV YP	21/17	/	1/
GELS	[illegible]	/	/
WL -CC'S.	[illegible]		
pH	10		
SOLIDS %	10%		
[illegible]	.23		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]	[illegible]		
[illegible]	[illegible]		
[illegible]	[illegible]		

DAY TOUR

NO. 2

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JET 1 32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 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

NO. 3

DRILLING ASSEMBLY (At end of tour)

BIT	[illegible]	[illegible]	FT.
STB RMR	OD	[illegible]	FT.
D.C. ID	OD	[illegible]	FT.
STB RMR	OD	[illegible]	FT.
STANDS DP		[illegible]	FT.
SINGLES	DP		FT.
KELLY DOWN		[illegible]	FT.
TOTAL		[illegible]	FT.
WT. OF STRING		[illegible]	LBS.

BIT RECORD

BIT NO.	[illegible]
SIZE	[illegible]
MFG.	[illegible]
TYPE	[illegible]
JETS 1/32"	[illegible]
SER. NO.	[illegible]
DEPTH OUT	
DEPTH IN	[illegible]
TOTAL FTG.	[illegible]
TOTAL HRS. RUN	[illegible]
COND. T.B.G.	[illegible]
GPM PD-PSI	/ /

MUD RECORD

TIME			
WEIGHT		[illegible]	[illegible]
PRESSURE GRADIENT	[illegible]		
VISC.-SEC.		53	51
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.			
pH		9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]	2 SKS.		
[illegible]	3 SKS.		
[illegible]	15 SKS.		
[illegible]	30 [illegible]		

MORNING TOUR

FOOTAGE: FROM [illegible] TO [illegible] — DR'D RM'R CORE'D [illegible] — CORE NO. — FORMATION (SHOW CORE RECOVERY): DSJ 650 / IOLE DAK D-1100 SAN 27

ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
50	45	1900	6¾	50	6¼		S

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
[illegible]	[illegible]	[illegible]		[illegible]

DRILLER [illegible]

DAY TOUR

FOOTAGE: FROM [illegible] TO [illegible] — DR'D RM'R CORE'D [illegible] — CORE NO. — FORMATION (SHOW CORE RECOVERY): [illegible]

ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	S
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	61	S
[illegible]	[illegible]	1900	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
2710	[illegible]	[illegible]						

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
[illegible]	[illegible]	[illegible]		[illegible]

DRILLER [illegible]

EVENING TOUR

FOOTAGE: FROM [illegible] TO [illegible] — DR'D RM'R CORE'D [illegible] — CORE NO. — FORMATION (SHOW CORE RECOVERY): [illegible]

ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
50	45	1900	[illegible]	50	6¼		S

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
[illegible]	[illegible]	[illegible]		[illegible]

DRILLER [illegible]

FORM 3T6 — APPROVED — APPROVED

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

C 23558

DAILY DRILLING REPORT REPORT NO. 16

LEASE	WELL NO.	API WELL NUMBER	DATE
	4		

OPERATOR

CONTRACTOR **LOFFLAND BROTHERS COMPANY** RIG NO. 72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5					

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1			
2			

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13⅜						2503

WIRE LINE RECORD REEL NO.
SIZE 1⅜ NO. LINES 10 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	6½	7½	13½
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			1½
6	TRIPS	1½		
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8	16	

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	16		
CUMULATIVE ROTATING HRS.			
TOTAL MUD COST			

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 12¼	0.15	FT.
1		29.61	
2	STB RMR OD	12.67	FT.
1	D.C. ID OD	29.71	FT.
4	STB RMR OD		FT.
1	D.C. ID OD	30.05	FT.
5	STB RMR OD	6.73	FT.
1		.71	
1		29.52	
43	STANDS DP	3990.50	FT.
	SINGLES DP		FT.
	KELLY DOWN	94.21	FT.
	TOTAL	4122.01	FT.
WT. OF STRING	153000		LBS.

BIT RECORD

BIT NO.	19
SIZE	12¼
MFG.	Smith
TYPE	F55
JETS 1/32"	14 14 14
SER. NO.	RJ4044
DEPTH OUT	
DEPTH IN	4124
TOTAL FTG.	37
TOTAL HRS. RUN	6½
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME			
WEIGHT		11.1	
PRESSURE GRADIENT			.576
VISC.-SEC.		55	54
PV/YP	/	/	19/12
GELS.	/	/	4/5
WL -CC'S.			7.6
pH		11.	11.1
SOLIDS %			14
SAND			trace

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT		FT.
1			
	STB RMR OD		FT.
1	D.C. ID OD		FT.
	STB RMR OD		FT.
5	STB RMR OD	.73	FT.
1			
2		29.52	
43	STANDS DP	3990.50	FT.
2	SINGLES DP	62.50	FT.
	KELLY DOWN	94.21	FT.
	TOTAL	4147.21	FT.
WT. OF STRING	154000		LBS.

BIT RECORD

BIT NO.	19
SIZE	12¼
MFG.	Smith
TYPE	F55
JETS 1/32"	14 14 14
SER. NO.	RJ4044
DEPTH OUT	
DEPTH IN	4124
TOTAL FTG.	23
TOTAL HRS. RUN	4½
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME	0700		
WEIGHT	11.1		
PRESSURE GRADIENT			
VISC.-SEC.	55		
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %	14		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 12¼	0.15	FT.
1		29.61	
2	STB RMR OD	6.73	FT.
1	D.C. ID OD	29.71	FT.
2	STB RMR OD	6.73	FT.
1	D.C. ID OD	30.05	FT.
5	STB RMR OD	6.73	FT.
1		.71	
1		29.52	
43	STANDS DP	3990.50	FT.
2	SINGLES DP	62.50	FT.
	KELLY DOWN	22.76	FT.
	TOTAL	4122.60	FT.
WT. OF STRING	154000		LBS.

BIT RECORD

BIT NO.	19
SIZE	12¼
MFG.	Smith
TYPE	F55
JETS 1/32"	14 14 14
SER. NO.	RJ4044
DEPTH OUT	4124
DEPTH IN	4222
TOTAL FTG.	98
TOTAL HRS. RUN	15¾
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME	1600		
WEIGHT	10.9		
PRESSURE GRADIENT			
VISC.-SEC.	50		
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	10.		
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
WT MAT	10 SKS		
GEL-EZ	2 SKS		

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. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHLUM. PARTEE-P COMPUT-C
0624	4161	37			50	40	1400	6¾	50	6½		S

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
0600	0630	½		R.U. & MU BHA
0630	0700	½		DRLG MUD WT. DOWN SLOWLY FROM 11.1 PPG

DRILLER [illegible]

FOOTAGE / FORMATION

FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHLUM. PARTEE-P COMPUT-C
4161	4222	D			50	42	1400	6¾	50	6½		S

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
4161	2¾	N 4 E						

DAY TOUR

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0700	1130	4½		[illegible]
[illegible]				[illegible]

DRILLER [illegible]

FOOTAGE / FORMATION

FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHLUM. PARTEE-P COMPUT-C
4161	4222	D		GAS KICK @ 10.9 MUD WT.	50	42	1400	6¾	50	6½		S

DEVIATION RECORD

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

EVENING TOUR

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1600	1715	1¼		GAS KICK @ 10.9 MUD WT
1715	1930	2¼		[illegible]
1930	2130	2		[illegible] CSG - 1600 PSI
2130	2345	2¼		[illegible]
2345	0600	6¼		[illegible]

DRILLER [illegible]

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

C 23557

DAILY DRILLING REPORT

REPORT NO. 15

LEASE	WELL NO.	API WELL NUMBER	DATE
	4	15-173-20115	5-1-74

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	#2

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

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

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1			
2			

LEGAL LAND DESCRIPTION

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. 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'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.

HRS. W/OPR. D.P.

HRS. WO/D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD 605

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT		FT.
1			
	STB RMR OD		FT.
1	D.C. ID OD		FT.
1	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1			
1			
42	STANDS DP		FT.
1	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

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

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHLS PARKER-P COMPLEC

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

DRILLER

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT		FT.
1			
	STB RMR OD		FT.
1	D.C. ID OD		FT.
	STB RMR OD		FT.
1	D.C. ID OD		FT.
	STB RMR OD		FT.
1			
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

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

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHLS PARKER-P COMPLEC

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

DRILLER

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT		FT.
1			
	STB RMR OD		FT.
1	D.C. ID OD		FT.
	STB RMR OD		FT.
1	D.C. ID OD		FT.
	STB RMR OD		FT.
1			
9			
1			
42	STANDS DP		FT.
9	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

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

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

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

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

DRILLER

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

C 23556

DAILY DRILLING REPORT

REPORT NO. 64

LEASE	WELL NO.	API WELL NUMBER	DATE
[illegible]	4	2-35-11E-30-12S-W.S.P.	05-7-54

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	102

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
[illegible]	[illegible]

LEGAL LAND DESCRIPTION [illegible]

D.P. SIZE	WT. FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
[illegible]					

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]

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

WIRE LINE RECORD REEL NO.

SIZE	NO. LINES	FT. SLIPPED
[illegible]	[illegible]	

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		[illegible]	[illegible]
3.	REAMING			
4.	CORING			
5.	CONDITION MUD & CIRCULATE			
6.	TRIPS			
7.	LUBRICATE RIG			
8.	REPAIR RIG			
9.	CUT OFF DRILLING LINE			
10.	DEVIATION SURVEY			[illegible]
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			
22.				
23.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		[illegible]	[illegible]	[illegible]

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	64
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)			BIT RECORD	
1	BIT	[illegible]	FT.	BIT NO.	[illegible]
1	[illegible]	[illegible]		SIZE	[illegible]
1	STB RMR OD	[illegible]	FT.	MFG.	[illegible]
1	D.C. ID OD	[illegible]	FT.	TYPE	[illegible]
1	STB RMR OD	[illegible]	FT.	JETS 1 32nds	[illegible]
1	D.C. ID OD	[illegible]	FT.	SER. NO.	[illegible]
1	STB RMR OD	[illegible]	FT.	DEPTH OUT	[illegible]
1		[illegible]		DEPTH IN	[illegible]
1		[illegible]		TOTAL FTG.	[illegible]
1		[illegible]		TOTAL HRS. RUN	[illegible]
1	STANDS DP	[illegible]	FT.	COND. 1/8's T/B/ GAGE	[illegible]
	SINGLES DP		FT.	GPM/ PD-PSI	
	KELLY DOWN	[illegible]	FT.		
	TOTAL	[illegible]	FT.		
WT. OF STRING	[illegible]		LBS.		

MUD RECORD				
TIME	[illegible]			[illegible]
WEIGHT	[illegible]			[illegible]
PRESSURE GRADIENT				
VISC.-SEC.	[illegible]			[illegible]
PV/YP	/	/	/	/
GELS	/	/	/	/
WL -CC'S.				
pH	[illegible]			[illegible]
SOLIDS %				
MUD & CHEMICALS ADDED				
TYPE	AMT.	TYPE	AMT.	
[illegible]	[illegible]			
[illegible]	[illegible]			
[illegible]				

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.	JET 1/32"	
	D.C. ID OD		FT.	SER. NO.	
	STB RMR OD		FT.	DEPTH OUT	
				DEPTH IN	
				TOTAL FTG.	
				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 RECORD				
TIME				
WEIGHT				
PRESSUPE GRADIENT				
VISC.-SEC.				
PV/YP	/	/	/	/
GELS	/	/	/	/
WL -CC'S.				
pH				
SOLIDS %				
MUD & CHEMICALS ADDED				
TYPE	AMT.	TYPE	AMT.	

NO.	DRILLING ASSEMBLY (At end of tour)			BIT RECORD	
1	BIT	[illegible]	FT.	BIT NO.	[illegible]
	[illegible]	[illegible]		SIZE	[illegible]
2	STB RMR OD	[illegible]	FT.	MFG.	[illegible]
1	D.C. ID OD	[illegible]	FT.	TYPE	[illegible]
1	STB RMR OD	[illegible]	FT.	JETS 1/32"	[illegible]
1	D.C. ID OD	[illegible]	FT.	SER. NO.	[illegible]
5	STB RMR OD	[illegible]	FT.	DEPTH OUT	[illegible]
1	[illegible]	[illegible]		DEPTH IN	[illegible]
5	[illegible]	[illegible]		TOTAL FTG.	[illegible]
	[illegible]	[illegible]		TOTAL HRS. RUN	[illegible]
41	STANDS DP	[illegible]	FT.	COND. 1/8's T/B/ GAGE	[illegible]
2	SINGLES DP	[illegible]	FT.	GPM/ PD-PSI	
	KELLY DOWN	[illegible]	FT.		
	TOTAL	[illegible]	FT.		
WT. OF STRING	[illegible]		LBS.		

MUD RECORD				
TIME	[illegible]			
WEIGHT	[illegible]			[illegible]
PRESSURE GRADIENT				[illegible]
VISC.-SEC.	[illegible]			[illegible]
PV/YP	/	/	/	[illegible]
GELS	/	/	/	[illegible]
WL -CC'S.				
pH	[illegible]			[illegible]
SOLIDS %	[illegible]			[illegible]
MUD & CHEMICALS ADDED				
TYPE	AMT.	TYPE	AMT.	
[illegible]	[illegible]			
[illegible]				

FOOTAGE

FROM	TO	DR'D RM'R CORE'C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHLUMBERGER
[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]

DEVIATION RECORD

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
[illegible]	[illegible]	[illegible]		[illegible]

DRILLER [illegible]

DAY TOUR

FOOTAGE

FROM	TO	DR'D RM'R CORE'C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S. P. M.	METHOD RUN SCHLUMBERGER
[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]
										[illegible]	[illegible]	[illegible]

DEVIATION RECORD

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
[illegible]				

DRILLER

EVENING TOUR

FOOTAGE

FROM	TO	DR'D RM'R CORE'C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHLUMBERGER
[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
[illegible]	[illegible]	[illegible]						

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
[illegible]	[illegible]	[illegible]		[illegible]

DRILLER [illegible]

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

C 23555

DAILY DRILLING REPORT — REPORT NO. 13

LEASE	WELL NO.	API WELL NUMBER	DATE

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	

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

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

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO.

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	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	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			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	13
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 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

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	
JET 1/32"	
SER. NO.	
DEPTH CUT	
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

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 1/32"	
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: FROM — TO — DR'D RM'R CORE'C — CORE NO. — FORMATION (SHOW CORE RECOVERY) — ROTARY RPM — WT. ON BIT 1000# — PUMP PRESS — PUMP NO. 1 (LINER SIZE, S.P.M.) — PUMP NO. 2 (LINER SIZE, S.P.M.) — METHOD RUN (SCI-S PARTEL-P COMPLEC)

DEVIATION RECORD: DEPTH — DEV. — DIRECTION (×3)

TIME LOG: FROM — TO — ELAPSED TIME — CODE NO. — DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

DAY TOUR

FOOTAGE: FROM — TO — DR'D RM'R CORE'C — CORE NO. — FORMATION (SHOW CORE RECOVERY) — ROTARY RPM — WT. ON BIT 1000# — PUMP PRESS — PUMP NO. 1 (LINER SIZE, S.P.M.) — PUMP NO. 2 (LINER SIZE, S.P.M.) — METHOD RUN (SCI-S PARTEL-P COMPLEC)

DEVIATION RECORD: DEPTH — DEV. — DIRECTION (×3)

TIME LOG: FROM — TO — ELAPSED TIME — CODE NO. — DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

EVENING TOUR

FOOTAGE: FROM — TO — DR'D RM'R CORE'C — CORE NO. — FORMATION (SHOW CORE RECOVERY) — ROTARY RPM — WT. ON BIT 1000# — PUMP PRESS — PUMP NO. 1 (LINER SIZE, S.P.M.) — PUMP NO. 2 (LINER SIZE, S.P.M.) — METHOD RUN (SCI-S PARTEL-P COMPLEC)

DEVIATION RECORD: DEPTH — DEV. — DIRECTION (×3)

TIME LOG: FROM — TO — ELAPSED TIME — CODE NO. — DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

Form 3T6 — APPROVED — APPROVED

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

C 23554

DAILY DRILLING REPORT

REPORT NO. 63

LEASE	WELL NO.	API WELL NUMBER	DATE

OPERATOR

CONTRACTOR: LOFFLAND BROTHERS COMPANY — RIG NO.

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

LEGAL LAND DESCRIPTION

	D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
							1			15
							2			7

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
							2503

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED

FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

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

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

MORNING TOUR

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

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

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

NO.	DRILLING ASSEMBLY (At end of tour)		
1	BIT		FT.
1			
2	STB RMR OD		FT.
1	D.C. ID OD		FT.
4	STB RMR OD		FT.
1	D.C. ID OD		FT.
5	STB RMR OD		FT.
1			
1			
1			
39	STANDS DP		FT.
1	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD	
BIT NO.	
SIZE	
MFG.	
TYPE	
JET 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	13
TOTAL HRS. RUN	4
COND. 1/8's T/B GAGE	
GPM/ PD-PSI	

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

NO.	DRILLING ASSEMBLY (At end of tour)		
1	BIT		FT.
1			
2	STB RMR OD		FT.
1	D.C. ID OD		FT.
4	STB RMR OD		FT.
1	D.C. ID OD		FT.
5	STB RMR OD		FT.
1			
1			
1			
39	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

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

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	FOOTAGE TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN

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

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

DRILLER

DAY TOUR

FOOTAGE FROM	FOOTAGE TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0400	1000	6		Change out 6 1/4 pump to 6 1/2 pump
1000	1145	1 3/4		Run in hole with 8 3/4 bit
1145	1215	1/2		Wash 12 ft to btm
1215	1230	1/4		Circ for trip
1230	1700	9 1/2		Drill 8 3/4 hole

DRILLER

EVENING TOUR

FOOTAGE FROM	FOOTAGE TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
4324	4342	0	3		50	45	1100	6 1/2	46			

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1700	2400	7		Drill 8 3/4 hole

DRILLER

C 23553

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

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

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION

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

WIRE LINE RECORD REEL NO.

SIZE	NO. LINES	FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

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

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

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 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.

HORNING 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 SCL–S PART'L–P COMP'L–C

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

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	
JET 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.

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 SCL–S PART'L–P COMP'L–C

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

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 1/32"	
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.

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. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL–S PART'L–P COMP'L–C

DEVIATION RECORD

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

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

FORM 3T6

APPROVED APPROVED

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

C 23552 ·

DAILY DRILLING REPORT — REPORT NO. /

LEASE	WELL NO.	API WELL NUMBER	DATE

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO.

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	RKB. TO CSG. HD.	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	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			
	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.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS				

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

MORNING TOUR

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

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

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

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

DRILLER

DAY TOUR

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

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

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

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

DRILLER

EVENING TOUR

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

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

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

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

DRILLER

C 23551

DAILY DRILLING REPORT — REPORT NO. 57

LEASE	WELL NO.	API WELL NUMBER	DATE
Pinon Mtn	A-4	05-045-22[illegible]	4-15-84

OPERATOR	CONTRACTOR	RIG NO.
Bill Barrett Corp.	LOFFLAND BROTHERS COMPANY	12

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
Ted Tollett	M. Lovelady

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5	19.50	E	6 5/8	H-90	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-375	14"
2	Emsco	D-375	14"

LEGAL LAND DESCRIPTION: Pinon Mountain A-55

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13 3/8						2973

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	3½	7½	13
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS	4½		
7	LUBRICATE RIG			
8	REPAIR RIG		½	
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.	1½		
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		5	8	11

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	57
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 12¼	[illegible]	FT.
1	[illegible]	[illegible]	
1	STB RMR OD	[illegible]	FT.
2	D.C. ID OD	1219	FT.
1	STB RMR OD	3.84	FT.
4	D.C. ID OD	114.90	FT.
1	STB RMR OD	1.40	FT.
1	[illegible]	[illegible]	
1	4½ DC	30[illegible].52	
1	[illegible]	[illegible]	
32	STANDS DP	[illegible]	FT.
	SINGLES DP	[illegible]	FT.
	KELLY DOWN	45	FT.
	TOTAL	[illegible]	FT.
WT. OF STRING	[illegible]		LBS.

BIT RECORD

BIT NO.	16	17
SIZE	12¼	12¼
MFG.	[illegible]	Smith
TYPE	[illegible]	F35
JETS 1 32"	12 12 12	13 13 13
SER. NO.	[illegible]	RX[illegible]
DEPTH OUT	[illegible]	
DEPTH IN	[illegible]	[illegible]
TOTAL FTG.	[illegible]	[illegible]
TOTAL HRS. RUN	[illegible]	
COND. 1/8's T/B/ GAGE	[illegible]	
GPM/ PD-PSI	[illegible]	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]			

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT [illegible]	[illegible]	FT.
1	[illegible]	[illegible]	
2	STB RMR OD	[illegible]	FT.
1	D.C. ID OD	[illegible]	FT.
1	STB RMR OD	[illegible]	FT.
1	D.C. ID OD	[illegible]	FT.
1	STB RMR OD	[illegible]	FT.
1	[illegible]	[illegible]	
1	[illegible]	[illegible]	
1	[illegible]	[illegible]	
31	STANDS DP	[illegible]	FT.
	SINGLES DP	[illegible]	FT.
	KELLY DOWN	[illegible]	FT.
	TOTAL	[illegible]	FT.
WT. OF STRING	[illegible]		LBS.

BIT RECORD

BIT NO.	17	
SIZE	12¼	
MFG.	[illegible]	
TYPE	[illegible]	
JET 1/32"	[illegible]	
SER. NO.	[illegible]	
DEPTH OUT		
DEPTH IN	[illegible]	
TOTAL FTG.	[illegible]	
TOTAL HRS. RUN	[illegible]	
COND. 1/8's T/B/ GAGE	[illegible]	
GPM/ PD-PSI	[illegible]	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]			

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 12¼	[illegible]	FT.
1	[illegible]	[illegible]	
1	STB RMR OD	[illegible]	FT.
2	D.C. ID OD	[illegible]	FT.
1	STB RMR OD	[illegible]	FT.
4	D.C. ID OD	[illegible]	FT.
1	STB RMR OD	[illegible]	FT.
1	[illegible]	[illegible]	
1	[illegible]	[illegible]	
1	[illegible]	[illegible]	
32	STANDS DP	[illegible]	FT.
	SINGLES DP	[illegible]	FT.
	KELLY DOWN	[illegible]	FT.
	TOTAL	[illegible]	FT.
WT. OF STRING	[illegible]		LBS.

BIT RECORD

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

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]			

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR..D RM..R CORE..C	CORE NO.	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL-S PAR'L-P COMP'D-C
4602	4642	D		50	45	1400	6¼	110			S

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
0600	0900	3	2	Drill 12¼" hole
0900	0930	½	5	Circulate for trip
0930	0945	¼	15	Check Blind Rams - Held 3000 psi
0945	1130	1¾	2	Run in with 12¼" bit
1130	1200	½	2	Drill 4602' to 4642'

DRILLER [illegible]

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR..D RM..R CORE..C	CORE NO.	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL-S PAR'L-P COMP'D-C
4642	4702	D		50	45	1400	6¼	110	6¼		S

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	1300	1	2	Drill 4642' to 4702'
1300	1330	½	5	Circulate
1330	2400	10½	2	Drill 4702' to 5130'

DRILLER [illegible]

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR..D RM..R CORE..C	CORE NO.	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL-S PAR'L-P COMP'D-C
4702	4[illegible]	D		[illegible]	[illegible]	[illegible]	6¼	[illegible]	6¼		S

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
4[illegible]		X						

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
[illegible]	1300	7	2	Drill [illegible]
1300	1330	½	5	[illegible]
1330	2400	10½	2	Drill 4702' to 5130'

DRILLER [illegible]

FORM 3T6 — APPROVED — APPROVED

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

C 23550

DAILY DRILLING REPORT — REPORT NO. 52

LEASE	WELL NO.	API WELL NUMBER	DATE
[illegible]	[illegible]	[illegible]	09-27-74

OPERATOR	CONTRACTOR	RIG NO.
[illegible]	LOFFLAND BROTHERS COMPANY	42

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
[illegible]	[illegible]

LEGAL LAND DESCRIPTION: [illegible]

WIRE LINE RECORD — REEL NO.

SIZE: 3 | NO. LINES: [illegible] | FT. SLIPPED:

FT. CUT OFF: | PRESENT LENGTH:

TON MI. OR TRIPS SINCE LAST CUT:

CUMULATIVE TON MI. OR TRIPS:

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	15½						2552

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
5"	19.50	E	7 1/4	[illegible]	1	1	[illegible]	[illegible]	16"
						2	[illegible]	[illegible]	16"

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	7	5¾	
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			2¼
6	TRIPS			
7	LUBRICATE RIG			
8	REPAIR RIG	½		
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY	½		¼
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'H			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADD. [illegible]			
	[illegible]			
TOTALS		[illegible]	[illegible]	[illegible]

DAY WORK TIME SUM... (OFFICE USE ONLY)

HRS. P. CONTR. D.P.

HRS. W/DRK D.P.

HRS. NO D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD: 52

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 13 3/4		FT.
1	[illegible]	[illegible]	
3	STB RMR [illegible] OD	[illegible]	FT.
1	D.C. ID [illegible] OD	[illegible]	FT.
4	STB RMR [illegible] OD	[illegible]	FT.
1	D.C. ID [illegible] OD	[illegible]	FT.
4	STB RMR [illegible] OD	[illegible]	FT.
1	[illegible]	[illegible]	
1	[illegible]	[illegible]	
1	[illegible]	[illegible]	
25	STANDS DP	[illegible]	FT.
2	SINGLES DP	[illegible]	FT.
	KELLY DOWN	[illegible]	FT.
	TOTAL	[illegible]	FT.
WT. OF STRING	[illegible]		LBS.

BIT RECORD

BIT NO.	1
SIZE	[illegible]
MFG.	[illegible]
TYPE	[illegible]
JETS 1 32"	[illegible]
SER. NO.	[illegible]
DEPTH OUT	
DEPTH IN	3174
TOTAL FTG.	[illegible]
TOTAL HRS. RUN	54 [illegible]
COND. 1/8's T/B GAGE	[illegible]
GPM/ PD-PSI	/ /

MUD RECORD

TIME	[illegible]	[illegible]	[illegible]
WEIGHT	10.7	10.7	10.7
PRESSURE GRADIENT			
VISC.-SEC.	[illegible]	52	[illegible]
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.			
pH	11.5	11.5	11.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]	2	[illegible]	
[illegible]	[illegible]		
[illegible]	150	LCM	

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT [illegible]	[illegible]	FT.
1	[illegible]	[illegible]	
2	STB RMR [illegible] OD	[illegible]	FT.
1	D.C. ID [illegible] OD	2.96	FT.
4	STB RMR [illegible] OD	[illegible]	FT.
1	D.C. ID [illegible] OD	[illegible]	FT.
5	STB RMR [illegible] OD	[illegible]	FT.
1	[illegible]	[illegible]	
9	[illegible]	[illegible]	
1	[illegible]	[illegible]	
26	STANDS DP	[illegible]	FT.
1	SINGLES DP	[illegible]	FT.
	KELLY DOWN	[illegible]	FT.
	TOTAL	[illegible]	FT.
WT. OF STRING	[illegible]		LBS.

BIT RECORD

BIT NO.	[illegible]
SIZE	[illegible]
MFG.	[illegible]
TYPE	[illegible]
JET 1/32"	[illegible]
SER. NO.	[illegible]
DEPTH OUT	
DEPTH IN	[illegible]
TOTAL FTG.	366
TOTAL HRS. RUN	[illegible]
COND. 1/8's T/B/ GAGE	[illegible]
GPM/ PD-PSI	/ /

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]			
[illegible]			

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT [illegible]	[illegible]	FT.
1	[illegible]	[illegible]	
1	STB RMR [illegible] OD	[illegible]	FT.
2	D.C. ID [illegible] OD	[illegible]	FT.
1	STB RMR [illegible] OD	[illegible]	FT.
4	D.C. ID [illegible] OD	[illegible]	FT.
1	STB RMR [illegible] OD	[illegible]	FT.
12	[illegible]	[illegible]	
1	6½ DC	[illegible]	
1	[illegible]	[illegible]	
36	STANDS DP	[illegible]	FT.
2	SINGLES DP	[illegible]	FT.
	KELLY DOWN	[illegible]	FT.
	TOTAL	[illegible]	FT.
WT. OF STRING	[illegible]		LBS.

BIT RECORD

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

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]			
[illegible]			

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. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCI. S PART. P COMP. C
3746	3775	D		[illegible]	50	42	1000	6¼	46			S

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
3750	2½	X						

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	0030	½	2	Drilling 13¾ hole
0030	0100	½	10	Survey
0100	0105	5	2	Drilling 13¾ Hole
0105	0130	½	8	Lubricate rig
0130	0600	5½	2	Drilling 13¾ Hole

DRILLER: [illegible]

DAY TOUR

FOOTAGE / FORMATION

FROM	TO	DR. D RM. R CORE. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCI. S PART. P COMP. C
3775	6139	44'		[illegible]	50	45	1500	6¾	46	6¼		S
							1600	6¾	27			

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
0600	1400	8		DRILLING 12¼ HOLE

DRILLER: [illegible]

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. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCI. S PART. P COMP. C
6139	[illegible]	15		[illegible]	50	45	1500	6¾	46			S
							[illegible]		27			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
[illegible]	[illegible]							

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1400	1700	3	2	Drilling 12¼ hole
1700	1730	3½	5	Circ. hole clean & pull out of hole for [illegible] (Deviation)
1730	2200	4½	2	Drilling 12¼ hole
2200	2215	¼	10	Survey
2215	2400	1¾	2	Drlg

DRILLER: [illegible]

FORM 3T6 — APPROVED — APPROVED

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

C 23549

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	

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

LEGAL LAND DESCRIPTION

WIRE LINE RECORD REEL NO.

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

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

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	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
	BIT	FT.	BIT NO.	
			SIZE	
	STB RMR OD	FT.	MFG.	
	D.C. ID OD	FT.	TYPE	
	STB RMR OD	FT.	JETS 1 32"	
	D.C. ID OD	FT.	SER. NO.	
	STB RMR OD	FT.	DEPTH OUT	
			DEPTH IN	
			TOTAL FTG.	
			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 RECORD				
TIME				
WEIGHT				
PRESSURE GRADIENT				
VISC.–SEC.				
PV/YP				
GELS				
WL –CC'S				
pH				
SOLIDS %				
MUD & CHEMICALS ADDED				
TYPE	AMT.	TYPE	AMT.	

FOOTAGE FROM	FOOTAGE TO	DR. D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SURVEY PATTERN COMPLETE

DEVIATION RECORD

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

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

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.	JET 1/32"	
	D.C. ID OD	FT.	SER. NO.	
	STB RMR OD	FT.	DEPTH OUT	
			DEPTH IN	
			TOTAL FTG.	
			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 RECORD				
TIME				
WEIGHT				
PRESSURE GRADIENT				
VISC.–SEC.				
PV/YP				
GELS				
WL –CC'S				
pH				
SOLIDS %				
MUD & CHEMICALS ADDED				
TYPE	AMT.	TYPE	AMT.	

FOOTAGE FROM	FOOTAGE TO	DR. D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SURVEY PATTERN COMPLETE

DEVIATION RECORD

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

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

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 1/32"	
	D.C. ID OD	FT.	SER. NO.	
	STB RMR OD	FT.	DEPTH OUT	
			DEPTH IN	
			TOTAL FTG.	
			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 RECORD				
TIME				
WEIGHT				
PRESSURE GRADIENT				
VISC.–SEC.				
PV/YP				
GELS				
WL –CC'S				
pH				
SOLIDS %				
MUD & CHEMICALS ADDED				
TYPE	AMT.	TYPE	AMT.	

FOOTAGE FROM	FOOTAGE TO	DR. D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SURVEY PATTERN COMPLETE

DEVIATION RECORD

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

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

DRILLER

FORM 3T6 APPROVED APPROVED

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

C 23548

DAILY DRILLING REPORT — REPORT NO. 57

LEASE	WELL NO.	API WELL NUMBER	DATE
Penn Fed	1	[illegible]	4-25-74
OPERATOR		**CONTRACTOR**	**RIG NO.**
[illegible]		LOFFLAND BROTHERS COMPANY	72
SIGNATURE OF OPERATOR'S REPRESENTATIVE		**SIGNATURE OF CONTRACTOR'S TOOL PUSHER**	
[illegible]		[illegible]	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
5	19.50	E	6 5/8	4 1/2 XH	1	1	[illegible]	[illegible]	14

LEGAL LAND DESCRIPTION: Penn Fed [illegible] 4 S-R

WIRE LINE RECORD — REEL NO.

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	A.K.B. TO CSG. HD.	SET AT
	13 3/8						235-3

SIZE: 1 3/4 — NO. LINES: 10 — 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	7½	9	
3.	REAMING			
4.	CORING			
5.	CONDITION MUD & CIRCULATE			
6.	TRIPS			
7.	LUBRICATE RIG			
8.	REPAIR RIG			
9.	CUT OFF DRILLING LINE			
10.	DEVIATION SURVEY	½		
11.	WIRE LINE LOGS			
12.	RUN CASING & CEMENT			
13.	WAIT ON CEMENT			
14.	NIPPLE UP B.O.P.			
15.	TEST B.O.P.			
16.	DRILL STEM TEST			
17.	PLUG BACK			
18.	SQUEEZE CEMENT			
19.	FISHING			
20.	DIR. WORK			
21.				
22.				
23.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8	16	

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	51
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 12¼"	1	FT.
2	[illegible]	2	
1	STB RMR [illegible] OD	[illegible]	FT.
1	D.C. ID [illegible] OD	[illegible]	FT.
2	STB RMR [illegible] OD	[illegible]	FT.
2	D.C. [illegible] OD	[illegible]	FT.
2	STB RMR [illegible] OD	[illegible]	FT.
1	[illegible]	[illegible]	
1	[illegible]	[illegible]	
23	STANDS DP	[illegible]	FT.
3	SINGLES DP	[illegible]	FT.
	KELLY DOWN	[illegible]	FT.
	TOTAL	[illegible]	FT.
WT. OF STRING	[illegible]		LBS.

BIT RECORD

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

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]			

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT, [illegible]	[illegible]	FT.
1	[illegible]	[illegible]	
1	STB RMR [illegible] OD	[illegible]	FT.
2	D.C. ID [illegible] OD	[illegible]	FT.
2	STB RMR [illegible] OD	[illegible]	FT.
1	[illegible]	[illegible]	
1	[illegible]	[illegible]	
20	STANDS DP	[illegible]	FT.
1	SINGLES DP	[illegible]	FT.
	KELLY DOWN	[illegible]	FT.
	TOTAL	[illegible]	FT.
WT. OF STRING	[illegible]		LBS.

BIT RECORD

BIT NO.	1
SIZE	[illegible]
MFG.	[illegible]
TYPE	[illegible]
JET 1/32"	[illegible]
SER. NO.	[illegible]
DEPTH OUT	
DEPTH IN	[illegible]
TOTAL FTG.	[illegible]
TOTAL HRS. RUN	[illegible]
COND. 1/8's T/B GAGE	
GPM PD-PSI	/ /

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]			

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 12¼"	1	FT.
1	[illegible]	[illegible]	
1	STB RMR [illegible] OD	[illegible]	FT.
1	D.C. ID [illegible] OD	[illegible]	FT.
2	STB RMR [illegible] OD	[illegible]	FT.
1	D.C. ID [illegible] OD	[illegible]	FT.
2	STB RMR [illegible] OD	[illegible]	FT.
1	[illegible]	[illegible]	
1	[illegible]	[illegible]	
24	STANDS DP	[illegible]	FT.
3	SINGLES DP	[illegible]	FT.
	KELLY DOWN	[illegible]	FT.
	TOTAL	[illegible]	FT.
WT. OF STRING	[illegible]		LBS.

BIT RECORD

BIT NO.	1C
SIZE	12¼
MFG.	[illegible]
TYPE	[illegible]
JETS 1/32"	12 12 13
SER. NO.	[illegible]
DEPTH OUT	[illegible]
DEPTH IN	[illegible]
TOTAL FTG.	
TOTAL HRS. RUN	[illegible]
COND. 1/8's T/B GAGE	
GPM PD-PSI	/ /

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]			

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL-S PARTIAL-P CONTRACT
[illegible]	[illegible]	D			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			C
					50	45	[illegible]	1 3/4	47			T

DEVIATION RECORD: DEPTH [illegible] — DEV. [illegible] — DIRECTION [illegible]

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

DRILLER [illegible]

DAY TOUR

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL-S PARTIAL-P CONTRACT
[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			S

DEVIATION RECORD: DEPTH [illegible] — DEV. [illegible] — DIRECTION [illegible]

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
[illegible]	[illegible]	5		[illegible]

DRILLER [illegible]

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. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL-S PARTIAL-P CONTRACT
3933	3965	D			50	55	[illegible]	[illegible]	[illegible]			S

DEVIATION RECORD: DEPTH [illegible] — DEV. 7½ — DIRECTION X

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

DRILLER [illegible]

Form 3T6 — APPROVED — APPROVED

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

C 23547

DAILY DRILLING REPORT

REPORT NO. 55

LEASE	WELL NO.	API WELL NUMBER	DATE
Pauline Fee	11-4	42-55-[illegible]-[illegible]-45	Oct 24 74

OPERATOR	CONTRACTOR	RIG NO.
Bruce Anderson Jr.	LOFFLAND BROTHERS COMPANY	12

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
	[illegible]

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

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Ideco	D-[illegible]	12
2	Ideco	D-[illegible]	12

LEGAL LAND DESCRIPTION: Pauline Fee Survey A-55

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13 3/8	[illegible]					352

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

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

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	55
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 12¼	1.00	FT.
1	DP 4½ XH	11.61	
1	STB RMR OD	4.27	FT.
1	D.C. ID OD	30.71	FT.
1	STB RMR OD	30.71	FT.
2	D.C. ID OD	30.71	FT.
3	STB RMR OD	30.71	FT.
1	[illegible]	Drilled	
1	[illegible]	1.50	
32	STANDS DP	3141.71	FT.
	SINGLES DP	[illegible]	FT.
	KELLY DOWN	38	FT.
	TOTAL	3371.00	FT.

WT. OF STRING [illegible] LBS.

BIT RECORD

BIT NO.	15
SIZE	12¼
MFG.	Reed
TYPE	S12-J
JETS 1/32"	12 12 13
SER. NO.	515777
DEPTH OUT	
DEPTH IN	3311
TOTAL FTG.	515
TOTAL HRS. RUN	69
COND. 1/8's T.B. GAGE	2 1
GPM/ PD-PSI	/

MUD RECORD

TIME	8 AM	4 PM	
WEIGHT	10.1	10.1	
PRESSURE GRADIENT			
VISC.-SEC.	38	40	
PV/YP	/	/	
GELS.	/	/	
WL.-CC'S.			
pH	9.5	9.5	
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Caust	1/2	Lime	1
Soda Ash	1/2	Gel	15

FOOTAGE

FROM	TO	DR. RM. CORE. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
3125	3171	D			40	55	1100	6¼	47			S

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
3145	5 3/4	S						

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	0130	1½	2	Drilling 12¼ hole
0130	0230	1	10	Survey
0230	0600	3½	2	Drilling 12¼ hole

DRILLER [illegible]

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT [illegible]	2.00	FT.
1	[illegible]	2.36	
1	STB RMR OD	2.62	FT.
2	D.C. ID OD	30.71	FT.
1	STB RMR OD	30.71	FT.
2	D.C. ID OD	30.71	FT.
3	STB RMR OD	30.71	FT.
1	[illegible]	2.00	
9	[illegible]	9.50	
32	STANDS DP	3141.54	FT.
2	SINGLES DP	19.17	FT.
	KELLY DOWN	21	FT.
	TOTAL	3371.71	FT.

WT. OF STRING [illegible] LBS.

BIT RECORD

BIT NO.	16	17
SIZE	12¼	12¼
MFG.	Reed	Smith
TYPE	S12-J	J-55
JET 1/32"	12 12 13	13 13 13
SER. NO.	515677	RX145
DEPTH OUT	3311	
DEPTH IN	3311	3674
TOTAL FTG.	515	12
TOTAL HRS. RUN	69	2¼
COND. 1/8's T.B. GAGE	2 2 1	
GPM/ PD-PSI	/	/

MUD RECORD

TIME	8 PM	4 AM	
WEIGHT	10.1	10.1	
PRESSURE GRADIENT	.476		
VISC.-SEC.	40	40	
PV/YP	22/13	/	/
GELS.	2	/	/
WL.-CC'S.	11.4		
pH	9.5		
SOLIDS %	2.5		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR. RM. CORE. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P. M.	METHOD RUN
3671	3671	D			40	55	1300	6¼	47			S

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
3671	4	S						

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0600	0630	½	2	Drilling 12¼ hole
0630	0645	¼	10	Survey
0645	1100	2¼	2	Drilling 12¼ hole
1100	1130	½	2	Drilling 12¼ hole
1130	1330	2	2	Drilling 12¼ hole
1330	1345	¼	2	Drilling 12¼ hole
1345	1700	2¼	2	Drilling 12¼ hole

DRILLER J. Stanford

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT [illegible]	1.00	FT.
1	DP 4½ XH	11.61	
1	STB RMR OD	4.27	FT.
2	D.C. ID OD	30.71	FT.
1	STB RMR OD	30.71	FT.
2	D.C. ID OD	30.71	FT.
3	STB RMR OD	30.71	FT.
1	[illegible]	1.00	
1	[illegible]	1.50	
32	STANDS DP	3141.71	FT.
2	SINGLES DP	19.17	FT.
	KELLY DOWN	13.71	FT.
	TOTAL	3374.59	FT.

WT. OF STRING [illegible] LBS.

BIT RECORD

BIT NO.	17
SIZE	12¼
MFG.	Smith
TYPE	J-55
JETS 1/32"	13 13 13
SER. NO.	RX145
DEPTH OUT	
DEPTH IN	3674
TOTAL FTG.	60
TOTAL HRS. RUN	10¼
COND. 1/8's T.B. GAGE	2 1
GPM/ PD-PSI	/

MUD RECORD

TIME		4 PM	
WEIGHT		10.1	
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL.-CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR. RM. CORE. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
3671	3741	D			40	55	1300	6¼	47			S

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
1600	2400	8	2	Drilling 12¼ hole

DRILLER

C 23546

DAILY DRILLING REPORT — REPORT NO. 54

LEASE	WELL NO.	API WELL NUMBER	DATE
Federal 12-4	12-4	A-05-10-30-123-W-45	04-23-74
OPERATOR	**CONTRACTOR**		**RIG NO.**
Amoco Production Co.	LOFFLAND BROTHERS COMPANY		72
SIGNATURE OF OPERATOR'S REPRESENTATIVE	**SIGNATURE OF CONTRACTOR'S TOOL PUSHER**		

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
1	[illegible]	E	6 7/8	4 1/2 IF	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-1000	16
2	Emsco	D-200	16

LEGAL LAND DESCRIPTION A55-10-30-123-W5

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	13 3/8				2503		

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED
1 3/4	10	

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			7½
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE	1½	9½	
6	TRIPS			
7	LUBRICATE RIG			
8	REPAIR RIG	14½	½	½
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		24	17	7

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	54
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 12¼	1.00	FT.
6	[illegible]	30.2	
2	STB RMR 9" OD	6.07	FT.
1	D.C. ID 6 1/4" OD	30.78	FT.
1	STB RMR 9" OD	6.17	FT.
2	D.C. ID 6 1/4" OD	61.35	FT.
5	STB-RMR 9" OD	93.65	FT.
1	[illegible]	1.31	
1	[illegible]	31.45	
31	STANDS DP	2874.2	FT.
2	SINGLES DP	18.5	FT.
	KELLY DOWN	[illegible]	FT.
	TOTAL	3076.7	FT.
WT. OF STRING	[illegible]		LBS.

BIT RECORD

BIT NO.	15
SIZE	12¼
MFG.	Reed
TYPE	S62-J
JETS 1/32"	12 12 13
SER. NO.	215677
DEPTH OUT	
DEPTH IN	3076
TOTAL FTG.	[illegible]
TOTAL HRS. RUN	[illegible]
COND. 1/8's T/B GAGE	
GPM/ PD-PSI	/ /

MUD RECORD

TIME	0200	0900	0600
WEIGHT	9.6	10.1	10.1
PRESSURE GRADIENT			
VISC.-SEC.	38	37	41
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gyp	4 SKS	Lignosulfonate	484
Gel	7545	Lignite	12

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 12¼	1.00	FT.
1	[illegible]	18.02	
3	STB RMR 9" OD	12.17	FT.
1	D.C. ID 6 1/4" OD	30.78	FT.
1	STB RMR 9" OD	30.17	FT.
2	D.C. ID 6 1/4" OD	60.75	FT.
5	STB RMR 9" OD	93.15	FT.
1	[illegible]	2.11	
7	[illegible]	220.5	
1	[illegible]	1.51	
31	STANDS DP	2874.2	FT.
2	SINGLES DP	18.5	FT.
	KELLY DOWN	33	FT.
	TOTAL	3076.7	FT.
WT. OF STRING	[illegible]		LBS.

BIT RECORD

BIT NO.	15
SIZE	12¼
MFG.	Reed
TYPE	S62-J
JET 1/32"	12 12 13
SER. NO.	215677
DEPTH OUT	
DEPTH IN	3076
TOTAL FTG.	278
TOTAL HRS. RUN	23½
COND. 1/8's T/B GAGE	
GPM/ PD-PSI	/ /

MUD RECORD

TIME	1200	0600	1500
WEIGHT	9.6	10.1	10.1
PRESSURE GRADIENT			
VISC.-SEC.	38	37	41
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gyp	15		
Gel	123		
Lignosulfonate	484		

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT [illegible]	1.00	FT.
1	[illegible]	18.02	
3	STB RMR 9" OD	12.17	FT.
1	D.C. ID 6 1/4" OD	30.78	FT.
1	STB RMR 9" OD	30.17	FT.
2	D.C. ID 6 1/4" OD	60.75	FT.
5	STB RMR 9" OD	93.15	FT.
1	[illegible]	2.11	
7	[illegible]	220.5	
1	[illegible]	1.51	
31	STANDS DP	2874.2	FT.
2	SINGLES DP	18.5	FT.
	KELLY DOWN	33	FT.
	TOTAL	3076.7	FT.
WT. OF STRING	[illegible]		LBS.

BIT RECORD

BIT NO.	15
SIZE	12¼
MFG.	Reed
TYPE	S62-J
JETS 1/32"	12 12 13
SER. NO.	215677
DEPTH OUT	
DEPTH IN	3076
TOTAL FTG.	278
TOTAL HRS. RUN	23½
COND. 1/8's T/B GAGE	
GPM/ PD-PSI	/ /

MUD RECORD

TIME	1200	0600	1500
WEIGHT	9.6	10.1	10.1
PRESSURE GRADIENT			
VISC.-SEC.	38	37	41
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gyp	15		
Gel	123		
Lignosulfonate	484		

FOOTAGE / FORMATION

FROM	TO	DR..D RM-R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
3574							1600	6¾	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
0001	0630	6½		CIRC THROUGH 4" LINE TO PIT - PUMP 5 SPM.
0630	0900	1½		MIX & PUMP 33 BBL 10.1# MUD.

DRILLER [illegible]

FOOTAGE / FORMATION

FROM	TO	DR..D RM-R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
3574												

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
0600	1500	9	5	CIRC THROUGH MANIFOLD & PUMP 8.4
1500	1600	1	5	CIRC & SPOT 50 BBL 10.1# MUD

DRILLER [illegible]

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
3574	3577	3			40	55	1600	6¾	42			5

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
1600	1830	1½	5	CIRC & SPOT 50 BBL 10.1# MUD
1830	2400	5½		DRILL 12¼" HOLE

DRILLER [illegible]

C 23545

DAILY DRILLING REPORT — REPORT NO. 53

LEASE	WELL NO.	API WELL NUMBER	DATE
Pan-Co Min	1-4	42-235-(1-30-125-1.45	04-22-74

OPERATOR	CONTRACTOR	RIG NO.
Amoco Canada Ltd.	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

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

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-1000	13
2	Emsco	D-1000	16

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13 3/8				2503		

WIRE LINE RECORD — REEL NO.

SIZE 1 3/16 — NO. LINES 10 — 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	8	6 1/2	
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE		1 1/2	8
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY	1/4	1/4	
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	16	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 53

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

NO. 1 — DRILLING ASSEMBLY (At end of tour) / BIT RECORD

NO.	DRILLING ASSEMBLY		BIT RECORD	
1	BIT 12 1/4	1.00 FT.	BIT NO.	15
1	[illegible]	10.02	SIZE	12 1/4
2	STB RMR 12" OD	12.27 FT.	MFG.	Reed
1	D.C. ID 3 1/8 OD	2.46 FT.	TYPE	S12-J
1	STB RMR [illegible] OD	1.44 FT.	JETS 1 32"	12 12 13
1	D.C. ID [illegible] OD	[illegible] FT.	SER. NO.	85177
1	STB RMR [illegible] OD	[illegible] FT.	DEPTH OUT	
2	D.C. [illegible]	61.72	DEPTH IN	2411
1	[illegible]	1.71	TOTAL FTG.	423
1	[illegible]	[illegible]	TOTAL HRS. RUN	47
30	STANDS DP	2760.26 FT.	COND. 1/8's T/B/ GAGE	
2	SINGLES DP	62.75 FT.	GPM/ PD-PSI	
	KELLY DOWN	32.10 FT.		
	TOTAL	2855.00 FT.		

WT. OF STRING 141000 LBS.

MUD RECORD

TIME	[illegible]	0400	0800
WEIGHT	9.7	9.7	9.7
PRESSURE GRADIENT			
VISC.-SEC.	39	38	37
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S			
pH	9	10	10
SOLIDS %	[illegible]	[illegible]	[illegible]

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	30 Sx	[illegible]	1 Sx
[illegible]	2 Sx		
[illegible]	2 Sx		
X-[illegible]	3 Sx		

MORNING TOUR

NO. 2 — DRILLING ASSEMBLY (At end of tour) / BIT RECORD

NO.	DRILLING ASSEMBLY		BIT RECORD	
1	BIT 12 1/4	[illegible] FT.	BIT NO.	15
1	[illegible]	[illegible]	SIZE	12 1/4
1	STB RMR [illegible] OD	[illegible] FT.	MFG.	Reed
1	D.C. ID [illegible] OD	30.32 FT.	TYPE	S12-J
1	STB RMR [illegible] OD	30.22 FT.	JET 1/32"	12 12 13
2	D.C. ID [illegible] OD	61.12 FT.	SER. NO.	85177
1	STB RMR [illegible] OD	[illegible] FT.	DEPTH OUT	
2	[illegible]	[illegible]	DEPTH IN	3071
1	[illegible]	[illegible]	TOTAL FTG.	516
1	[illegible]	[illegible]	TOTAL HRS. RUN	53 1/2
31	STANDS DP	[illegible] FT.	COND. 1/8's T/B/ GAGE	R-[illegible]
2	SINGLES DP	1085 FT.	GPM/ PD-PSI	/ / /
	KELLY DOWN	33.40 FT.		
	TOTAL	3574.87 FT.		

WT. OF STRING 142000 LBS.

MUD RECORD

TIME	1800	1300	1800
WEIGHT	9.1	9.4	9.4
PRESSURE GRADIENT			
VISC.-SEC.	41	42	38
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S			
pH	11	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	20 Sx		
X-[illegible]	3 Sx		

DAY TOUR

NO. 3 — DRILLING ASSEMBLY (At end of tour) / BIT RECORD

NO.	DRILLING ASSEMBLY		BIT RECORD	
1	BIT 12 1/4	1.00 FT.	BIT NO.	15
1	[illegible]	10.02	SIZE	12 1/4
2	STB RMR [illegible] OD	1.27 FT.	MFG.	Reed
1	D.C. ID [illegible] OD	30.28 FT.	TYPE	S12-J
1	STB RMR [illegible] OD	30.17 FT.	JETS 1/32"	12 12 13
2	D.C. ID [illegible] OD	61.25 FT.	SER. NO.	85177
1	STB RMR [illegible] OD	[illegible] FT.	DEPTH OUT	
1	[illegible]	1.73	DEPTH IN	3076
1	[illegible]	[illegible]	TOTAL FTG.	
1	[illegible]	25.00	TOTAL HRS. RUN	
31	STANDS DP	2874.22 FT.	COND. 1/8's T/B/ GAGE	
2	SINGLES DP	62.85 FT.	GPM/ PD-PSI	
	KELLY DOWN	23.20 FT.		
	TOTAL	3574.47 FT.		

WT. OF STRING 140000 LBS.

MUD RECORD

TIME	1800		2300
WEIGHT	9.1		9.4
PRESSURE GRADIENT			
VISC.-SEC.	37		38
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S			
pH	9.0		
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel, Mat	25 Sx		
Flake	2 Sx		
Defoamer	1 Gal		

EVENING TOUR

FOOTAGE / FORMATION / DRILLING PARAMETERS

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
3457	3509	D		50	40	40	2000	6 1/4	50	6 1/4		5

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	3440	5°	X						

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	0430	4 1/2		Drlg 12 1/4 Hole.
0430	0445	1/4		Circ & Cond.
0445	0700	3 1/4		Drlg 12 1/4 Hole.

DRILLER [illegible]

FOOTAGE / FORMATION / DRILLING PARAMETERS

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
3509	3524	D		—	40	45	2000	6 1/4	50			5

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	3571	4 3/4°	X						

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0800	1300	5	2	Drlg 12 1/4 Hole
1300	1315	1/4	11	Survey
1315	1445	1 1/2	2	Drlg 12 1/4 Hole
1445	1800	1 1/4	5	Circ Hole Thru Manifold & Pump Bit
				2 DPP — 15 MIN 400 PSI
				SICP 15 MIN 420 PSI

DRILLER [illegible]

FOOTAGE / FORMATION / DRILLING PARAMETERS

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
3524							1500	6 1/4	36	6 1/4		5

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
1800	2400	6		Circ Thru Manifold & Pump Out Mat Mat

DRILLER [illegible]

EVENING TOUR

C 23544

DAILY DRILLING REPORT — REPORT NO. 52

LEASE	WELL NO.	API WELL NUMBER	DATE
Pointed Mtn.	A-4	A-5[illegible]-10-30-123-W-45[illegible]	04-21-74

OPERATOR	CONTRACTOR	RIG NO.
Amoco Canada Ltd.	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: J. H. Fraher.

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO.

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5"	19.50	E	6 5/8	H.S.L.	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-1000	14
2	Emsco	D-700	16

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
13 3/8				2503		

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

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	52
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 12 1/4	[illegible]	FT.
1	[illegible]	[illegible]	
2	STB RMR	OD [illegible]	FT.
1	D.C. ID	OD [illegible]	FT.
1	STB RMR	OD [illegible]	FT.
1	D.C. ID	OD [illegible]	FT.
1	STB RMR	OD [illegible]	FT.
[illegible]			
28	STANDS DP	2692.15	FT.
2	SINGLES DP	63.52	FT.
	KELLY DOWN	21.00	FT.
	TOTAL	[illegible]	FT.

WT. OF STRING 137000 LBS.

BIT RECORD

BIT NO.	15
SIZE	12 1/4
MFG.	Reed
TYPE	S62-J
JETS 1/32"	12 12 13
SER. NO.	[illegible]
DEPTH OUT	
DEPTH IN	3076
TOTAL FTG.	[illegible]
TOTAL HRS. RUN	21 1/4
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	[illegible]	[illegible]	0600
WEIGHT	[illegible]	[illegible]	[illegible]
PRESSURE GRADIENT			
VISC.-SEC.	[illegible]	37	37
PV/YP	/	/	/
GELS.	/	/	/
WL.-CC'S.			12
pH	[illegible]	[illegible]	[illegible]
SOLIDS %	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Drispac	2 sks		
F.L.	5 sks		
Caustic	4 sks		
K-Mag	2 sks		

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SURF. SLIDE PUMP/TURB. COMB-C
3252	3311	D		61	40	60	2000	6 1/2	50			S
							1750			6 1/2	62	S

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
3210	4 3/4	X						

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	0600	6		Drilling 12 1/4 Hole
0600	0615	1/4		Circ. & Work Pipe Survey
0615	0700	1 1/4		Drilling 12 1/4 Hole.

DRILLER [illegible]

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 12 1/4	1.00	FT.
1	[illegible]	[illegible]	
3	STB RMR	OD [illegible]	FT.
1	D.C. ID	OD 3.81	FT.
1	STB RMR	OD [illegible]	FT.
1	STB RMR	OD [illegible]	FT.
[illegible]			
27	STANDS DP	2577.35	FT.
1	SINGLES DP	21.00	FT.
	KELLY DOWN	41.00	FT.
	TOTAL	2331.10	FT.

WT. OF STRING 135,000 LBS.

BIT RECORD

BIT NO.	15
SIZE	12 1/4
MFG.	Reed
TYPE	S62-J
JET 1/32"	12 12 13
SER. NO.	[illegible]
DEPTH OUT	
DEPTH IN	3076
TOTAL FTG.	314
TOTAL HRS. RUN	31 1/4
COND. 1/8's T/B/ GAGE	[illegible]
GPM/ PD-PSI	

MUD RECORD

TIME	[illegible]	[illegible]	[illegible]
WEIGHT	[illegible]	[illegible]	[illegible]
PRESSURE GRADIENT		[illegible]	[illegible]
VISC.-SEC.	37	38	38
PV/YP	/	/	/
GEL.S.	/	/	/
WL.-CC'S.			
pH	[illegible]	[illegible]	[illegible]
SOLIDS %			
[illegible]			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	200	Lignosol	[illegible]
Caustic	40	Soda Ash	[illegible]
Drispac	50	Lime	1,000

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SURF. SLIDE PUMP/TURB. COMB-C
3311	3319	D		—	40	60	[illegible]	6 3/4	50			S

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
3310	5°	X						

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0700	1100	3	2	Drilling 12 1/4 Hole
1100	1115	1/4	15	Rig Repair Drum & Check B.O.P.s
1115	1515	4	2	Drilling 12 1/4 Hole
1515	1530	1/4	1	Survey
1530	1700	1/2	2	Drilling 12 1/4 Hole

DRILLER [illegible]

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 12 1/4	1.00	FT.
1	[illegible]	[illegible]	
2	STB RMR	OD 12.1	FT.
1	D.C. ID	OD [illegible]	FT.
1	STB RMR	OD 3.82	FT.
1	D.C. ID	OD 3.81	FT.
1	STB RMR	OD 12.1	FT.
3	[illegible]	[illegible]	
30	STANDS DP	2771.21	FT.
1	SINGLES DP	31.46	FT.
	KELLY DOWN	12.00	FT.
	TOTAL	2815.00	FT.

WT. OF STRING 140,000 LBS.

BIT RECORD

BIT NO.	15
SIZE	12 1/4
MFG.	Reed
TYPE	S62-J
JETS 1/32"	12 12 13
SER. NO.	[illegible]
DEPTH OUT	
DEPTH IN	3076
TOTAL FTG.	393
TOTAL HRS. RUN	31 1/4
COND. 1/8's T/B/ GAGE	[illegible]
GPM/ PD-PSI	

MUD RECORD

TIME	1700	2200	2200
WEIGHT	[illegible]	[illegible]	[illegible]
PRESSURE GRADIENT		1610	1610
VISC.-SEC.	41	[illegible]	41
PV/YP	/	/	/
GELS.	/	/	/
WL.-CC'S.		[illegible]	
pH	[illegible]	[illegible]	9.5
SOLIDS %	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Soda Ash	100 lbs		
Caustic			

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SURF. SLIDE PUMP/TURB. COMB-C
3314	3357	D		43	40	66	[illegible]	6 1/4	50			S
										6 1/2		S

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
1700	2400	9		Drilling 12 1/4 Hole

DRILLER [illegible]

C 23543

DAILY DRILLING REPORT — REPORT NO. 51

LEASE	WELL NO.	API WELL NUMBER	DATE
[illegible]	[illegible]	[illegible]	04-20-74

OPERATOR	CONTRACTOR	RIG NO.
[illegible]	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

LEGAL LAND DESCRIPTION

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5	[illegible]	E	[illegible]	[illegible]	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	12

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	7				3203		

WIRE LINE RECORD — REEL NO.

SIZE [illegible] — NO. LINES 10 — 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	8	8½	5¼
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS		3	1
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			¼
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21. [illegible]	12	½	
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	51
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT 12¼	[illegible] FT.	BIT NO.	[illegible]
1	[illegible]	[illegible]	SIZE	[illegible]
2	STB RMR [illegible] OD	[illegible] FT.	MFG.	[illegible]
1	D.C. ID [illegible] OD	[illegible] FT.	TYPE	[illegible]
3	STB RMR OD	[illegible] FT.	JETS 1/32"	[illegible]
1	D.C. ID [illegible] OD	[illegible] FT.	SER. NO.	[illegible]
1	STB RMR [illegible] OD	[illegible] FT.	DEPTH OUT	[illegible]
1	[illegible]	[illegible]	DEPTH IN	[illegible]
3	[illegible]	[illegible]	TOTAL FTG.	110
1	[illegible]	[illegible]	TOTAL HRS. RUN	16
30	STANDS DP	[illegible] FT.	COND. 1/8's T.B. GAGE	[illegible]
1	SINGLES DP	31.71 FT.	GPM/ PD-PSI	[illegible]
	KELLY DOWN	22.00 FT.		
	TOTAL	[illegible] FT.		
WT. OF STRING	[illegible]	LBS.		

MUD RECORD			
TIME	[illegible]	[illegible]	[illegible]
WEIGHT	9	[illegible]	[illegible]
PRESSURE GRADIENT			
VISC.-SEC.	4	41	41
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	9.2		
pH	9.0	10	[illegible]
SOLIDS %			

MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AMT.
[illegible]		[illegible]	
[illegible]		[illegible]	
[illegible]		[illegible]	
[illegible]		[illegible]	

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT [illegible]	[illegible] FT.	BIT NO.	15
1	[illegible]	[illegible]	SIZE	12¼
2	STB RMR [illegible] OD	[illegible] FT.	MFG.	[illegible]
1	D.C. ID [illegible] OD	[illegible] FT.	TYPE	[illegible]
3	STB RMR [illegible] OD	[illegible] FT.	JET 1/32"	[illegible]
1	D.C. ID [illegible] OD	[illegible] FT.	SER. NO.	[illegible]
1	STB RMR [illegible] OD	[illegible] FT.	DEPTH OUT	[illegible]
2	[illegible]	[illegible]	DEPTH IN	[illegible]
2	[illegible]	[illegible]	TOTAL FTG.	[illegible]
1	[illegible]	[illegible]	TOTAL HRS. RUN	[illegible]
30	STANDS DP	[illegible] FT.	COND. 1/8's T.B. GAGE	[illegible]
1	SINGLES DP	[illegible] FT.	GPM/ PD-PSI	[illegible]
	KELLY DOWN	[illegible] FT.		
	TOTAL	[illegible] FT.		
WT. OF STRING		LBS.		

MUD RECORD			
TIME	[illegible]	[illegible]	[illegible]
WEIGHT	[illegible]	[illegible]	[illegible]
PRESSURE GRADIENT	[illegible]		
VISC.-SEC.	[illegible]	[illegible]	[illegible]
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	[illegible]	[illegible]	[illegible]
SOLIDS %			

MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AMT.
[illegible]		[illegible]	
[illegible]		[illegible]	
[illegible]		[illegible]	
[illegible]		[illegible]	

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT 12¼	[illegible] FT.	BIT NO.	15
1	[illegible]	[illegible]	SIZE	12¼
2	STB RMR [illegible] OD	[illegible] FT.	MFG.	[illegible]
1	D.C. ID [illegible] OD	[illegible] FT.	TYPE	[illegible]
3	STB RMR [illegible] OD	[illegible] FT.	JETS 1/32"	[illegible]
1	D.C. ID [illegible] OD	[illegible] FT.	SER. NO.	[illegible]
1	STB RMR [illegible] OD	[illegible] FT.	DEPTH OUT	[illegible]
2	[illegible]	[illegible]	DEPTH IN	[illegible]
2	[illegible]	[illegible]	TOTAL FTG.	[illegible]
1	[illegible]	[illegible]	TOTAL HRS. RUN	[illegible]
26	STANDS DP	[illegible] FT.	COND. 1/8's T/B/ GAGE	[illegible]
	SINGLES DP	FT.	GPM/ PD-PSI	[illegible]
	KELLY DOWN	[illegible] FT.		
	TOTAL	[illegible] FT.		
WT. OF STRING	[illegible]	LBS.		

MUD RECORD			
TIME	[illegible]	[illegible]	[illegible]
WEIGHT	[illegible]	[illegible]	[illegible]
PRESSURE GRADIENT			
VISC.-SEC.	[illegible]	[illegible]	[illegible]
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	[illegible]	[illegible]	[illegible]
SOLIDS %			

MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AMT.
[illegible]		[illegible]	
[illegible]		[illegible]	
[illegible]		[illegible]	
[illegible]		[illegible]	

DAY TOUR

FOOTAGES

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SURV.-S PAPER-P CORE-C
3114	3150	D		78	50	40	1500	6½	120			S
										6½	[illegible]	

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
[illegible]	0300	8		[illegible]

DRILLER [illegible]

EVENING TOUR

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SURV.-S PAPER-P CORE-C
3151	3203	D		Drill Chge in Stem	50	40	1500	6½	120			S

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
0600	1130	3½	2	Drilling 12¼ Hole / Lay Down 7 Singles
1130	1430	3	6	Hoist 7 Pck. in Hole Drill Collars
1430	1600	1½	21	Pick up 7-6½" Drill Collars

DRILLER [illegible]

EVENING TOUR

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SURV.-S PAPER-P CORE-C
3203	3227	D		24	40	55	1500	6½	120			S
3227	3252	D		25	40	55	1700			6½	62	S

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
3245	4¼	X						

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1600	1700	1	1	Run in Hole
1700	1715	¼		Break Line & Leak Stem 5 Std
1715	1745	½		Drilling 12¼ Hole
1745	1800	¼		Circ Out Trip Gas
1800	1815	¼		Survey
1815	2400	6¼		Drilling 12¼ Hole

DRILLER [illegible]

FORM 3T6 — APPROVED — APPROVED

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

C 23542

DAILY DRILLING REPORT — REPORT NO. 50

LEASE	WELL NO.	API WELL NUMBER	DATE
Points Unit	4-4	43-10-36-123-W-45	04-17-74

OPERATOR	CONTRACTOR	RIG NO.
Mobil Coastal & S.	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO.

	D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
	4"	16.60	E	6 5/8	4 1/2 XH	1

	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
	1	Emsco	D-375	16"
	2	Emsco	D-375	16"

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	13 3/8"				2503		

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

COMPLETION

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	50
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD		
1	BIT 12 1/4	1.00 FT.	BIT NO.	14	TIME	0100	0300
1	IC Rock Bit	1.00	SIZE	12 1/4	WEIGHT	9.1	9.1
2	STB RMR 8" OD	12.57 FT.	MFG.	Reed	PRESSURE GRADIENT		
1	D.C. ID 3 1/2 OD	2.96 FT.	TYPE	S12-J	VISC.-SEC.	39	42
1	STB RMR 8" OD	3.09 FT.	JETS 1 32"	12 12 12	PV/YP	1	1
1	D.C. ID 3 1/2 OD	31.42 FT.	SER. NO.	F15774	GELS.	1	1
3	STB RMR 8" OD	93.72 FT.	DEPTH OUT		WL-CC'S.		
1	Sub	1.42	DEPTH IN	2917	pH	10	10
31	D.C.	954.61 FT.	TOTAL FTG.	457	SOLIDS %		
1	Sub	2.41	TOTAL HRS. RUN	65			
29	STANDS DP	2753.7 FT.	COND. 1/8's T/B. GAGE		MUD & CHEMICALS ADDED		
	SINGLES DP	FT.	GPM/ PD-PSI	/	TYPE	AMT.	TYPE AMT.
	KELLY DOWN	21 FT.			Lignite	350	
	TOTAL	3051.33 FT.			Caustic	100	
WT. OF STRING	114000 LBS.				Soda Ash	100	
					KCl	400	

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD			MUD RECORD		
1	BIT 12 1/4	1.00 FT.	BIT NO.	14	15	TIME	0700	1000
1	IC Rock Bit	11.12	SIZE	12 1/4	12 1/4	WEIGHT	9.0	9.1
2	STB RMR 8" OD	63.07 FT.	MFG.	Reed	Reed	PRESSURE GRADIENT		
1	D.C. ID 3 1/2 OD	2.96 FT.	TYPE	S12-J	S12-J	VISC.-SEC.	44	38
2	STB RMR 8" OD	61.75 FT.	JET 1/32"	12 12 12	13 13 13	PV/YP	1	1
1	D.C. ID 3 1/2 OD	31.41 FT.	SER. NO.	F15170	F15179	GELS.	1	1
1	STB RMR 8" OD	31.35 FT.	DEPTH OUT	3071		WL-CC'S.		
31	D.C.	954.61 FT.	DEPTH IN	3577	3076	pH	9.5	9.5
1	Sub	31.42	TOTAL FTG.	494		SOLIDS %		
1	Sub	31.45	TOTAL HRS. RUN	47 1/2				
29	STANDS DP	2745.17 FT.	COND. 1/8's T/B. GAGE	2 0 2		MUD & CHEMICALS ADDED		
1	SINGLES DP	31.35 FT.	GPM/ PD-PSI	/	/	TYPE	AMT.	TYPE AMT.
	KELLY DOWN	41.00 FT.				X-Pol	5	Lime
	TOTAL	3076.32 FT.						
WT. OF STRING	114000 LBS.							

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD		
1	BIT 12 1/4	1.00 FT.	BIT NO.	15	TIME	2100	2300
1	IC Rock Bit	11.12	SIZE	12 1/4	WEIGHT	9.1	9.2
2	STB RMR 8" OD	63.07 FT.	MFG.	Reed	PRESSURE GRADIENT		
1	D.C. ID 3 1/2 OD	2.96 FT.	TYPE	S12-J	VISC.-SEC.	39	41
2	STB RMR 8" OD	61.75 FT.	JETS 1/32"	12 12 12	PV/YP	1	1
1	D.C. ID 3 1/2 OD	31.43 FT.	SER. NO.	F15177	GELS.	1	1
1	STB RMR 8" OD	3.42 FT.	DEPTH OUT		WL-CC'S.	9.8	
1	Top Sub	2.42	DEPTH IN	3076	pH	9.0	10
31	D.C.	954.61 FT.	TOTAL FTG.	31	SOLIDS %		
1	Sub	3.45	TOTAL HRS. RUN	6			
27	STANDS DP	2645.87 FT.	COND. 1/8's T/B. GAGE	1 2		MUD & CHEMICALS ADDED	
1	SINGLES DP	31.47 FT.	GPM/ PD-PSI	/	/	TYPE	AMT. TYPE AMT.
	KELLY DOWN	37.00 FT.				Gel	6 sks Caustic 1 sks
	TOTAL	3108.00 FT.				Soda Ash 4 sks	
WT. OF STRING	114000 LBS.					X-Pol 1 gal	

FOOTAGE FROM	FOOTAGE TO	DR'D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCI POINTS PAINTS OTHER
2129	3036	D			50	40	1800	6 1/2	50	6 5/8		S

DEVIATION RECORD: DEPTH 3005 | DEV. 4 1/2 | DIRECTION X

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	0045	3/4		Drlg 12 1/4 Hole
0045	0130	1/2		Circ & Cond Mud for Trip
0130	0630	5		Trip for Bit #15
0630	0700	1/2		Circ Thru Manifold & Test Kelly

DRILLER

DAY TOUR

FOOTAGE FROM	FOOTAGE TO	DR'D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCI POINTS PAINTS OTHER
3041	3076	D			50	40	1800	6 1/2	50			

DEVIATION RECORD: DEPTH 3076 | DEV. 4 1/4 | DIRECTION X

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0700	0915	2 1/4	2	Drilling 12 1/4 Hole
0915	0945	1/2	5	Circ for Bit Trip & POOH
0945	1345	4	2	Drilling 12 1/4 Hole
1345	1400	1/4	5	Surv.
1400	1500	1	2	Hole Fill 2 Bbl @ 3076'
1500	1530	1/2	2	Check Flow Rate Change Bit Before Survey
1530	1600	1/2	1	Run in w/Bit #15

DRILLER

EVENING TOUR

FOOTAGE FROM	FOOTAGE TO	DR'D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCI POINTS PAINTS OTHER
3071	3108	D			50	40	1800	6 1/2	50	6 5/8		S

DEVIATION RECORD: DEPTH | DEV. | DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1600	1700	1	1	Run in w/Bit #15
1700	1730	1/2	2	Drlg 30' Fill & Ream
1730	1745	1/4	5	Surv.
1745	1815	1/2	2	Circ Twp Gas Thru Choke Manifold & Rec Rpt
1815	2400	5 1/2	2	Drilling 12 1/4 Hole

DRILLER

FORM 3T6 — APPROVED — APPROVED

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

C 23541

DAILY DRILLING REPORT

REPORT NO. 41

LEASE	WELL NO.	API WELL NUMBER	DATE
Pan Am A-4	A-4	A-015-21130-0100	04-15-74

OPERATOR	CONTRACTOR	RIG NO.
Pan American Petroleum Corp.	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

L. Hall

LEGAL LAND DESCRIPTION

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4"	11.85	E	6 3/4	H.E.F.	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-350	16
2	Emsco	D-350	16

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13 3/8				2103		

WIRE LINE RECORD REEL NO.

SIZE 7/8 | NO. LINES 10 | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. CR 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	9 3/4	9
3.	REAMING			
4.	CORING			
5.	CONDITION MUD & CIRCULATE			
6.	TRIPS			
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.	DIR. WORK			
21.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		4	19 3/4	9

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO. D.P.	2
HRS STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	47
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 12 1/4	1.10	FT.
1	[illegible]	10.2	
2	STB RMR OD	02.07	FT.
1	D.C. ID 3" OD	31.14	FT.
1	STB RMR OD	30.19	FT.
1	D.C. ID OD	31.42	FT.
3	STB RMR OD	93.72	FT.
1	[illegible]	1.45	
23	STANDS DP	2491.52	FT.
1	SINGLES DP	11.57	FT.
	KELLY DOWN	[illegible]	FT.
	TOTAL	[illegible]	FT.

WT. OF STRING 111 000 LBS.

BIT RECORD

BIT NO.	17
SIZE	12 1/4
MFG.	[illegible]
TYPE	[illegible]
JETS 1/32"	12 12
SER. NO.	91 14
DEPTH OUT	
DEPTH IN	2517
TOTAL FTG.	343
TOTAL HRS. RUN	43
COND. 1/8's T.B. GAGE	[illegible]
GPM/ PD-PSI	

MUD RECORD

TIME	1100	0300	0600
WEIGHT	10.1	10.1	10.1
PRESSURE GRADIENT			
VISC.-SEC.	43	42	41
PV/YP	/	/	11 / 7
GELS.	/	/	/
WL -CC'S.			5.0
pH	10.5	10	10.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]	[illegible]		
[illegible]	[illegible]		
[illegible]	[illegible]		
[illegible]	[illegible]		

MORNING TOUR

FOOTAGE

FROM	TO	DR'D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
2341	2500	D		31	50	40	1500	6 1/2	50			S
								6 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
0001	0300	5		[illegible]

DRILLER [illegible]

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 12 1/4	[illegible]	FT.
1	[illegible]	1.13	
2	STB RMR OD	1.[illegible]	FT.
1	D.C. ID OD	[illegible]	FT.
1	STB RMR OD	[illegible]	FT.
1	D.C. ID OD	[illegible]	FT.
3	STB RMR OD	[illegible]	FT.
1	[illegible]	1.45	
[illegible]	STANDS DP	[illegible]	FT.
1	SINGLES DP	[illegible]	FT.
	KELLY DOWN	[illegible]	FT.
	TOTAL	[illegible]	FT.

WT. OF STRING [illegible] LBS.

BIT RECORD

BIT NO.	24
SIZE	12 1/4
MFG.	[illegible]
TYPE	[illegible]
JET 1/32"	12 [illegible]
SER. NO.	[illegible]
DEPTH OUT	
DEPTH IN	[illegible]
TOTAL FTG.	[illegible]
TOTAL HRS. RUN	[illegible]
COND. 1/8's T.B. GAGE	[illegible]
GPM/ PD-PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]	[illegible]		

DAY TOUR

FOOTAGE

FROM	TO	DR'D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
2700	2755	D			40	40	1500	6 3/4	50			S

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	2711	4 1/4	X						

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0600	1100	5	2	Drlg 12 1/4 Hole
1100	1145	3/4	10	Survey
1145	1400	2 1/4	2	Drlg

DRILLER [illegible]

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 12 1/4	1.00	FT.
1	[illegible]	1.13	
2	STB RMR OD	1.07	FT.
1	D.C. ID OD	2.12	FT.
1	STB RMR OD	30.45	FT.
1	D.C. ID OD	31.42	FT.
3	STB RMR OD	93.72	FT.
1	[illegible]	1.45	
24	STANDS DP	2512.17	FT.
1	SINGLES DP	31.02	FT.
	KELLY DOWN	27.00	FT.
	TOTAL	2731.00	FT.

WT. OF STRING 112 000 LBS.

BIT RECORD

BIT NO.	JH
SIZE	12 1/4
MFG.	Reed
TYPE	[illegible]
JETS 1/32"	12 12 12
SER. NO.	[illegible]
DEPTH OUT	
DEPTH IN	2517
TOTAL FTG.	402
TOTAL HRS. RUN	53 1/4
COND. 1/8's T.B. GAGE	[illegible]
GPM/ PD-PSI	

MUD RECORD

TIME		2000	2230
WEIGHT		10	
PRESSURE GRADIENT			
VISC.-SEC.		38	
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.		9.2	
pH		10	
SOLIDS %	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	9.4	10

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]	[illegible]		
[illegible]	[illegible]		
[illegible]	[illegible]		

EVENING TOUR

FOOTAGE

FROM	TO	DR'D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
2755	2778	D			50	40	1500	7 3/4	50	6 1/2		S

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
1400	2400	5		Drlg 12 1/4 Hole

DRILLER [illegible]

Form 3T6

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

C 23540

DAILY DRILLING REPORT

REPORT NO. 47

LEASE	WELL NO.	API WELL NUMBER	DATE
Ponta Blue	A-4	M-35-11-20-12-3-1 1/2	04-17-74

OPERATOR	CONTRACTOR	RIG NO.
Mesa Petroleum Co.	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE: Ian McCampbell

SIGNATURE OF CONTRACTOR'S TOOL PUSHER:

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5"	19.50	E	6 5/8	NC 50	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Continental	D-1000	12"
2	Emsco	D-1000	12"

LEGAL LAND DESCRIPTION: Ponta Blue #A-4

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13 3/8"				2503		

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED
1 1/2"	10	

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	8	8	7½
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			½
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS			8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	48
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

DRILLING ASSEMBLY (At end of tour) — BIT RECORD — MUD RECORD

NO.	DRILLING ASSEMBLY		BIT RECORD	
1	BIT 12¼	1.00 FT.	BIT NO.	14
1	[illegible]	1.20	SIZE	12¼
2	STB RMR 1 OD	5.07 FT.	MFG.	Reed
1	D.C. ID OD	30.00 FT.	TYPE	S82-J
1	STB RMR 1 OD	30.18 FT.	JETS 1/32"	12 12 12
1	D.C. ID OD	1.00 FT.	SER. NO.	RJ5724
3	STB RMR OD	5.23 FT.	DEPTH OUT	
1	[illegible]	1.05	DEPTH IN	2503
24	STANDS DP	2313.41 FT.	TOTAL FTG.	1482
2	SINGLES DP	61.71 FT.	TOTAL HRS. RUN	17½
	KELLY DOWN	FT.	COND. 1/8's T.B. GAGE	1 1
	TOTAL	FT.	GPM/ PD-PSI	/

WT. OF STRING 108000 LBS.

MUD RECORD				
TIME		06:30		
WEIGHT				
PRESSURE GRADIENT				
VISC.-SEC.				
PV/YP	/	/	/	
GELS	/	/	/	
WL -CC'S.				
pH	11	10		
SOLIDS %				

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]			

HORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
1	BIT	FT.	BIT NO.	14
1	[illegible]		SIZE	12¼
2	STB RMR 1 OD	FT.	MFG.	Reed
1	D.C. ID OD	FT.	TYPE	S82-J
1	STB RMR OD	FT.	JET 1/32"	[illegible]
1	D.C. ID OD	FT.	SER. NO.	RJ5724
3	STB RMR 1 OD	FT.	DEPTH OUT	
1	[illegible]		DEPTH IN	3513
24	STANDS DP	FT.	TOTAL FTG.	1482
2	SINGLES DP	FT.	TOTAL HRS. RUN	17½
	KELLY DOWN	FT.	COND. 1/8's T.B. GAGE	[illegible]
	TOTAL	FT.	GPM/ PD-PSI	/

WT. OF STRING [illegible] LBS.

MUD RECORD				
TIME	[illegible]			
WEIGHT	[illegible]			
PRESSURE GRADIENT				
VISC.-SEC.	45			
PV/YP	/	/	/	
GELS	/	/	/	
WL -CC'S.				
pH	[illegible]			
SOLIDS %				

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]			

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
1	BIT 12¼	1.00 FT.	BIT NO.	14
1	[illegible]	1.20	SIZE	12¼
2	STB RMR 1 OD	5.07 FT.	MFG.	Reed
1	D.C. ID OD	30.00 FT.	TYPE	S82-J
1	STB RMR 1 OD	30.18 FT.	JETS 1/32"	12 12 12
1	D.C. ID OD	1.00 FT.	SER. NO.	RJ5724
3	STB RMR OD	5.23 FT.	DEPTH OUT	
1	[illegible]	1.05	DEPTH IN	2503
24	STANDS DP	2313.41 FT.	TOTAL FTG.	1482
2	SINGLES DP	61.71 FT.	TOTAL HRS. RUN	17½
	KELLY DOWN	FT.	COND. 1/8's T.B. GAGE	1 1
	TOTAL	FT.	GPM/ PD-PSI	/

WT. OF STRING 108000 LBS.

MUD RECORD				
TIME		06:30		
WEIGHT				
PRESSURE GRADIENT				
VISC.-SEC.				
PV/YP	/	/	/	
GELS	/	/	/	
WL -CC'S.				
pH	11	10		
SOLIDS %				

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]			

NO.	DRILLING ASSEMBLY		BIT RECORD	
1	BIT 12¼	1.00 FT.	BIT NO.	14
1	[illegible]	1.20	SIZE	12¼
2	STB RMR 1 OD	5.07 FT.	MFG.	Reed
1	D.C. ID OD	30.00 FT.	TYPE	S82-J
1	STB RMR 1 OD	30.18 FT.	JETS 1/32"	12 12 12
1	D.C. ID OD	1.00 FT.	SER. NO.	RJ5724
3	STB RMR OD	5.23 FT.	DEPTH OUT	
1	[illegible]	1.05	DEPTH IN	2503
24	STANDS DP	2313.41 FT.	TOTAL FTG.	1482
2	SINGLES DP	61.71 FT.	TOTAL HRS. RUN	17½
	KELLY DOWN	FT.	COND. 1/8's T.B. GAGE	1 1
	TOTAL	FT.	GPM/ PD-PSI	/

WT. OF STRING 108000 LBS.

MUD RECORD				
TIME		06:30		
WEIGHT				
PRESSURE GRADIENT				
VISC.-SEC.				
PV/YP	/	/	/	
GELS	/	/	/	
WL -CC'S.				
pH	11	10		
SOLIDS %				

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]			

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
1	BIT 12¼	1.00 FT.	BIT NO.	14
1	[illegible]	1.20	SIZE	12¼
2	STB RMR 1 OD	5.07 FT.	MFG.	Reed
1	D.C. ID OD	30.00 FT.	TYPE	S82-J
1	STB RMR 1 OD	30.18 FT.	JETS 1/32"	12 12 12
1	D.C. ID OD	1.00 FT.	SER. NO.	RJ5724
3	STB RMR OD	5.23 FT.	DEPTH OUT	
1	[illegible]	1.05	DEPTH IN	2503
24	STANDS DP	2313.41 FT.	TOTAL FTG.	1482
2	SINGLES DP	61.71 FT.	TOTAL HRS. RUN	17½
	KELLY DOWN	FT.	COND. 1/8's T.B. GAGE	1 1
	TOTAL	FT.	GPM/ PD-PSI	/

WT. OF STRING 108000 LBS.

MUD RECORD				
TIME		06:30		
WEIGHT				
PRESSURE GRADIENT				
VISC.-SEC.				
PV/YP	/	/	/	
GELS	/	/	/	
WL -CC'S.				
pH	11	10		
SOLIDS %				

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]			

FOOTAGE — FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR'D RM-R CORE-C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
2477	2491	D		[illegible]	50	40	1500	7"	48	6½"		5

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
0001	0600	6		[illegible]

DRILLER

FOOTAGE — FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR'D RM-R CORE-C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
2139	2230	D			50	40	2000	7"	50			5

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
0600	1100	5		Drlg. 12¼" hole

DRILLER

FOOTAGE — FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR'D RM-R CORE-C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
2784	2847	D		[illegible]	40	40	1800	6½"	50	6½"		5

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
2518	4¾	X						

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1100	2030	7½		Drlg. 12¼" hole
2030	2045	¼		[illegible]
2045	2400	3¼		[illegible]

DRILLER

EVENING TOUR

Form 3T6 — APPROVED — APPROVED

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

C 23539

DAILY DRILLING REPORT — REPORT NO. 7

LEASE	WELL NO.	API WELL NUMBER	DATE
[illegible]	3-B	[illegible]	4-11-70

OPERATOR	CONTRACTOR	RIG NO.
[illegible]	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

LEGAL LAND DESCRIPTION [illegible]

WIRE LINE RECORD — REEL NO.

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
[illegible]					

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	[illegible]		
2	[illegible]		

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	2"		9#	1	253	—	243
		[illegible]					

WIRE LINE RECORD: SIZE [illegible] NO. LINES 10 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	11½	3	7½
3	REAMING		1½	
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS	3½	2½	
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY	½		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	[illegible]	[illegible]	½	
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TRG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8	7½	8½

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	47
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD		
1	BIT [illegible]	[illegible] FT.	BIT NO.	13	TIME		
1	[illegible]	[illegible]	SIZE	12¼	WEIGHT		
2	STB RMR [illegible] OD	[illegible] FT.	MFG.	[illegible]	PRESSURE GRADIENT		
1	D.C. ID [illegible] OD	9.96 FT.	TYPE	SDT	VISC.-SEC.		
1	STB RMR OD	8.86 FT.	JETS 1/32"	12 12 12	PV/YP	/	/
1	D.C. ID [illegible] OD	9.42 FT.	SER. NO.	[illegible]	GELS	/	/
3	STB RMR [illegible] OD	93.72 FT.	DEPTH OUT	[illegible]	WL-CC'S		
1	[illegible]	1.86 FT.	DEPTH IN	2508	pH		
2	[illegible]	[illegible] FT.	TOTAL FTG.	[illegible]	SOLIDS %	5.25	
1	[illegible]	2.45 FT.	TOTAL HRS. RUN	[illegible]			
23	STANDS DP	2123.54 FT.	COND. 1/8's T/B/ GAGE	3 2 2	MUD & CHEMICALS ADDED		
	SINGLES DP	FT.	GPM/ PD-PSI	/ /	TYPE	AMT.	TYPE AMT.
	KELLY DOWN	FT.					
	TOTAL	[illegible] FT.					
WT. OF STRING	[illegible] LBS.						

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
2504	2508	DR			50	15	1300	4¾		6¼	62	SCL-S PARTEL-P COMPLEC

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
2508	4½	X						

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	2½		[illegible]
[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]		[illegible]
				[illegible]

DRILLER [illegible]

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD		
1	BIT [illegible]	[illegible] FT.	BIT NO.	14	TIME	1030	[illegible]
[illegible]	[illegible]	[illegible]	SIZE	12¼	WEIGHT	[illegible]	[illegible]
2	STB RMR [illegible] OD	[illegible] FT.	MFG.	[illegible]	PRESSURE GRADIENT		
1	D.C. ID [illegible] OD	2.86 FT.	TYPE	SDT-3	VISC.-SEC.	[illegible]	[illegible]
1	STB RMR [illegible] OD	30.18 FT.	JETS 1/32"	12 12 12	PV/YP	/	/
1	D.C. ID [illegible] OD	1.47 FT.	SER. NO.	[illegible]	GELS	/	/
3	STB RMR [illegible] OD	92.72 FT.	DEPTH OUT		WL-CC'S		
1	[illegible]	1.45 FT.	DEPTH IN	2517	pH	[illegible]	[illegible]
2	[illegible]	[illegible] FT.	TOTAL FTG.	[illegible]	SOLIDS %	[illegible]	[illegible]
1	[illegible]	2.45 FT.	TOTAL HRS. RUN	2½			
24	STANDS DP	2221.37 FT.	COND. 1/8's T/B GAGE	[illegible]	MUD & CHEMICALS ADDED		
1	SINGLES DP	30.30 FT.	GPM/ PD-PSI	/ /	TYPE	AMT.	TYPE AMT.
	KELLY DOWN	[illegible] FT.			[illegible]	[illegible]	[illegible]
	TOTAL	[illegible] FT.			[illegible]	[illegible]	[illegible]
WT. OF STRING	136000 LBS.				[illegible]	[illegible]	

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
2517	2.-2	D		25'	50	50	2300	4½	54	6¼		

DEVIATION RECORD

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
[illegible]				[illegible]
	[illegible]	2½		[illegible]
[illegible]	[illegible]	½		[illegible]
[illegible]	1230	1½		[illegible]
1230	1700	3½		[illegible]
				[illegible]

DRILLER [illegible]

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD		
1	BIT 12¼	1.11 FT.	BIT NO.	14	TIME		
1	[illegible]	10.02	SIZE	12¼	WEIGHT	[illegible]	
3	STB RMR [illegible] OD	69.07 FT.	MFG.	[illegible]	PRESSURE GRADIENT		
1	D.C. ID [illegible] OD	2.86 FT.	TYPE	SDT-3	VISC.-SEC.	[illegible]	
1	STB RMR [illegible] OD	30.18 FT.	JETS 1/32"	12 12 12	PV/YP	[illegible]	[illegible]
1	D.C. ID [illegible] OD	9.82 FT.	SER. NO.	[illegible]	GELS	[illegible]	[illegible]
3	STB RMR [illegible] OD	83.72 FT.	DEPTH OUT		WL-CC'S	[illegible]	
1	[illegible]	1.45 FT.	DEPTH IN	2517	pH	[illegible]	
2	[illegible]	59.65 FT.	TOTAL FTG.	61	SOLIDS %	[illegible]	
1	[illegible]	2.45 FT.	TOTAL HRS. RUN	11 1/4			
25	STANDS DP	2313.41 FT.	COND. 1/8's T/B/ GAGE	[illegible]	MUD & CHEMICALS ADDED		
	SINGLES DP	FT.	GPM/ PD-PSI	/ /	TYPE	AMT.	TYPE AMT.
	KELLY DOWN	14.66 FT.			[illegible]	[illegible]	[illegible]
	TOTAL	[illegible] FT.			[illegible]	[illegible]	[illegible]
WT. OF STRING	[illegible] LBS.				[illegible]	[illegible]	

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
2517	2471	D			50	[illegible]	1200	4¾	54			SCL-S
					50	[illegible]	1500	-		6¼	60	[illegible]
					50	[illegible]	2000	4½	50			SCL-S

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
[illegible]	4½							

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
[illegible]	[illegible]	1 3/4	2	Drilling 12¼ Hole
[illegible]	[illegible]	11¼	10	Circ.
[illegible]	[illegible]	1	2	Drlg.
				[illegible]

DRILLER [illegible]

Form 3T6 — APPROVED — APPROVED

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

C 23538

DAILY DRILLING REPORT REPORT NO. 41

LEASE	WELL NO.	API WELL NUMBER	DATE
DENIED AREA TAIN	A-4	A-55-60-720-127-4WC	64-12-74

OPERATOR	CONTRACTOR	RIG NO.
[illegible]	LOFFLAND BROTHERS COMPANY	12

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
[illegible]	[illegible]

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
[illegible]	19.50	E	6 5/8	[illegible]	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	[illegible]	[illegible]	15"
2	[illegible]	[illegible]	16"

LEGAL LAND DESCRIPTION: DENIED AREA TAIN A-4

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED
1 3/8	40	

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
2 3/8"	[illegible]	4.7 J55	6	252		243
	USS	H 40				

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL		3½	8
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS	12		
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 B.O.P.			
15. TEST B.O.P.	12		
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21. [illegible]	4	24	
		24	
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	43
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 12¼	1.00	FT.
1	BIT SUB	4.12	
1	STB RMR/[illegible] OD	29.37	FT.
6	D.C. ID OD	176.77	FT.
1	STB RMR OD	1.46	FT.
3	D.C. ID OD	84.25	FT.
2	STB RMR OD	6.16	FT.
1	C/O	2.47	
22	STANDS DP	2[illegible].52	FT.
1	SINGLES DP	[illegible]	FT.
	KELLY DOWN	[illegible]	FT.
	TOTAL	[illegible]	FT.
WT. OF STRING	[illegible]		LBS.

BIT RECORD

BIT NO.	13
SIZE	12¼
MFG.	Smith
TYPE	F4
JETS 1/32"	12 12 12
SER. NO.	F232
DEPTH OUT	
DEPTH IN	2303
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.
Bicarb	100#		

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 12¼	1.00	FT.
1	BIT SUB	4.12	
1	STB RMR [illegible] OD	29.00	FT.
6	D.C. ID OD	176.77	FT.
1	STB RMR OD	1.46	FT.
3	D.C. ID OD	86.25	FT.
2	STB RMR OD	6.16	FT.
1	C/O	2.47	
22	STANDS DP	2[illegible].54	FT.
1	SINGLES DP	[illegible]	FT.
	KELLY DOWN	21.00	FT.
	TOTAL	2[illegible].00	FT.
WT. OF STRING	[illegible]		LBS.

BIT RECORD

BIT NO.	13
SIZE	12¼
MFG.	Smith
TYPE	F4
JETS 1/32"	12 12 12
SER. NO.	F232
DEPTH OUT	
DEPTH IN	2303
TOTAL FTG.	20
TOTAL HRS. RUN	3½
COND. 1/8's T/B GAGE	[illegible]
GPM/ PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	30
PV/YP	/ /
GELS	/ /
WL-CC'S	
pH	9.5
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Bicarb	1 sack		
Gel	11 sacks		
Lime	3 sacks		
Caustic	1 sack		

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 12¼	1.00	FT.
1	BIT SUB	4.12	
1	STB RMR OD	29.00	FT.
6	D.C. ID OD	176.77	FT.
1	STB RMR OD	1.46	FT.
3	D.C. ID OD	86.25	FT.
2	STB RMR OD	6.16	FT.
1	C/O	2.47	
23	STANDS DP	2[illegible].54	FT.
2	SINGLES DP	[illegible]	FT.
	KELLY DOWN	[illegible]	FT.
	TOTAL	[illegible]	FT.
WT. OF STRING	[illegible]		LBS.

BIT RECORD

BIT NO.	13
SIZE	12¼
MFG.	Smith
TYPE	F4
JETS 1/32"	12 12 12
SER. NO.	F232
DEPTH OUT	
DEPTH IN	2303
TOTAL FTG.	20
TOTAL HRS. RUN	3½
COND. 1/8's T/B GAGE	[illegible]
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.
Bicarb	1 sack		
Gel	11 sacks		
Lime	3 sacks		
Caustic	1 sack		

FOOTAGE / FORMATION

FROM	TO	DR'D RM'R CORE'C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
2303					[illegible]	[illegible]	[illegible]	6¼		6½	62	S

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
0600	0730	1½		PRESSURE ANNULUS TO 3000 PSI HOLDING OK.
				CHECK PUMP OUT VALVE WORK OK.
0730	0800	2		PICK UP 12¼ BIT S 2 DC'S IN TO 2035 TAG CEMENT
0800	0900	4		DRILL CEMENT & FLOAT EQUIP.

DRILLER [illegible]

DAY TOUR

FOOTAGE / FORMATION

FROM	TO	DR'D RM'R CORE'C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
2303	2523	D		20'	50	15	1350	6¼		6½	62	S

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
0800	1015	2¼		DRILL OUT CEMENT & SHOES
1015	1115	1		CLEAN OUT SUCTION TANK
1115	1200	¾		CIRC 12.5 MUD
1200	1245	¾		BUILD VOLUME
1245	1515	1		DRILL 12¼ HOLE
1515	1145	¼		TAKE PRESSURE GRADIENT TEST
1145	1400	2¼		DRILL 12¼ HOLE

DRILLER [illegible]

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. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
2523	2574	D			50	15	1350	6¼		6½	62	S

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
1600	2100	5		DRILL TO 2574 MADE.

DRILLER [illegible]

Form 316 APPROVED APPROVED

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

C 23537

DAILY DRILLING REPORT

REPORT NO. 05

LEASE	WELL NO.	API WELL NUMBER	DATE
[illegible]	A-4	0-55-Le-30-[illegible]-W-35	04-10-76

OPERATOR	CONTRACTOR	RIG NO.
[illegible]	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Al Lunsford

LEGAL LAND DESCRIPTION: [illegible] Quinn Lain A-4

WIRE LINE RECORD — REEL NO.

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	20		91 SP	6	253		243
		USS	11 41				

SIZE 1 3/4 — NO. LINES 12 — FT. SLIPPED

FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

K.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
[illegible]	19.5	[illegible]	[illegible]	[illegible]	[illegible]

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	[illegible]	[illegible]	15
2	[illegible]	[illegible]	16

TIME DISTRIBUTION – HOURS

CODE	OPERATION	MORN.	DAY	EVE.
	RIG UP AND TEAR DOWN			
	DRILL ACTUAL			
	REAMING			
	CORING			
	CONDITION MUD & CIRCULATE			
	TRIPS			12
	LUBRICATE RIG			
	REPAIR RIG			
	CUT OFF DRILLING LINE			
	DEVIATION SURVEY			
	WIRE LINE LOGS			
	RUN CASING & CEMENT			
	WAIT ON CEMENT			
	NIPPLE UP B.O.P.	5	7	
	TEST B.O.P.			
	DRILL STEM TEST			
	PLUG BACK			
	SQUEEZE CEMENT			
	FISHING			
	DIR. WORK			
	[illegible]	7		
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
	TOTALS			5

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	45
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	
	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.	10
SIZE	7 7/8
MFG.	[illegible]
TYPE	S12
JETS 1/32"	12 12 12
SER. NO.	[illegible] 282
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B GAGE	
GPM/ PD-PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

MORNING TOUR

FOOTAGE / 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 SGL-S PAR-L-P COM-B-C
0503								6 3/4		6 1/4		

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
0600	0700	3		[illegible] 3000 PSI
0700	0800	5		[illegible]

DRILLER [illegible]

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	
JET 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B GAGE	
GPM/ PD-PSI	

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

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 SGL-S PAR-L-P COM-B-C
2	3							1 1/2		1 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
0300	1100	8		[illegible]

DRILLER [illegible]

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.	10
SIZE	[illegible]
MFG.	[illegible]
TYPE	[illegible]
JETS 1/32"	
SER. NO.	[illegible]
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.D RM-R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL-S PAR-L-P COM-B-C
2	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
1100	2300	12		[illegible]
2300	2400	1		[illegible]
0000	0600	6		[illegible]

DRILLER

FORM 3T6 — APPROVED — APPROVED

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

C 23536

DAILY DRILLING REPORT

REPORT NO. 14

LEASE	WELL NO.	API WELL NUMBER	DATE
[illegible]	A-4	0-54-44-31-123-20445	04-13-74

OPERATOR	CONTRACTOR	RIG NO.
[illegible]	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

LEGAL LAND DESCRIPTION [illegible]

WIRE LINE RECORD REEL NO.

	D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
	5	19.50	E	6⅝	[illegible]	1

	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
	1	[illegible]	D-[illegible]	15
	2	[illegible]	D-700	12

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING YUBING OR LINER	20"		91 51	6	253		243
		USS	40 40				

WIRE LINE RECORD: SIZE 7/8 | NO. LINES 10 | FT. SLIPPED | FT. CUT OFF | PRESENT LENGTH

TOTAL 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	3½		
7.	LUBRICATE RIG			
8.	REPAIR RIG			
9.	CUT OFF DRILLING LINE			
10.	DEVIATION SURVEY			
11.	WIRE LINE LOGS			
12.	RUN CASING & CEMENT	1½		
13.	WAIT ON CEMENT	2½		11½
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.	[illegible]			
22.				
23.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTAL		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	14
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

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

FOOTAGE FROM	TO	DR.-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	S.P.M.	PUMP NO. 2 LINER SIZE	S.P.M.	METHOD RUN SGL-S PARLL-P COMPD-C
9503								6¾		6¼		

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
0001	0230	2½		RUN 9 JTS 7" CSG. CEMENT W/ 300 SXS 50-50 POZ
0230	0300	½		WASH TO BOTTOM
0300	[illegible]	3½		CIRC.
[illegible]	[illegible]			[illegible]

DRILLER [illegible]

DAY TOUR

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

FOOTAGE FROM	TO	DR.-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SGL-S PARLL-P COMPD-C
2503												

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
700	1600	9		W.O.C.

DRILLER [illegible]

EVENING TOUR

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

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

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1600	1730	1½		W.O.C.
1730	[illegible]	1		[illegible]
[illegible]				[illegible]
	[illegible]			[illegible]
[illegible]	[illegible]			[illegible]

DRILLER [illegible]

FORM 3T6 APPROVED APPROVED

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

C 23535

DAILY DRILLING REPORT — REPORT NO. 43

LEASE	WELL NO.	API WELL NUMBER	DATE
Prince Ranch Unit	A-4	A-55-06-30-123-W45	04-12-74

OPERATOR	CONTRACTOR	RIG NO.
Amoco Prod. Co.	LOFFLAND BROTHERS COMPANY	12

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
[illegible]	[illegible]

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5	19.5	E	6 5/8	[illegible]	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-375	15
2	Emsco	F-300	16

LEGAL LAND DESCRIPTION: Prince Area A 4-55

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FI'ST	RKB. TO CSG. HD.	SET AT
	20		91 54	6	253		243
		USS	11 40				

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED
1 5/16	10	

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	2		
6	TRIPS	11½		2
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY	3		
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT		15	
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	CTU	1½	2	1
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		24	18	

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: 43

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT		FT.
1	[illegible]		
	STB RMR OD		FT.
1	D.C. ID OD		FT.
1	STB RMR OD		FT.
	ID		FT.
	STB RMR OD		FT.
3	[illegible]		
2	[illegible]		
32	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.

WT. OF STRING: [illegible] LBS.

BIT RECORD

BIT NO.	4
SIZE	[illegible]
MFG.	[illegible]
TYPE	[illegible]
JETS 1 32"	
SER. NO.	[illegible]
DEPTH OUT	
DEPTH IN	[illegible]
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
2503												

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	0700	1½		Finish [illegible]
0700	[illegible]	2		Circ. [illegible]
0930	0630	3		Run multiple [illegible]
0630	[illegible]	1½		[illegible]

DRILLER: [illegible]

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	
JET 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

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

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
[illegible]	1000	2		[illegible]
1000	[illegible]			[illegible]
	1600	[illegible]		Circ.

DRILLER: [illegible]

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 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/

MUD RECORD

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

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

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
1600	2100	5		Running [illegible]
2100	2200	1		[illegible]
2200	2400	2		[illegible]

DRILLER: [illegible]

EVENING TOUR

Form 3T6 — APPROVED — APPROVED

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

C - 23534

DAILY DRILLING REPORT

REPORT NO. 42

LEASE	WELL NO.	API WELL NUMBER	DATE
Ferris Mountain	9-6	5-55-L-30-123-WH	04-11-74

OPERATOR	CONTRACTOR	RIG NO.
Amoco Prod. Co.	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
	R. Lunsford

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5	19.5	E	6⅜	NC50	

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-375	15
2	Emsco	D-375	16

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	20		91 H	6	253		243
		USS	11 W				

WIRE LINE RECORD REEL NO.

SIZE 7/16 NO. LINES 11 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	12	8	3½
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			2½
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			½
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			3
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	12	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.			
HRS. W/OPR. D.P.			
HRS. WO/D.P.			
HRS. STAND			
TOTAL DAY WORK			

NO. OF DAYS FROM SPUD 42

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
1	BIT		FT.
1			
1	STB RMR OD		FT.
1	D.C. ID OD		FT.
1	STB RMR OD		FT.
2	D.C. ID OD		FT.
1	STB RMR OD		FT.
2			
1			
21	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD		
BIT NO.	9	
SIZE	12¼	
MFG.	HC	
TYPE	J-33	
JETS 1/32"		
SER. NO.		
DEPTH OUT		
DEPTH IN	2142	
TOTAL FTG.		
TOTAL HRS. RUN	15	
COND. 1/8's T/B/ GAGE		
GPM/ PD-PSI	/	/

MUD RECORD			
TIME	0600		
WEIGHT	9.3+		
PRESSURE GRADIENT			
VISC.-SEC.	41		
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH			
SOLIDS %			
MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AMT.
Lo-			

NO.	DRILLING ASSEMBLY (At end of tour)		
1	BIT		FT.
1			
1	STB RMR OD		FT.
1	D.C. ID OD		FT.
5	D.C. ID OD		FT.
1	STB RMR OD		FT.
1			
2	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD		
BIT NO.	8	
SIZE	12¼	
MFG.	HC	
TYPE	J-33	
JETS 1/32"		
SER. NO.		
DEPTH OUT		
DEPTH IN	2142	
TOTAL FTG.	12	
TOTAL HRS. RUN	23	
COND. 1/8's T/B/ GAGE		
GPM/ PD-PSI	/	/

MUD RECORD			
TIME	0600	1700	
WEIGHT	9.3	9.3	
PRESSURE GRADIENT			
VISC.-SEC.	39	39	
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH	11.5	11.5	11.0
SOLIDS %			
MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AMT.
	200		

NO.	DRILLING ASSEMBLY (At end of tour)		
1	BIT		FT.
	STB RMR OD		FT.
6	D.C. ID OD		FT.
	STB RMR OD		FT.
2	D.C. ID OD		FT.
	STB RMR OD		FT.
12	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN	3858	FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD		
BIT NO.	1	1A
SIZE	12¼	12¼
MFG.	HC	HC
TYPE	J-33	J-33
JETS 1/32"	18 18 18	
SER. NO.	216	216
DEPTH OUT	2243	
DEPTH IN	2142	2243
TOTAL FTG.	101	
TOTAL HRS. RUN	23¼	
COND. 1/8's T/B/ GAGE	4 4 I	
GPM/ PD-PSI	350 /	/
	6542	

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	FOOTAGE TO	DR'D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCR-S PAR-P COMP-C
2122	2414	D		24	45	50	1100	6½	45	6½	45	P

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
0600	1400	8		Drlg 17½ Hole

DRILLER

EVENING TOUR

FOOTAGE FROM	FOOTAGE TO	DR'D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCR-S PAR-P COMP-C
2414	2503	D			45	50	1100	6½	45	6½	45	P

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	2503	5°	X						

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1400	1415	2¼		Drlg 17½ Hole
1415	1430	¼		Drop Survey @ 2503
1430	2220	9		Mix Mud
2220	2230	½		
2230	2330	1		
2330	2400	½		

DRILLER

Form 3T6

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

C 23533

DAILY DRILLING REPORT

REPORT NO. 41

LEASE	WELL NO.	API WELL NUMBER	DATE
Panter Minerals	A-4	A-55-60-3C-133-W45	6/10-14

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	12

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5	19.50	E	6 5/8	H-90	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-375	16
2	Emsco	D-375	16

LEGAL LAND DESCRIPTION

WIRE LINE RECORD REEL NO.

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	8 5/8	USS	24 J-55	6	253		263
	2		4.7 J-55				

SIZE 7/32 NO. LINES 6 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	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE	1/2		
6	TRIPS	2 1/2	1 1/2	1/2
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY	1/4		
11	WIRE LINE LOGS	4 1/2	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		1/2		1/2
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8		8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. W/O/D.P.	
HRS. STANDBY	
TOTAL DAYWORK	
NO. OF DAYS FROM SPUD	14
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)			BIT RECORD		MUD RECORD	
1	BIT N-R-R	1.00	FT.	BIT NO.	9	TIME	0001
1		1.53		SIZE	7 7/8	WEIGHT	9.5
1	STB RMR OD	6.62	FT.	MFG.	REED	PRESSURE GRADIENT	.495
1	D.C. ID OD	21-4	FT.	TYPE	YT22J	VISC.-SEC.	61
1	STB RMR OD	6.62	FT.	JETS 1/32"	16 16 16	PV/YP	/ / /
5	D.C. ID OD	147.73	FT.	SER. NO.	SN 5110	GELS.	/ / /
1	STB RMR OD	1.45	FT.	DEPTH OUT	2402	WL -CC'S.	
3		90.65		DEPTH IN	2148	pH	
2		2.09		TOTAL FTG.	254	SOLIDS %	
		9.95		TOTAL HRS. RUN	7 1/2		
21	STANDS DP	1942.12	FT.	COND. 1/8's T/B/ GAGE	2 3 1/16	MUD & CHEMICALS ADDED	
2	SINGLES DP	23.30	FT.	GPM/ PD-PSI	/ /	TYPE / AMT. / TYPE / AMT.	
	KELLY DOWN	40.32	FT.			GEL 15 SXS	
	TOTAL	2402.00	FT.			GELEX 3 SXS	
WT. OF STRING	125,000		LBS.				

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

NO.	DRILLING ASSEMBLY (At end of tour)			BIT RECORD		MUD RECORD	
1	BIT N-R-R	1.00	FT.	BIT NO.	1	TIME	17 2100
1		1.53		SIZE	7 7/8	WEIGHT	9.3
1	STB RMR OD	6.62	FT.	MFG.	REED	PRESSURE GRADIENT	.485
1	D.C. ID OD	21-4	FT.	TYPE	YT22J	VISC.-SEC.	55 60 57
1	STB RMR OD	6.62	FT.	JETS 1/32"	16 16 16	PV/YP	/ / /
5	D.C. ID OD	147.73	FT.	SER. NO.	SN 5110	GELS.	/ / /
1	STB RMR OD	1.45	FT.	DEPTH OUT	2402	WL -CC'S.	
3		90.65		DEPTH IN	2148	pH	72 60
2		2.09		TOTAL FTG.	254	SOLIDS %	
		9.95		TOTAL HRS. RUN	7 1/2		
21	STANDS DP	1942.12	FT.	COND. 1/8's T/B/ GAGE	2 3 1/16	MUD & CHEMICALS ADDED	
2	SINGLES DP	23.30	FT.	GPM/ PD-PSI	/ /	TYPE / AMT. / TYPE / AMT.	
	KELLY DOWN	40.32	FT.				
	TOTAL	2402.00	FT.				
WT. OF STRING	125,000		LBS.				

MORNING TOUR

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCI.-S PART.-P COM.-C
2402							1400	6 3/4	55	6 1/4		S

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	2402	3°	1						

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	0730	7 1/2		Circ. & Cond. Mud. Pull 3 std. Wet.
0730	1030	3		Circ.
1030	1330	3		Circ. & Cond. Mud. Pull 3 std. Wet.
1330	1700	3 1/2		Circ. & Cond. Mud. Pull 3 std. Wet.
				Rig up & run Dresser Atlas Wire Line Logs.

DRILLER

DAY TOUR

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCI.-S PART.-P COM.-C
								6 3/4		6 1/4		

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0700	1400	7		Rig up & run Dresser Atlas Wire Line Logs.
		1/2		Rig down Dresser Atlas Wire Line Logs.

DRILLER

EVENING TOUR

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCI.-S PART.-P COM.-C
2402	TD	3			40	40	1400	6 3/4	55	6 1/4	40	P

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1700	1830	1/2		Rig up & run Schlumberger Wire Line Logs. TD 2402
1830	1700			Down 11 Hours

DRILLER

C 23532

DAILY DRILLING REPORT

REPORT NO. 16

LEASE	WELL NO.	API WELL NUMBER	DATE
Pan Am Fed	1	30-025-21	12-24

OPERATOR	CONTRACTOR	RIG NO.
Pan Am	LOFFLAND BROTHERS COMPANY	12

SIGNATURE OF OPERATOR'S REPRESENTATIVE: Lonnie Uptmore

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Norman Lee

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4½	16.60	E	6¼	NC 46	1	1	Emsco	D-375	16
						2	Emsco	D-375	16

LEGAL LAND DESCRIPTION: Sec 2 T-18-S R-32-E

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	PKR. TO C.G. HD.	SET AT
	8⅝		24 J	7	302		302

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED
1 5/16	12	

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	7½	
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE		12	8
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.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABB'NG			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	2	22	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. W/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	16
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT	12¼ FT.	BIT NO.	1
		1302	SIZE	12¼
1	STB RMR OD	12 FT.	MFG.	Reed
1	D.C. ID OD	6¼ FT.	TYPE	HP 53 A
1	STB RMR OD	12 FT.	JETS 1/32"	16-16-16
1	D.C. ID OD	6¼ FT.	SER. NO.	511
1	STB RMR OD	12 FT.	DEPTH OUT	1302
		1290	DEPTH IN	0
1	STANDS DP	1290 FT.	TOTAL FTG.	1302
	SINGLES DP	FT.	TOTAL HRS. RUN	22½
	KELLY DOWN	40 FT.	COND. 1/8's T/B GAGE	1 1 1
	TOTAL	1330 FT.	GPM/ PD-PSI	/ /
WT. OF STRING	70,000	LBS.		

MUD RECORD			
TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS			
WL -CC'S			
pH			
SOLIDS %			
MUD & CHEMICALS ADDED	TYPE	AMT.	TYPE AMT.
	Vis	5 sx	

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL-S PARTEL-P COMB-C
0	1302				50	5	1500	6¼	41	6¼	40	P

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
0600	1300	7	2	Drlg 1302
1300	1330	½	5	Circ & Cond Mud for Trip
1330	2400	10½	2	Drlg 1330

DRILLER

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT	12¼ FT.	BIT NO.	1
		1302	SIZE	12¼
1	STB RMR OD	12 FT.	MFG.	Reed
1	D.C. ID OD	6¼ FT.	TYPE	HP 53 A
1	STB RMR OD	12 FT.	JET 1/32"	16-16-16
1	D.C. ID OD	6¼ FT.	SER. NO.	511
1	STB RMR OD	12 FT.	DEPTH OUT	1302
2		1290	DEPTH IN	0
2		1290 FT.	TOTAL FTG.	1302
		40	TOTAL HRS. RUN	22½
2	STANDS DP	1290 FT.	COND. 1/8's T/B GAGE	1 1 1
2	SINGLES DP	37 FT.	GPM/ PD-PSI	/ /
	KELLY DOWN	40 FT.		
	TOTAL	1367 FT.		
WT. OF STRING	75,000	LBS.		

MUD RECORD			
TIME	0800	1100	1430
WEIGHT	8.5+	8.8	8.8
PRESSURE GRADIENT			
VISC.-SEC.	45	45	45
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH			
SOLIDS %			
MUD & CHEMICALS ADDED	TYPE	AMT.	TYPE AMT.
	WT MAT	45 sx	
	WT MAT	15 sx	
	GELEX	3 sx	

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL-S PARTEL-P COMB-C
1302	2400				45	5	1200	6¼	41	6¼	40	P

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
0600	1030	4½	2	Drlg 1330
1030	1100	½	5	Circ & Cond Mud for Trip
1100	1430	3½	3	Trip Out for Bit
1430	1500	½	5	Circ & Cond Mud for Trip
1500	2400	9	2	Drlg 1367

DRILLER

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT	12¼ FT.	BIT NO.	1
2		1302	SIZE	12¼
1	STB RMR OD	12 FT.	MFG.	Reed
1	D.C. ID OD	6¼ FT.	TYPE	HP 53 A
1	STB RMR OD	12 FT.	JETS 1/32"	16-16-16
3	D.C. ID OD	6¼ FT.	SER. NO.	511
1	STB RMR OD	12 FT.	DEPTH OUT	1302
3		1290	DEPTH IN	1213
3		1290 FT.	TOTAL FTG.	89
1		40	TOTAL HRS. RUN	22½
20	STANDS DP	1200 FT.	COND. 1/8's T/B GAGE	
2	SINGLES DP	37 FT.	GPM/ PD-PSI	/ /
	KELLY DOWN	40 FT.		
	TOTAL	1277 FT.		
WT. OF STRING	70,000	LBS.		

MUD RECORD			
TIME	1700	1900	2300
WEIGHT	8.7	9.1	9.3
PRESSURE GRADIENT			
VISC.-SEC.	43	55	52
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH			
SOLIDS %			
MUD & CHEMICALS ADDED	TYPE	AMT.	TYPE AMT.
	Gel	10 sx	
	Vis	10 sx	

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL-S PARTEL-P COMB-C
2400					45	5	1300	6¼	41	6¼	40	S

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
1600	2400	8		Circ & Condition Mud (Min Wt Mud)

DRILLER

FORM 3T6

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

C - 23531

DAILY DRILLING REPORT REPORT NO. 37

LEASE	WELL NO.	API WELL NUMBER	DATE
Powell A Fee	1	[illegible]	7-27-75

OPERATOR	CONTRACTOR	RIG NO.
Phillips Petroleum Co.	LOFFLAND BROTHERS COMPANY	1

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Cochran

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
5	19.5	E	[illegible]	[illegible]			[illegible]	[illegible]	

LEGAL LAND DESCRIPTION: Lea County, New Mexico

WIRE LINE RECORD REEL NO.

SIZE 7/16 NO. LINES 1 FT. SLIPPED

FT. CUT OFF PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	8 5/8	[illegible]	24 J	1	353		343
			24 K	40			

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	3	1	
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.	ATTEMPT - [illegible]	3	7	
22.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS				

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	37
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
	BIT	FT.	BIT NO.		TIME	[illegible]
			SIZE		WEIGHT	[illegible]
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT	.450
	D.C. ID OD	FT.	TYPE		VISC.-SEC.	[illegible]
	STB RMR OD	FT.	JETS 1 32nds		PV/YP	/
	D.C. ID OD	FT.	SER. NO.		GELS	/
	STB RMR OD	FT.	DEPTH OUT		WL-CC'S	
			DEPTH IN		pH	
			TOTAL FTG.		SOLIDS %	
			TOTAL HRS. RUN			
	STANDS DP	FT.	COND. 1/8's T/B GAGE		MUD & CHEMICALS ADDED	
	SINGLES DP	FT.	GPM PD-PSI	/ /	TYPE AMT.	TYPE AMT.
	KELLY DOWN	FT.				
	TOTAL	FT.				
WT. OF STRING		LBS.				

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
1	BIT [illegible]	FT.	BIT NO.	9	TIME	1330
2	[illegible]		SIZE	7 7/8	WEIGHT	8.8
1	STB RMR OD	FT.	MFG.	[illegible]	PRESSURE GRADIENT	.455
1	D.C. ID OD	FT.	TYPE	[illegible]	VISC.-SEC.	53
1	STB RMR OD	FT.	JET 1 32nds	[illegible]	PV/YP	/ 19/23 /
5	D.C. ID OD	FT.	SER. NO.	[illegible]	GELS	/ 14/26 /
1	STB RMR OD	FT.	DEPTH OUT		WL-CC'S	
3	[illegible]		DEPTH IN	2153	pH	8.5
[illegible]			TOTAL FTG.		SOLIDS %	3.75
[illegible]		2.45	TOTAL HRS. RUN			
1	STANDS DP	FT.	COND. 1/8's T/B GAGE		MUD & CHEMICALS ADDED	
1	SINGLES DP	FT.	GPM PD-PSI	/ /	TYPE AMT.	TYPE AMT.
	KELLY DOWN	FT.				
	TOTAL	FT.				
WT. OF STRING		LBS.				

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
	BIT	FT.	BIT NO.	1	TIME	
1			SIZE		WEIGHT	
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT	
	D.C. ID OD	FT.	TYPE		VISC.-SEC.	
	STB RMR OD	FT.	JETS 1 32nds		PV/YP	/ /
	D.C. ID OD	FT.	SER. NO.		GELS	/ /
	STB RMR OD	FT.	DEPTH OUT		WL-CC'S	
			DEPTH IN		pH	
			TOTAL FTG.		SOLIDS %	
			TOTAL HRS. RUN			
1	STANDS DP	FT.	COND. 1/8's T/B/ GAGE		MUD & CHEMICALS ADDED	
	SINGLES DP	FT.	GPM/ PD-PSI	/ /	TYPE AMT.	TYPE AMT.
	KELLY DOWN	FT.			WC-10	
	TOTAL	FT.				
WT. OF STRING		LBS.				

DAY TOUR

FOOTAGE FROM	FOOTAGE 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 SURVEYS PARTIAL CORES
2357				[illegible] 2 [illegible]								
				[illegible] to 16 Pumps								
				Reducing to 12 Spurs [illegible]								

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
0001	0030	1/2		Check Pit Floats Ran on Coil
0030	0115	1 3/4		Ream to 2357
0115	0230	2 1/2		Run & Drill Pit 3 Stands
0230	0300	1/2		Run 2 Jts 7

DRILLER [illegible]

DAY TOUR

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SURVEYS PARTIAL CORES
2357					35	9/3	1200	6 1/4	41	6 1/4	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
0530	0900	1 1/2		Finish In 5 7/8
0900	0915	1/4		Prep Circ & Trip & Circulate Pre Mix Mud
0915	1100	1 3/4		Circ & Cond Mud & Trip 7/8 — 1135

DRILLER [illegible]

EVENING TOUR

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SURVEYS PARTIAL CORES
2357					3			6 1/4	120	6 1/4		

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
1600	[illegible]			Clean Out Mud Pits Rig Down for — 1536

DRILLER [illegible]

Form 3T6 APPROVED APPROVED

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

C - 23530

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
			Jan 1977

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

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

LEGAL LAND DESCRIPTION

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

LAST CASING TUBING OR LINER

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

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.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS				

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)			BIT RECORD	
	BIT		FT.	BIT NO.	
				SIZE	
	STB RMR	OD	FT.	MFG.	
	D.C ID	OD	FT.	TYPE	
	STB RMR	OD	FT.	JETS 1/32"	
	D.C ID	OD	FT.	SER. NO.	
	STB RMR	OD	FT.	DEPTH OUT	
				DEPTH IN	
				TOTAL FTG.	
				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 RECORD		
TIME		
WEIGHT		
PRESSURE GRADIENT		
VISC.-SEC		
PV YP		
GELS		
WL -CC'S		
pH		
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	FOOTAGE 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 SCHL'S PARTEE'S P COMPLEX

DEVIATION RECORD

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

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

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.	JET 1/32"	
	D.C ID	OD	FT.	SER. NO.	
	STB RMR	OD	FT.	DEPTH OUT	
				DEPTH IN	
				TOTAL FTG.	
				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 RECORD		
TIME	0900	1200
WEIGHT	8.8	8.8
PRESSURE GRADIENT		
VISC.-SEC	29	29
PV YP	/	/
GELS	/	/
WL -CC'S		
pH		
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	100#		
GELEX	4#		

FOOTAGE FROM	FOOTAGE 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 SCHL'S PARTEE'S P COMPLEX

DEVIATION RECORD

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

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

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 1/32"	
	D.C ID	OD	FT.	SER. NO.	
	STB RMR	OD	FT.	DEPTH OUT	
				DEPTH IN	
				TOTAL FTG.	
				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 RECORD		
TIME		
WEIGHT		
PRESSURE GRADIENT		
VISC.-SEC		
PV/YP	/	/
GELS	/	/
WL -CC'S		
pH		
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	FOOTAGE 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 SCHL'S PARTEE'S P COMPLEX

DEVIATION RECORD

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

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

DRILLER

FORM 3T6 APPROVED APPROVED

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

C - 23529

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
OPERATOR		**CONTRACTOR** LOFFLAND BROTHERS COMPANY	RIG NO.
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	

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

LEGAL LAND DESCRIPTION

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

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

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1.	RIG UP AND TEAR DOWN			
2.	DRILL ACTUAL		1	
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.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS			9	

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	37
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

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

FOOTAGE 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 SCHL-S PARFL-P COMPL-C

DEVIATION RECORD

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

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
		2		

DRILLER

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	MUD RECORD			
1	BIT	FT.	BIT NO.	TIME	0930	1200	
			SIZE	WEIGHT	9.7	9.7	
	STB RMR OD	FT.	MFG.	PRESSURE GRADIENT			
	D.C. ID OD	FT.	TYPE	VISC.-SEC.	28	28	
	STB RMR OD	FT.	JET 1 32"	PV YP	/	/	
	D.C. ID OD	FT.	SER. NO.	GELS	/	/	
	STB RMR OD	FT.	DEPTH OUT	WL -CC'S.			
2			DEPTH IN	pH			
			TOTAL FTG.	SOLIDS %			
			TOTAL HRS. RUN				
9	STANDS DP	FT.	COND. 1 8's T B GAGE	MUD & CHEMICALS ADDED			
1	SINGLES DP	FT.	GPM PD-PSI	TYPE AMT. TYPE AMT.			
	KELLY DOWN	FT.					
	TOTAL	FT.					
WT. OF STRING		LBS.					

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

DEVIATION RECORD

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

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

DRILLER

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	MUD RECORD	
	BIT	FT.	BIT NO.	TIME	1930
			SIZE	WEIGHT	9.7
	STB RMR OD	FT.	MFG.	PRESSURE GRADIENT	
	D.C. ID OD	FT.	TYPE	VISC.-SEC.	28
	STB RMR OD	FT.	JETS 1 32"	PV/YP	/ /
	D.C. ID OD	FT.	SER. NO.	GELS	/ /
	STB RMR OD	FT.	DEPTH OUT	WL -CC'S.	
			DEPTH IN	pH	
			TOTAL FTG.	SOLIDS %	
			TOTAL HRS. RUN		
2	STANDS DP	FT.	COND. 1 8's T B GAGE	MUD & CHEMICALS ADDED	
	SINGLES DP	FT.	GPM PD-PSI	TYPE AMT. TYPE AMT.	
	KELLY DOWN	FT.			
	TOTAL	FT.			
WT. OF STRING		LBS.			

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

DEVIATION RECORD

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

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

DRILLER

FORM 3T6

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APPROVED

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

C - 23528

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

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

LEGAL LAND DESCRIPTION

WIRE LINE RECORD REEL NO.

SIZE | NO. L S | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

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

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.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS				

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

MORNING TOUR

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

FOOTAGE FROM	TO	DR. D RM. R CORE. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL. 3 PAR. P COMP. C

DEVIATION RECORD

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

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

DRILLER

DAY TOUR

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

FOOTAGE FROM	TO	DR. D RM. R CORE. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL. 3 PAR. P COMP. C

DEVIATION RECORD

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

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

DRILLER

EVENING TOUR

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

FOOTAGE FROM	TO	DR. D RM. R CORE. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL. 3 PAR. P COMP. C

DEVIATION RECORD

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

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

DRILLER

FORM 3T6 APPROVED APPROVED

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

C- 23527

DAILY DRILLING REPORT REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
OPERATOR	CONTRACTOR		RIG NO.
	LOFFLAND BROTHERS COMPANY		
SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER		

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

LEGAL LAND DESCRIPTION

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

WIRE LINE RECORD REEL NO.

SIZE	NO. LINES	FT. SLIPPED

FT. CUT OFF PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

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.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS				

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

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

MORNING TOUR

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

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

DEVIATION RECORD

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

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

DRILLER

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	MUD RECORD		
	BIT	FT.	BIT NO.	TIME	0600	1800
			SIZE	WEIGHT	9.2	9.4
	STB RMR OD	FT.	MFG.	PRESSURE GRADIENT	.478	.447
	D.C. ID OD	FT.	TYPE	VISC.-SEC.	28	31
	STB RMR OD	FT.	JET 1 32"	PV/YP	/	/
	D.C. ID OD	FT.	SER. NO.	GELS	/	/
	STB RMR OD	FT.	DEPTH OUT	WL -CC'S		
			DEPTH IN	pH	8.0	8.0
			TOTAL FTG.	SOLIDS %		
			TOTAL HRS. RUN			
	STANDS DP	FT.	COND. 1/8's T B GAGE	MUD & CHEMICALS ADDED		
	SINGLES DP	FT.	GPM/ PD-PSI	TYPE / AMT. / TYPE / AMT.		
	KELLY DOWN	FT.		GEL 45sx		
	TOTAL	FT.		GELEX 15#		
WT. OF STRING		LBS.		SODA ASH 3 C#		

FOOTAGE FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCH.-S PAR.-P COMP.-C
0	210				45	50	1400	6 3/4	95	6 1/4		S

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
0600	1800	12		DRLG. F/ 0' T/ 210'

DRILLER

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	MUD RECORD	
	BIT	FT.	BIT NO.	TIME	1800
			SIZE	WEIGHT	9.4
	STB RMR OD	FT.	MFG.	PRESSURE GRADIENT	.447
	D.C. ID OD	FT.	TYPE	VISC.-SEC.	29
	STB RMR OD	FT.	JETS 1/32"	PV/YP	/
	D.C. ID OD	FT.	SER. NO.	GELS	/
	STB RMR OD	FT.	DEPTH OUT	WL -CC'S	
			DEPTH IN	pH	
			TOTAL FTG.	SOLIDS %	
			TOTAL HRS. RUN		
	STANDS DP	FT.	COND. 1 8's T/B GAGE	MUD & CHEMICALS ADDED	
	SINGLES DP	FT.	GPM/ PD-PSI	TYPE / AMT. / TYPE / AMT.	
	KELLY DOWN	FT.		GEL	
	TOTAL	FT.		GELEX	
WT. OF STRING		LBS.		SODA ASH	

FOOTAGE FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCH.-S PAR.-P COMP.-C
210					45	50	1400	6 3/4	95	6 1/4		S

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

DRILLER

FORM 3T6 APPROVED APPROVED

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

C 23526

DAILY DRILLING REPORT

REPORT NO. 34

LEASE	WELL NO:	API WELL NUMBER	DATE
Pinion Unit N	A-4	A-55-40-30-223-42-00	6-13-76

OPERATOR: Amoco Canada Ltd.

CONTRACTOR: LOFFLAND BROTHERS COMPANY — RIG NO. 72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: P. Cradduck

LEGAL LAND DESCRIPTION: Pinion Unit A-55

WIRE LINE RECORD — REEL NO.

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
5"	19.50	E	6 1/4	4 1/2 IF	1	1	Ellis	D-1100	15"
						2	Ellis	D-700	11"

LAST CASING TUBING OR LINER	SIZE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	20"	94 H-40	2	353		2462
		94 H-40				

WIRE LINE RECORD: SIZE 1 3/16 — NO. LINES 100 — 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		4	
3.	REAMING			
4.	CORING			
5.	CONDITION MUD & CIRCULATE			
6.	TRIPS			
7.	LUBRICATE RIG			
8.	REPAIR RIG		3½	
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.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8		

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	8 D½ 8
NO. OF DAYS FROM SPUD	34
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO. — DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

BIT NO.	6
SIZE	
MFG.	
TYPE	
JETS 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T.B. GAGE	
GPM PD-PSI	

MUD RECORD

TIME	0500
WEIGHT	9.5
PRESSURE GRADIENT	
VISC.-SEC.	39
PV/YP	/ / /
GELS	/ / /
WL-CC'S	
pH	9½
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCH.-S PART.-P COM.-C
1717		0			40	50	1200			6½	120	S

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

DRILLER

NO. — DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

BIT NO.	5
SIZE	
MFG.	
TYPE	
JET 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T.B. GAGE	
GPM PD-PSI	

MUD RECORD

TIME	0500	1100	
WEIGHT	9.3	9.3	
PRESSURE GRADIENT	.040	.040	
VISC.-SEC.	38	38	
PV/YP	/	/	/
GELS	/	/	/
WL-CC'S	8.0	8.0	
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCH.-S PART.-P COM.-C
					45	50	1200			6½	120	S
					45	50	1200	6½	48			S

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

DRILLER

DAY TOUR

NO. — DRILLING ASSEMBLY (At end of tour)

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

BIT RECORD

BIT NO.	4
SIZE	
MFG.	
TYPE	
JETS 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T.B. GAGE	
GPM PD-PSI	

MUD RECORD

TIME	1700		
WEIGHT	9.5		
PRESSURE GRADIENT	.041		
VISC.-SEC.	38		
PV/YP	/	/	/
GELS	/	/	/
WL-CC'S	8.0		
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCH.-S PART.-P COM.-C
2026		8			45	50	1200	6½	48	6½		S

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

DRILLER

EVENING TOUR

C 23525

DAILY DRILLING REPORT

REPORT NO. 33

LEASE	WELL NO.	API WELL NUMBER	DATE
Pure Oil Co.	1-C	[illegible]	4-20-74

OPERATOR	CONTRACTOR	RIG NO.
[illegible]	LOFFLAND BROTHERS COMPANY	[illegible]

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
[illegible]	[illegible]

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

LEGAL LAND DESCRIPTION: [illegible]

WIRE LINE RECORD — REEL NO.

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

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	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	7½	[illegible]	8
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG		[illegible]	
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY	¼		
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
COMPLETION A. PERF'R'T'H			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	F	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	33
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT	FT.	BIT NO.	[illegible]
			SIZE	
2	STB RMR OD	FT.	MFG.	
1	D.C. ID OD	FT.	TYPE	
1	STB RMR OD	FT.	JETS 1 32nds	
1	D.C. ID OD	FT.	SER. NO.	
1	STB RMR OD	FT.	DEPTH OUT	
3			DEPTH IN	12[illegible]
15	STANDS DP	FT.	TOTAL FTG.	
2	SINGLES DP	FT.	TOTAL HRS. RUN	3[illegible]
	KELLY DOWN	FT.	COND. 1/8's T. B. GAGE	
	TOTAL	FT.	GPM PD-PSI	
WT. OF STRING		LBS.		

MUD RECORD				
TIME	[illegible]			
WEIGHT	[illegible]			
PRESSURE GRADIENT				
VISC.-SEC.	[illegible]			
PV YP	/	/	/	
GELS.	/	/	/	
WL -CC'S.				
pH				
SOLIDS %				
MUD & CHEMICALS ADDED				
TYPE	AMT.	TYPE	AMT.	

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHLUM PARFL-P COM.D-C
[illegible]		D										
[illegible]		D		[illegible] 30 [illegible]	[illegible]	50	[illegible]					

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	[illegible]	[illegible]	X						

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
[illegible]				

DRILLER

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT [illegible]	FT.	BIT NO.	
			SIZE	
2	STB RMR OD	FT.	MFG.	
1	D.C. ID OD	FT.	TYPE	
1	STB RMR OD	FT.	JET 1 32nds	
1	D.C. ID OD	FT.	SER. NO.	
1	STB RMR OD	FT.	DEPTH OUT	
3			DEPTH IN	[illegible]
15	STANDS DP	FT.	TOTAL FTG.	
2	SINGLES DP	FT.	TOTAL HRS. RUN	3
	KELLY DOWN	FT.	COND. 1/8's T. B. GAGE	
	TOTAL	FT.	GPM PD-PSI	
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.-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 SCHLUM PARFL-P COM.D-C
[illegible]	[illegible]				45	50	1500			[illegible]		

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
[illegible]				

DRILLER

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT [illegible]	[illegible] FT.	BIT NO.	11
1	[illegible]	[illegible]	SIZE	11"
1	STB RMR OD	[illegible] FT.	MFG.	REED
1	D.C. ID OD	[illegible] FT.	TYPE	FT3-J
1	STB RMR OD	[illegible] FT.	JETS 1/32nds	12 12 12
1	D.C. ID OD	[illegible] FT.	SER. NO.	[illegible]
3	STB RMR OD	[illegible] FT.	DEPTH OUT	
2	[illegible]	[illegible]	DEPTH IN	[illegible]
1	[illegible]	[illegible]	TOTAL FTG.	331
			TOTAL HRS. RUN	[illegible]
16	STANDS DP	[illegible] FT.	COND. 1/8's T. B. GAGE	[illegible]
1	SINGLES DP	[illegible] FT.	GPM PD-PSI	
	KELLY DOWN	[illegible] FT.		
	TOTAL	[illegible] FT.		
WT. OF STRING	[illegible]	LBS.		

MUD RECORD				
TIME	[illegible]	[illegible]	[illegible]	
WEIGHT	8.5	8.5	8.5	
PRESSURE GRADIENT				
VISC.-SEC.	29	28	28	
PV/YP	/	/	/	
GELS.	/	/	/	
WL -CC'S.				
pH	9.0	9.0	8.0	
SOLIDS %				
MUD & CHEMICALS ADDED				
TYPE	AMT.	TYPE	AMT.	

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHLUM PARFL-P COM.D-C
[illegible]	[illegible]	37			45	50	1500			6½	60	

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
[illegible]	[illegible]	[illegible]		[illegible]

DRILLER

FORM 3T6 APPROVED APPROVED

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

C 23524

DAILY DRILLING REPORT

REPORT NO. 32

LEASE	WELL NO.	API WELL NUMBER	DATE
Harris 11-1	1	15-055-21-3[illegible]	4-1-74

OPERATOR	CONTRACTOR	RIG NO.
[illegible]	LOFFLAND BROTHERS COMPANY	32

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
	[illegible]

LEGAL LAND DESCRIPTION

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

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	2	[illegible]	[illegible]				

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
					1
					2

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	[illegible]	[illegible]	
2	[illegible]	[illegible]	

TIME DISTRIBUTION — HOURS

CODE NO. — OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	2	12	9
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.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	32
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT	FT.	BIT NO.	
			SIZE	
1	STB RMR OD	FT.	MFG.	
8	D.C. ID OD	FT.	TYPE	
	STB RMR OD	FT.	JETS 1/32"	
	D.C. ID OD	FT.	SER. NO.	
	STB RMR OD	FT.	DEPTH OUT	
			DEPTH IN	
			TOTAL FTG.	
			TOTAL HRS. RUN	12
	STANDS DP	FT.	COND. 1/8's T B GAGE	
1	SINGLES DP	122 FT.	GPM/ PD-PSI	/ /
	KELLY DOWN	FT.		
	TOTAL	FT.		
WT. OF STRING	114	LBS.		

MUD RECORD			
TIME	[illegible]	[illegible]	[illegible]
WEIGHT	[illegible]	8.5	8.5
PRESSURE GRADIENT			
VISC.-SEC.	[illegible]	29	28
PV YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	[illegible]	9.0	9.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	FOOTAGE TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL-S PARL-P COMP-C
1651	1714	2		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1	[illegible]	3		[illegible]

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.	JET 1 32"	
	D.C. ID OD	FT.	SER. NO.	
	STB RMR OD	FT.	DEPTH OUT	
			DEPTH IN	
			TOTAL FTG.	
			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 RECORD			
TIME	[illegible]	[illegible]	[illegible]
WEIGHT	[illegible]	[illegible]	[illegible]
PRESSURE GRADIENT			
VISC.-SEC.	[illegible]	[illegible]	[illegible]
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	9.0	9.0	9.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]	[illegible]		
[illegible]	[illegible]		

FOOTAGE FROM	FOOTAGE TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL-S PARL-P COMP-C
[illegible]												

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

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

DRILLER

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT	FT.	BIT NO.	
			SIZE	
1	STB RMR OD	FT.	MFG.	
1	D.C. ID OD	FT.	TYPE	
1	STB RMR OD	FT.	JETS 1/32"	
1	D.C. ID OD	FT.	SER. NO.	
1	STB RMR OD	FT.	DEPTH OUT	
			DEPTH IN	
			TOTAL FTG.	123
			TOTAL HRS. RUN	28 3/4
	STANDS DP	FT.	COND. 1/8's T/B/ GAGE	
	SINGLES DP	FT.	GPM/ PD-PSI	/ /
	KELLY DOWN	FT.		
	TOTAL	FT.		
WT. OF STRING	114	LBS.		

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

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel			

FOOTAGE FROM	FOOTAGE TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL-S PARL-P COMP-C
[illegible]		D										

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

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
[illegible]				

DRILLER

FORM 3T6 — APPROVED — APPROVED

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

C 23523

DAILY DRILLING REPORT

REPORT NO. 21

LEASE	WELL NO.	API WELL NUMBER	DATE
Poole Estate	11-4	42-357-10730-00-00	11-21-74

OPERATOR	CONTRACTOR	RIG NO.
Mobil Producing TX & NM Inc.	LOFFLAND BROTHERS COMPANY	2

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
3 1/2	13.30	E	4 3/4	NC 38	1	1	Emsco	D-375	12"
						2	Emsco	D-375	12"

LEGAL LAND DESCRIPTION

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	7"	LONE STAR	17# J-55	42	1736	12	1736

WIRE LINE RECORD REEL NO.

SIZE 7/32" NO. LINES 6 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	13 1/4	3
3	REAMING			2
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS		3 1/4	
7	LUBRICATE RIG			
8	REPAIR RIG			3
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY	1/4		
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8	16	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	31
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
1	BIT	7 7/8"	
1	STB RMR	OD	FT.
1	D.C. ID	OD	FT.
1	STB RMR	OD	FT.
1	D.C. ID	OD	FT.
1	STB RMR	OD	FT.
1			
1			
114	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	#1
SIZE	7 7/8"
MFG.	Reed
TYPE	HP-53
JETS 1/32"	3
SER. NO.	[illegible]
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	26
TOTAL HRS. RUN	1 1/4
COND. 1 8's T B GAGE	1
GPM PD-PSI	

MUD RECORD

TIME		5:00	10:30
WEIGHT		8.4	8.7
PRESSURE GRADIENT			
VISC.-SEC.	26	28	29
PV/YP	/	/	/
GELS	/	/	/
WL-CC'S			
pH		7.0	8.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
1	BIT	7 7/8"	
1	STB RMR	OD	FT.
1	D.C. ID	OD	FT.
1	STB RMR	OD	FT.
1	D.C. ID	OD	FT.
1	STB RMR	OD	FT.
1			
1			
1	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	#2
SIZE	7 7/8"
MFG.	Reed
TYPE	HP-53
JET 1/32"	3 3 3
SER. NO.	[illegible]
DEPTH OUT	1736
DEPTH IN	1710 1732
TOTAL FTG.	32
TOTAL HRS. RUN	2 1/2
COND. 1 8's T B GAGE	1
GPM PD-PSI	/ /

MUD RECORD

TIME	2:00		10:00
WEIGHT	8.4		8.5
PRESSURE GRADIENT			
VISC.-SEC.	28		30
PV/YP	/	/	/
GELS	/	/	/
WL-CC'S			
pH	7.5		8.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
1	BIT	7 7/8"	
1	STB RMR	OD	FT.
1	D.C. ID	OD	FT.
1	STB RMR	OD	FT.
1	D.C. ID	OD	FT.
1	STB RMR	OD	FT.
1			
1			
1	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	#3
SIZE	7 7/8"
MFG.	Reed
TYPE	HP-53
JETS 1/32"	3 3 3
SER. NO.	F1543
DEPTH OUT	
DEPTH IN	1736
TOTAL FTG.	
TOTAL HRS. RUN	5
COND. 1 8's T/B/ GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME	2:30		
WEIGHT	8.4		
PRESSURE GRADIENT			
VISC.-SEC.	28		
PV/YP	/	/	/
GELS	/	/	/
WL-CC'S			
pH	7.0		
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL.-S PAR.-P COM.-C
1734	1736	D		Sd & Shly [illegible]	45	50	600	6 1/2		6 1/2	61	S
				[illegible]								

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
1736	1/2	X						

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	0645	6 3/4		[illegible]
0645	0715	1/2		[illegible]
0715	0915	2		[illegible]

DRILLER [illegible]

DAY TOUR

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S. P. M.	METHOD RUN SGL.-S PAR.-P COM.-C
1736	1736			[illegible]								

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
0600	0930	3 1/2	2	[illegible]
0930	1400	4 1/2	6	[illegible]
1400	1500	1	11	[illegible]
1500	1600	1	2	[illegible]
				FLUID LOST 1736.57
				RECOVERED 1700.27
				LOST 37.82
				CIRCULATION MADE.

DRILLER [illegible]

EVENING TOUR

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR.-P COM.-C
1734	1736	D		[illegible]	45	50	600	6 1/2		6 1/2	60	

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
1800	1830	1/2	3	[illegible]
1830	1900	1/2	1	[illegible]
1900	2130	2 1/2		[illegible]
2130	2400	2 1/2		[illegible]

DRILLER [illegible]

NO. O

FORM 3T6 APPROVED APPROVED

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

C 23522

DAILY DRILLING REPORT

REPORT NO. 20

LEASE	WELL NO.	API WELL NUMBER	DATE
			7/

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

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

LEGAL LAND DESCRIPTION

WIRE LINE RECORD REEL NO.

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

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.			
HRS. W/OPR. D.P.			
HRS. WO/D.P.			
HRS. STANDBY			
TOTAL DAY WORK			
NO. OF DAYS FROM SPUD	30		
CUMULATIVE ROTATING HRS.			
TOTAL MUD COST			

MORNING TOUR

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

FOOTAGE FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL. DBL. PART. P CONT. C
		D										

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

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

DRILLER

DAY TOUR

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

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

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

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

DRILLER

EVENING TOUR

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

FOOTAGE FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL. DBL. PART. P CONT. C
		D										

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

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

DRILLER

C 23521

DAILY DRILLING REPORT

REPORT NO. 21

LEASE	WELL NO.	API WELL NUMBER	DATE
			05-21-14

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	32

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

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

LEGAL LAND DESCRIPTION

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

WIRE LINE RECORD — REEL NO.

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

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

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	27
CUMUL. & TIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT	FT.	BIT NO.	7
			SIZE	7 7/8
2	STB RMR OD	FT.	MFG.	
1	D.C. ID OD	FT.	TYPE	
1	STB RMR OD	FT.	JETS 1 32"	
1	D.C. ID OD	FT.	SER. NO.	
1	STB RMR OD	FT.	DEPTH OUT	
5			DEPTH IN	
			TOTAL FTG.	
			TOTAL HRS. RUN	
11	STANDS DP	FT.	COND. 1 8's T B GAGE	
2	SINGLES DP	FT.	GPM PD-PSI	
	KELLY DOWN	FT.		
	TOTAL	FT.		
WT. OF STRING		LBS.		

MUD RECORD				
TIME				
WEIGHT	9.1			
PRESSURE GRADIENT				
VISC.-SEC.	40	37		
PV YP	/	/	/	
GELS.	/	/	/	
WL -CC'S.				
pH		7		
SOLIDS %				

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT	FT.	BIT NO.	
			SIZE	
1	STB RMR OD	FT.	MFG.	
1	D.C. ID OD	FT.	TYPE	
1	STB RMR OD	FT.	JET 1 32"	
1	D.C. ID OD	FT.	SER. NO.	
1	STB RMR OD	FT.	DEPTH OUT	
			DEPTH IN	
			TOTAL FTG.	
			TOTAL HRS. RUN	
12	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 RECORD				
TIME	3:00	12:00		
WEIGHT	8.8+	9.1		
PRESSURE GRADIENT				
VISC.-SEC.	58	59	52	
PV/YP	/	/	/	
GELS.	/	/	/	
WL -CC'S.				
pH	9.0	9.0	9.5	
SOLIDS %				

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
SODA ASH	10 SX		
GEL	4 SX		
GELEX	11 SX		

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT 17 1/2	FT.	BIT NO.	7
1			SIZE	7 7/8
1	STB RMR OD	FT.	MFG.	
1	D.C. ID OD	FT.	TYPE	
1	STB RMR OD	FT.	JETS 1 32"	
1	D.C. ID OD	FT.	SER. NO.	
1	STB RMR OD	FT.	DEPTH OUT	
			DEPTH IN	
			TOTAL FTG.	
			TOTAL HRS. RUN	
2	STANDS DP	FT.	COND. 1 8's T B GAGE	
1	SINGLES DP	FT.	GPM PD-PSI	
	KELLY DOWN	FT.		
	TOTAL	FT.		
WT. OF STRING		LBS.		

MUD RECORD				
TIME	6:00			
WEIGHT	9.2+	9.4		
PRESSURE GRADIENT				
VISC.-SEC.	42	42		
PV/YP	/	/	/	
GELS.	/	/	/	
WL -CC'S.				
pH				
SOLIDS %				

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE FROM	FOOTAGE 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 SCHLUM'S PARA-P COMPLEX
1123	1163											

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

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

DRILLER

FOOTAGE FROM	FOOTAGE 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 SCHLUM'S PARA-P COMPLEX
1163	1165	D			45	5						

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	1165	5	X						

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

DRILLER

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHLUM'S PARA-P COMPLEX
1165	1165											

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

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

DRILLER

FORM 3T6

APPROVED

APPROVED

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

C 23520

DAILY DRILLING REPORT

REPORT NO. 28

LEASE	WELL NO.	API WELL NUMBER	DATE
			5-20-74

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	

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

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
						1			
						2			

LEGAL LAND DESCRIPTION

WIRE LINE RECORD REEL NO.

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

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				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADJUT'N'L			
	G.			
	TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	28
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO. | DRILLING ASSEMBLY (At end of tour) | BIT RECORD | MUD RECORD

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. 7; SIZE 17½; MFG. ____; TYPE ____; JETS 1 32" ____; SER. NO. ____; DEPTH OUT ____; DEPTH IN 1210; TOTAL FTG. 15; TOTAL HRS. RUN ____; COND. 1/8's T. B. GAGE ____; GPM/ PD--PSI ____

MUD RECORD: TIME ____; WEIGHT 10; PRESSURE GRADIENT ____; VISC.--SEC. 30; PV YP ____; GELS ____; WL --CC'S ____; pH ____; SOLIDS % ____

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

DAY TOUR

NO. | DRILLING ASSEMBLY (At end of tour) | BIT RECORD | MUD RECORD

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

MUD RECORD: TIME ____; WEIGHT ____; PRESSURE GRADIENT ____; VISC.--SEC. ____; PV-YP ____; GELS ____; WL --CC'S. ____; pH ____; SOLIDS % ____

MUD & CHEMICALS ADDED: TYPE | AMT. | TYPE | AMT.

EVENING TOUR

NO. | DRILLING ASSEMBLY (At end of tour) | BIT RECORD | MUD RECORD

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. 7; SIZE 17½; MFG. ____; TYPE ____; JETS 1/32" ____; SER. NO. ____; DEPTH OUT ____; DEPTH IN ____; TOTAL FTG. 113; TOTAL HRS. RUN 25; COND. 1/8's T/B/ GAGE ____; GPM/ PD--PSI ____

MUD RECORD: TIME ____; WEIGHT ____; PRESSURE GRADIENT ____; VISC.--SEC. ____; PV/YP ____; GELS ____; WL --CC'S. ____; pH ____; SOLIDS % ____

MUD & CHEMICALS ADDED: TYPE | AMT. | TYPE | AMT.

MORNING TOUR

FOOTAGE FROM | TO | DR..D RM..R CORE..C | CORE NO. | FORMATION (SHOW CORE RECOVERY) | ROTARY RPM | WT. ON BIT 1000 # | PUMP PRESS | PUMP NO. 1: LINER SIZE | S.P.M. | PUMP NO. 2: LINER SIZE | S.P.M. | METHOD RUN SGL. S PAR'L'L P COMP'D C

DEVIATION RECORD: DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG FROM | TO | ELAPSED TIME | CODE NO. | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

DAY TOUR

FOOTAGE FROM | TO | DR..D RM..R CORE..C | CORE NO. | FORMATION (SHOW CORE RECOVERY) | ROTARY RPM | WT. ON BIT 1000 # | PUMP PRESS | PUMP NO. 1: LINER SIZE | S.P.M. | PUMP NO. 2: LINER SIZE | S. P. M. | METHOD RUN SGL. S PAR'L'L P COMP'D C

DEVIATION RECORD: DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG FROM | TO | ELAPSED TIME | CODE NO. | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

EVENING TOUR

FOOTAGE FROM | TO | DR..D RM..R CORE..C | CORE NO. | FORMATION (SHOW CORE RECOVERY) | ROTARY RPM | WT. ON BIT 1000 # | PUMP PRESS | PUMP NO. 1: LINER SIZE | S.P.M. | PUMP NO. 2: LINER SIZE | S.P.M. | METHOD RUN SGL. S PAR'L'L P COMP'D C

DEVIATION RECORD: DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG FROM | TO | ELAPSED TIME | CODE NO. | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1700	2045	2½		Drilling 1705 Hole
2045	2100	¼		Make Low Survey
2100	2400	2		Drilling 1715 Hole

DRILLER

FORM 3T6 APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

C 23519

DAILY DRILLING REPORT

REPORT NO. 27

LEASE	WELL NO.	API WELL NUMBER	DATE

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION

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

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1.	RIG UP AND TEAR DOWN			
2.	DRILL ACTUAL	7	16	
3.	REAMING			5
4.	CORING			
5.	CONDITION MUD & CIRCULATE			
6.	TRIPS		2 3	
7.	LUBRICATE RIG			
8.	REPAIR RIG			
9.	CUT OFF DRILLING LINE			
10.	DEVIATION SURVEY	1		
11.	WIRE LINE LOGS			
12.	RUN CASING & CEMENT			
13.	WAIT ON CEMENT			
14.	NIPPLE UP B.O.P.			
15.	TEST B.O.P.			
16.	DRILL STEM TEST			
17.	PLUG BACK			
18.	SQUEEZE CEMENT			
19.	FISHING			
20.	DIR. WORK			
21.				
22.				
23.				
COMPLETION	A. PERF'R'T'N			
	B. TSTG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS				

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	27
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD		
1	BIT	FT.	BIT NO.		TIME		
			SIZE		WEIGHT		
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT		
	D.C. ID OD	FT.	TYPE		VISC.-SEC.		
1	STB RMR OD	FT.	JETS 1/32"		PV YP		
	D.C. ID OD	FT.	SER. NO.		GELS		
1	STB RMR OD	FT.	DEPTH OUT		WL -CC'S		
			DEPTH IN		pH		
7			TOTAL FTG.		SOLIDS %		
			TOTAL HRS. RUN				
11	STANDS DP	FT.	COND. 1/8's T B GAGE		MUD & CHEMICALS ADDED		
1	SINGLES DP	FT.	GPM PD-PSI		TYPE AMT.	TYPE AMT.	
	KELLY DOWN	FT.					
	TOTAL	FT.					
WT. OF STRING		LBS.					

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCI-S PART'L-P CORE-C
9270	9414	34			45	20	1700	6	94	6		S

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	9270	4 3/4	X	9370	4 3/4	X			

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
2001	0330	3½		
0330	0600	2½		
0600	0730	1½		
0730	1130	4		
1130	1200	½		
1200	2400	12		

DRILLER

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD		
1	BIT	FT.	BIT NO.	4	TIME		
			SIZE	10 5/8	WEIGHT		
	STB RMR OD	FT.	MFG.	REED	PRESSURE GRADIENT		
	D.C. ID OD	FT.	TYPE	J22-J	VISC.-SEC.		
1	STB RMR OD	FT.	JETS 1/32"	18 18 18	PV YP		
	D.C. ID OD	FT.	SER. NO.	218588	GELS		
1	STB RMR OD	FT.	DEPTH OUT	9414	WL -CC'S		
			DEPTH IN		pH		
7			TOTAL FTG.	144	SOLIDS %		
			TOTAL HRS. RUN	23½			
11	STANDS DP	FT.	COND. 1/8's T B GAGE	2 0 1	MUD & CHEMICALS ADDED		
1	SINGLES DP	FT.	GPM PD-PSI		TYPE AMT.	TYPE AMT.	
	KELLY DOWN	FT.					
	TOTAL	FT.					
WT. OF STRING		LBS.					

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S. P. M.	METHOD RUN SCI-S PART'L-P CORE-C
9414	9470	6			45	20	1700	6	94	6		-

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	9414	4	X						

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	0130	1½	2	Circ. & Cond. Mud.
0130	0330	2	11	Circ. & Cond. Mud
0330	0500	1½	1	Hand
0500	0530	½	4	Run in Hole to Bottom Ream
0530	0600	½	2	Circ. & Cond. Mud for Trip
0600	1200	6	4	Pull out of Hole & Pick up Bit

DRILLER

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD		
1	BIT	1.00 FT.	BIT NO.	4	TIME		
	12 1/4	6.40	SIZE	10 5/8	WEIGHT	9	
2	STB RMR OD	6.22 FT.	MFG.	REED	PRESSURE GRADIENT		
1	D.C. ID OD	6.50 FT.	TYPE	J22-J	VISC.-SEC.		
1	STB RMR OD	9.32 FT.	JETS 1/32"	18 18 18	PV YP	1 1	7 5
1	D.C. ID OD	31.04 FT.	SER. NO.	218588	GELS	1 1	7
1	STB RMR OD	1.43 FT.	DEPTH OUT		WL -CC'S		
2		122.32	DEPTH IN		pH		
1		5.68	TOTAL FTG.		SOLIDS %		
1		5.45	TOTAL HRS. RUN				
20	STANDS DP	FT.	COND. 1/8's T/B/ GAGE		MUD & CHEMICALS ADDED		
1	SINGLES DP	1005.61 FT.	GPM/ PD-PSI		TYPE AMT.	TYPE AMT.	
	KELLY DOWN	7.00 FT.					
	TOTAL	1440.00 FT.					
WT. OF STRING		107000 LBS.					

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCI-S PART'L-P CORE-C
9470					45	12	2000	6	94	6	94	
9650	9740	11			45	17	2100	6	94	6	94	
9740	TD				45	17	2100	6	94	6	94	

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	1500	3	4	Pick up Tools & Run in Hole
1500	2300	4		Ream Fr 9470 To 9740 Circulate & R.U.
2300	2400	1		Pump Pill & Pull out of Hole

DRILLER

C 23518

DAILY DRILLING REPORT REPORT NO. 21

LEASE	WELL NO.	API WELL NUMBER	DATE
[illegible]	D-4	[illegible]	03-22-[illegible]

OPERATOR	CONTRACTOR	RIG NO.
[illegible]	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
[illegible]	[illegible]

LEGAL LAND DESCRIPTION [illegible]

WIRE LINE RECORD REEL NO.

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	20	LSS	91.5#	6	253		248
			4.4#				
		CRAMPTON & SONS, 3/4 CAP					

SIZE 7/8 NO. LINES 10 FT. SLIPPED 75'
FT. CUT OFF PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5"	19.5#	E	6 5/8	4 1/2 H	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	D-375	11"
2	EMSCO	D-375	11"

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1.	RIG UP AND TEAR DOWN			
2.	DRILL ACTUAL	7 3/4	7 1/4	8 1/2
3.	REAMING			
4.	CORING			
5.	CONDITION MUD & CIRCULATE		1	
6.	TRIPS		2 3/4	2 1/2
7.	LUBRICATE RIG			
8.	REPAIR RIG			
	CUT OFF DRILLING LINE			1
	DEVIATION SURVEY	1/4	1/4	1
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.			1	1

COMPLETION

A.	PERF'R'T'N		
B.	TBG TRIPS		
C.	TREATING		
D.	SWABBING		
E.	TESTING		
F.	ADDIT'N'L		
G.			
TOTALS		8	7

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	21		
CUMULATIVE ROTATING HRS.			
TOTAL MUD COST			

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)			BIT RECORD	
1	BIT 12 1/4		FT.	BIT NO.	3
2	[illegible]			SIZE	12 1/4
1	STB RMR 12 1/4 OD	12 1/4	FT.	MFG.	[illegible]
1	D.C. ID 3" OD	8"	FT.	TYPE	[illegible]
1	STB RMR [illegible] OD	[illegible]	FT.	JETS 1 32"	[illegible]
1	D.C. ID [illegible] OD	[illegible]	FT.	SER. NO.	[illegible]
1	STB RMR [illegible] OD	[illegible]	FT.	DEPTH OUT	
3	[illegible]	[illegible]		DEPTH IN	1254
29	[illegible]	[illegible]		TOTAL FTG.	13
				TOTAL HRS. RUN	11 3/4
9	STANDS DP	835.72	FT.	COND. 1/8's T.B. GAGE	[illegible]
1	SINGLES DP	31.91	FT.	GPM/ PD-PSI	
	KELLY DOWN	37.55	FT.		
	TOTAL	1254.18	FT.		
WT. OF STRING	[illegible]		LBS.		

MUD RECORD			
TIME	0100	0330	0600
WEIGHT	9.1	9.1	9.1
PRESSURE GRADIENT	.470	.470	.470
VISC.-SEC.	45	43	42
PV/YP	/	/	/
GELS	/	/	/
WL-CC'S			
pH	10.5	10.5	10.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
H2O - GBM			

NO.	DRILLING ASSEMBLY (At end of tour)			BIT RECORD	
1	BIT [illegible]		FT.	BIT NO.	[illegible]
2	[illegible]			SIZE	[illegible]
1	STB RMR [illegible] OD	[illegible]	FT.	MFG.	[illegible]
1	D.C. ID [illegible] OD	[illegible]	FT.	TYPE	[illegible]
1	STB RMR [illegible] OD	[illegible]	FT.	JET 1 32"	[illegible]
1	D.C. ID [illegible] OD	[illegible]	FT.	SER. NO.	[illegible]
1	STB RMR [illegible] OD	[illegible]	FT.	DEPTH OUT	[illegible]
5	[illegible]	[illegible]		DEPTH IN	[illegible]
2	[illegible]	[illegible]		TOTAL FTG.	82
1	[illegible]	[illegible]		TOTAL HRS. RUN	[illegible]
4	STANDS DP	[illegible]	FT.	COND. 1/8's T.B. GAGE	1/8/1
2	SINGLES DP	[illegible]	FT.	GPM/ PD-PSI	
	KELLY DOWN	[illegible]	FT.		
	TOTAL	[illegible]	FT.		
WT. OF STRING	[illegible]		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 FROM	FOOTAGE TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SURF-S PART-P CORED-C
1254	1731	C		[illegible]	40	60	1100	6 1/2	45	6 1/2	50	P

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	1705	3°	X						

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	0600	6		[illegible]
0600	0800	2		[illegible]

DRILLER [illegible]

EVENING TOUR

FOOTAGE FROM	FOOTAGE TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SURF-S PART-P CORED-C
1731	1740	10		[illegible]	30	10	1100	6 1/2	45	6 1/2	50	P
1740												

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	1721	2°	X						

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0900	1105	2 1/2		[illegible]
1105	1130	1/2		[illegible]
1130	1500	3 1/2		[illegible]
1500	1505	1/2		[illegible]
1505	1730	2 1/2		[illegible]

DRILLER [illegible]

EVENING TOUR

FOOTAGE FROM	FOOTAGE TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SURF-S PART-P CORED-C
[illegible]	1740	C		[illegible]	45	10	1200	6 1/2	60	6 1/2	50	P

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	1655	5°	X	1720	5°	X			

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1100	1200	1		[illegible]
1700	1730	1/2		[illegible]
1730	1800	1/2		[illegible]
1800	1845	3/4		[illegible]
1845	2000	1 1/4		[illegible]
2000	2030	1/2		[illegible]
2030	2130	1		[illegible]

DRILLER [illegible]

FORM 3T6 APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

C 23517

DAILY DRILLING REPORT

REPORT NO. 25

LEASE	WELL NO.	API WELL NUMBER	DATE
Doris Mesa Fee	A-4	04-55-lm-30-137-UTM	07-25-74

OPERATOR	CONTRACTOR	RIG NO.
Exxon Corp.	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
[illegible] Johnson	[illegible] Lunsford

LEGAL LAND DESCRIPTION: Santa Barbara, Calif.

WIRE LINE RECORD — REEL NO.

	SIZE	NO. LINES	FT. SLIPPED
	1/4"	10	
FT. CUT OFF		PRESENT LENGTH	
TOH 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	20"	USS	94.51 H-40	6	253		243
		Cameron	w/ 5" csg.	7" csg.			

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5"	19.5#	E	6 5/8"	H-90	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-375	15
2	Emsco	D-375	15

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	7¾	6	4
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS		1-2	7¼
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY	1/4	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	[illegible]			½

COMPLETION			
A	PERF'R'T'N		
B	TBG TRIPS		
C	TREATING		
D	SWABBING		
E	TESTING		
F	ADDIT'N'L		
G			
TOTALS		8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	25
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT	[illegible]	FT.
1	[illegible]	[illegible]	FT.
1	STB RMR	OD	FT.
1	D.C. ID	OD	FT.
1	STB RMR	OD	FT.
1	D.C. ID	OD	FT.
1	STB RMR	OD	FT.
3	[illegible]	[illegible]	FT.
2	[illegible]	[illegible]	FT.
1	[illegible]	[illegible]	FT.
9	STANDS DP	741.80	FT.
1	SINGLES DP	31.75	FT.
	KELLY DOWN	39.50	FT.
	TOTAL	[illegible]	FT.
WT. OF STRING	105 000		LBS.

BIT RECORD

BIT NO.	[illegible]
SIZE	17½
MFG.	[illegible]
TYPE	[illegible]
JETS 1/32"	[illegible]
SER. NO.	[illegible]
DEPTH OUT	
DEPTH IN	1179
TOTAL FTG.	55
TOTAL HRS. RUN	12¾
COND. 1/8's T.B. GAGE	[illegible]
GPM/ PD-PSI	

MUD RECORD

TIME	0100	0330	0615
WEIGHT	9.1	9.04	9.1
PRESSURE GRADIENT	470	467	473
VISC.-SEC.	42	51	43
PV/YP	/	/	11/9
GELS.	/	/	7/22
WL -CC'S			13.1
pH	10.5	10.5	10.0
SOLIDS %			6.0

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
H2O - 74 P.M.			

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. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN ROTARY PART'L SLIDE COMBO
1203	1234	31'			[illegible]	[illegible]	1600	1¾	45	1½	49	P
				Fuel 10' L								

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
[illegible]	?	K						

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	0730	7½		Drilling 12¼ Hole
0730	0730	½		Wire Line Survey
0730	0815	4½		[illegible]

DRILLER [illegible]

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT		FT.
1			FT.
1	STB RMR	OD	FT.
1	D.C. ID	OD	FT.
1	STB RMR	OD	FT.
1	D.C. ID	OD	FT.
1	STB RMR	OD	FT.
3	[illegible]	[illegible]	FT.
2	[illegible]	[illegible]	FT.
1	[illegible]	[illegible]	FT.
9	STANDS DP	773.20	FT.
1	SINGLES DP	31.75	FT.
	KELLY DOWN	16.00	FT.
	TOTAL	[illegible]	FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	[illegible]
SIZE	[illegible]
MFG.	[illegible]
TYPE	[illegible]
JETS 1/32"	[illegible]
SER. NO.	[illegible]
DEPTH OUT	[illegible]
DEPTH IN	171
TOTAL FTG.	[illegible]
TOTAL HRS. RUN	[illegible]
COND. 1/8's T.B. GAGE	3-1-2
GPM/ PD-PSI	

MUD RECORD

TIME	[illegible]		
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'D RM-R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN ROTARY PART'L SLIDE COMBO
1234	[illegible]	18'			[illegible]	30	[illegible]	[illegible]	45	[illegible]	40	1
[illegible]												

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3¼	X

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	1215	3¾		[illegible]
[illegible]	[illegible]	[illegible]		[illegible]
1430	1430	2		[illegible]
[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	1¼		[illegible]

DRILLER [illegible]

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. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN ROTARY PART'L SLIDE COMBO
1234	1290	92			40	40	1000	6¾	45	1¼	50	P
							1000					

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
1245	3¼	X	1290	3½	X			

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1600	1700	1		[illegible]
[illegible]	1730	½		[illegible]
1730	1915	1½		[illegible]
1915	2145	2½		[illegible]
2145	2200	¼		[illegible]
2200	2230	1½		[illegible]
2230	2400	½		[illegible]

DRILLER [illegible]

C 23516

DAILY DRILLING REPORT

REPORT NO. 24

LEASE	WELL NO.	API WELL NUMBER	DATE
Pointed Mountain	A-4	A55-Lo-30-123-45W	03-24-74

OPERATOR	CONTRACTOR	RIG NO.
Davis Services Inc.	LOFFLAND BROTHERS COMPANY	76

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5"	19.50	E	6 1/4	NC 50	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-100	18
2	Emsco	D-300	16

LEGAL LAND DESCRIPTION: Pointed Mountain A-55

WIRE LINE RECORD — REEL NO.

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	LKR. TO CSG. NO.	SET AT
	20"	USS	94.54	6	253		243
			H-40				
		CEMENTED W/ 920 SKS. 3% CaCl.					

WIRE LINE RECORD: SIZE 5/16 — NO. LINES 10 — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH — TON MI. OR TRIPS SINCE LAST CUT — CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	5 3/4		2 1/2
3. REAMING			5 1/4
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS	3 1/2		1
7. LUBRICATE RIG			
8. REPAIR RIG	1 1/2		
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.			
A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8		8

COMPLETION

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	24
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT 13 3/4	1.00 FT.	BIT NO.	5
1	Reamer 12 1/4	4.14	SIZE	12 1/4
	STB RMR OD	FT.	MFG.	Reed
2	D.C. ID 9 OD	12.91 FT.	TYPE	RWR
1	STB RMR OD	2.36 FT.	JETS 1 32"	11 11 11
2	D.C. ID 9 OD	60.47 FT.	SER. NO.	YR5791
2	STB RMR OD	6.45 FT.	DEPTH OUT	
3	D.C. ID 9 OD	93.55	DEPTH IN	1171
2	D.C. ID 9 OD	62.20	TOTAL FTG.	14
1	Jar 9 OD	31.00	TOTAL HRS. RUN	5 3/4
5	STANDS DP	701.50 FT.	COND. 1/8's T/B GAGE	2 1
2	SINGLES DP	63.20 FT.	GPM/ PD-PSI	/ /
	KELLY DOWN	39.55 FT.		
	TOTAL	1172.00 FT.		
WT. OF STRING	70,000	LBS.		

MUD RECORD			
TIME	0130	0430	0600
WEIGHT	9.1	9.1	9.1
PRESSURE GRADIENT	.470	.470	.465
VISC.-SEC.	52	47	43
PV/YP	/	/	12/10
GELS.	/	/	5/18
WL -CC'S.			12
pH	9.0	9.0	9.5
SOLIDS %			5.2
F.C.			2/32

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Caustic	5#	Lime	4 sx

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT 12 1/4	1.00 FT.	BIT NO.	5
1	Reamer 12 1/4	4.14	SIZE	12 1/4
1	STB RMR OD	4.14 FT.	MFG.	Reed
1	D.C. ID 9 OD	31.00 FT.	TYPE	RWR
1	STB RMR OD	4.00 FT.	JET 1/32"	11 11 11
1	D.C. ID 9 OD	31.00 FT.	SER. NO.	YR5791
1	STB RMR OD	4.45 FT.	DEPTH OUT	1171
5		156.73	DEPTH IN	1157 1171
1		31.00	TOTAL FTG.	14
3		93.55	TOTAL HRS. RUN	5 3/4
7	STANDS DP	693.50 FT.	COND. 1/8's T/B GAGE	4 2 2
2	SINGLES DP	62.05 FT.	GPM/ PD-PSI	/ /
	KELLY DOWN	39.55 FT.		
	TOTAL	1171.00 FT.		
WT. OF STRING	73,000	LBS.		

MUD RECORD			
TIME	1700	1130	
WEIGHT	9.1	9.0	
PRESSURE GRADIENT		.467	
VISC.-SEC.	43	43	
PV/YP	12/10	14/	1
GELS.	5/18	/	/
WL -CC'S.	12	11	
pH	9.5	9.0	
SOLIDS %	5.5		
F.C.	2/32		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Soda Ash	2 sx		

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT	FT.	BIT NO.	RR 4
1			SIZE	12 1/4
1	STB RMR OD	FT.	MFG.	Reed
1	D.C. ID OD	FT.	TYPE	S 73 J
1	STB RMR OD	FT.	JETS 1/32"	11 11 11
2	D.C. ID OD	FT.	SER. NO.	RK 5793
1	STB RMR OD	FT.	DEPTH OUT	
1			DEPTH IN	1171
3			TOTAL FTG.	96
1			TOTAL HRS. RUN	4 1/2
8	STANDS DP	701.50 FT.	COND. 1/8's T/B/ GAGE	4 2 2
	SINGLES DP	FT.	GPM/ PD-PSI	/ /
	KELLY DOWN	39.55 FT.		
	TOTAL	1303.00 FT.		
WT. OF STRING	82,000	LBS.		

MUD RECORD			
TIME		2000	0330
WEIGHT		9.1	9.2
PRESSURE GRADIENT		.470	.470
VISC.-SEC.		43	43
PV/YP		/	/
GELS.		/	/
WL -CC'S.			
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Soda Ash	300#		
KCl - Polym			

FORMATION

FOOTAGE FROM	FOOTAGE TO	DR'D RM'R CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
1161	1171	10'			50	25	1000	6 3/4	53	6 1/2		SCL-S PARKER-P COMPASS 5

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
0600	0730	1 1/2		Install new 10" 900 Series Casing Head
0730	0830	1		Weld on 12" SRRA & Casing Spool
0830	0900	0 1/2		Drill out 13 3/4" Hole

DRILLER

FORMATION

FOOTAGE FROM	FOOTAGE TO	DR'D RM'R CORE'D	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
1171	1171	0			50	25	900	6 3/4	53	6 1/2		

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
1171	3/4	X						

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0900	1100	3		Drill 12 1/4" Hole
1100	1245	2		Circ. & Cond. Mud @ 71
1245	1315	2		Trip out of Hole
1315				Lay Down 12" Reed Stabilizer & pick up 8" Reed Roller Reamer 15' above 8" D.C.
	1530	2 1/2		Trip in Hole
1530	1600	1/2		Ream 60'

DRILLER

FORMATION

FOOTAGE FROM	FOOTAGE TO	DR'D RM'R CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
1171	1177	6'		Drilled No. 3 Section	45	25	700	6 3/4	53	6 1/2		
1177	1303			" "	45	40	1100	6 3/4	45	6 1/2	4 1/2	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
1180	3/4	X						

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1100	1700	1		Ream to 1171 Ft.
1700	1715	2 1/4		Ream from 1171 to 1177
1915	1930	1/4		Circ. & Cond. Mud
1930	2045	1/4		Mixing Gel Sweep
2045	2100	3/4		Trip out

DRILLER

FORM 3T6 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

C 23515

DAILY DRILLING REPORT — REPORT NO. 23

LEASE	WELL NO.	API WELL NUMBER	DATE
PAINTED MOUNTAIN	D-6	43-047-16-30-12S-19E	03-22-74

OPERATOR	CONTRACTOR	RIG NO.
Ramco Operating Co.	LOFFLAND BROTHERS COMPANY	74

SIGNATURE OF OPERATOR'S REPRESENTATIVE: R.A. Johnson

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Al Cardinale

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5"	16.60	E	6⅜"	4½ XH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-1000	16
2	Emsco	D-700	16

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	20"	?	94/51	6	253		253

Cemented w/525 sks. 3% CaCl

LEGAL LAND DESCRIPTION: PAINTED MOUNTAIN D-06

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED
7/16	10	

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	7¾	12	4¼
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			3
7	LUBRICATE RIG			
8	REPAIR RIG		1	1½
9	CUT OFF DRILLING LINE	¼	½	¼
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				

COMPLETION: A. PERF'R'T'N; B. TBG TRIPS; C. TREATING; D. SWABBING; E. TESTING; F. ADDIT'N'L; G.

TOTALS	8	24	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: 23
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT	12¼"	FT.
1	STB RMR	12" OD	FT.
1	D.C. ID	OD	FT.
1	STB RMR	OD	FT.
5	D.C. ID	OD	FT.
1	STB RMR	OD	FT.
7	STANDS DP		FT.
1	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.

WT. OF STRING: LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T. B. GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME		
WEIGHT		
PRESSURE GRADIENT		
VISC.-SEC.		
PV/YP		
GELS.		
WL -CC'S		
pH		
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

MORNING TOUR

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
					45			6¼	45	6½	45	

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	1055	2	X						

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS
0001	0730	½		Drilling
0730	0800	½		Rig
0800	0000	16		Drilling

DRILLER:

NO. 2 — DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT	12¼"	FT.
1	STB RMR	12" OD	FT.
1	D.C. ID	OD	FT.
1	STB RMR	OD	FT.
5	D.C. ID	OD	FT.
1	STB RMR	OD	FT.
7	STANDS DP		FT.
1	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.

WT. OF STRING: LBS.

BIT RECORD

BIT NO.	4
SIZE	12¼
MFG.	Reed
TYPE	HP43
JET 1/32"	18 18 18
SER. NO.	216553
DEPTH OUT	
DEPTH IN	1037
TOTAL FTG.	115
TOTAL HRS. RUN	15½
COND. 1/8's T. B. GAGE	1 1 I
GPM/ PD-PSI	

MUD RECORD

TIME	0900	0000
WEIGHT	9.1	9.1
PRESSURE GRADIENT	.473	.473
VISC.-SEC.	45	45
PV/YP	12/8	12/8
GELS.	3/5	3/5
WL -CC'S.	12	12
pH	11.5	11.5
SOLIDS %	6.5	6.5

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. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
1037	1152	2						6¼	45	6½	44	

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	917	2¼	X						

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS
0700	0730	½		Rig up & run to 7 Repair rig & Drlg
0730	1130	4		Drlg & Survey
1130	1600	4½		" "

DRILLER:

NO. 3 — DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT	12¼"	FT.
1	STB RMR	12" OD	FT.
2	D.C. ID	OD	FT.
1	STB RMR	OD	FT.
4	D.C. ID	OD	FT.
1	STB RMR	OD	FT.
7	STANDS DP		FT.
1	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.

WT. OF STRING: LBS.

BIT RECORD

BIT NO.	4
SIZE	12¼
MFG.	H-W
TYPE	X-33-J, 3 WR
JETS 1/32"	18 18 18 18 18
SER. NO.	216553
DEPTH OUT	1152
DEPTH IN	1152
TOTAL FTG.	115
TOTAL HRS. RUN	15½
COND. 1/8's T.B. GAGE	1 1 I
GPM/ PD-PSI	

MUD RECORD

TIME	1600	0000
WEIGHT	9.1	9.1
PRESSURE GRADIENT	.473	.473
VISC.-SEC.	45	45
PV/YP	12/8	12/8
GELS.	3/5	3/5
WL -CC'S.	12	12
pH	11.5	11.5
SOLIDS %	6.5	6.5

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. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
1152								6¼		6½		

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	1149	2 5/8	X						

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS
1600	1900	2		Drlg 12¼ Hole
1900	1930	½		Wire Line Survey
1930	1130	5		Drlg 12¼ Hole
1130	1700	5½		Pump 20 bbl Wtr. Line Survey 11°
1700	1930	2½		Drlg 12¼ Hole
1930	2230	3		Circ & Cond Mud for Trip
2230	2300	½		Short Trip 8 Stds
2300	0130	2½		Circ & Cond Mud for Trip

DRILLER:

DRILLING CREW PAYROLL DATA

C 23515

DATE: MARCH 23/74
WELL NAME & NO.: PAINTED MOUNTAIN D-6
COMPANY: Ramco Operating Co.
TOOL PUSHER: Al Cardinale — RIG NO. 74

MORNING TOUR 0001 P.M. 0530 A.M.

CREW	SOC. SEC. NO.	NAME	HRS.
DRILLER	464-98-5789	JOHN GOUSENBURG	12
DRKMAN	529-54-7939	BARRY SEELY	12
MTRMAN	525-12-4592	JOHN SIARA	12
FIREMAN			
FLRMAN	530-52-7104	ALVIN CAMPBELL	12
FLRMAN	529-96-3930	BRIAN BRINKMAN	12
FLRMAN			

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

DAY TOUR 0530 A.M. 1600 P.M.

CREW	SOC. SEC. NO.	NAME	HRS.
DRILLER	529-56-1476	DEAN BROWN	12
DRKMAN	529-90-4044	MARVIN THOMPSON	12
MTRMAN	701-74-5580	GORDON SIVERTS	12
FIREMAN			
FLRMAN	529-86-2258	TROY BATTLEDAY	12
FLRMAN	708-33-3332	LLOYD A JAKE	12
FLRMAN	707-72-5021	RON LAYTON	12

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR 1 P.M. 2400 P.M.

CREW	SOC. SEC. NO.	NAME	HRS.
DRILLER			
DRKMAN			
MTRMAN			
FIREMAN			
FLRMAN			
FLRMAN			
FLRMAN			

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

Form 3T6 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

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APPROVED (Rev. Jan. 1/71)

C 23514

DAILY DRILLING REPORT — REPORT NO. 22

LEASE	WELL NO.	API WELL NUMBER	DATE
Pinto Mountain	A-4	055-66-30-127-45W	07-22-74

OPERATOR: Amoco Production Co.

CONTRACTOR: LOFFLAND BROTHERS COMPANY — RIG NO. 72

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [illegible]

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5	19.5	E	7"	NC50	1
					2

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	D-800	12
2	EMSCO	D-700	12

LEGAL LAND DESCRIPTION: Pinto Mountain 56

WIRE LINE RECORD — REEL NO.

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JTS.	FEET	RKB. TO CSG. HD.	SET AT
	20"	USS	94.51	6	253		243
				H-40			
		CEMENTED W/ 825 SKS TYPE CA					

SIZE 1/4" — NO. LINES 10 — FT. SLIPPED

FT. CUT OFF — PRESENT LENGTH

TON MI. OP 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			12
3	REAMING	1/2	8	1/2
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	OTH	1/2		

COMPLETION: A. PERF'R'TN; B. TBG TRIPS; C. TREATING; D. SWABBING; E. TESTING; F. ADDIT'N'L; G.

TOTALS: 8 8 8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.

HRS. W/OPR. D.P.

HRS. WO/D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD: 92

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
1	BIT		FT.
2			
1	STB RMR	OD	FT.
1	D.C. ID	OD	FT.
1	STB RMR	OD	FT.
5	D.C. ID	OD	FT.
1	STB RMR	OD	FT.
1			
2			
1			
6	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.

WT. OF STRING: LBS.

BIT RECORD

BIT NO.	1A
SIZE	17 1/2
MFG.	HTC
TYPE	OSC-3
JETS 1/32"	16 16 16
SER. NO.	6PE205
DEPTH OUT	
DEPTH IN	253
TOTAL FTG.	
TOTAL HRS. RUN	
COND. T.B. GAGE	/ /
GPM/ PD-PSI	

MUD RECORD

TIME	0200	0400	0630
WEIGHT	9.1+	9.1+	9.1+
PRESSURE GRADIENT			
VISC.-SEC.	43	41	42
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S			
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
1	BIT		FT.
2			
1	STB RMR	GD	FT.
1	D.C. ID	OD	FT.
1	STB RMR	GD	FT.
5	D.C. ID	OD	FT.
1	STB RMR	OD	FT.
1			
2			
1			
6	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.

WT. OF STRING: LBS.

BIT RECORD

BIT NO.	1A
SIZE	17 1/2
MFG.	HTC
TYPE	OSC-3
JET 1/32"	16 16 16
SER. NO.	6PE205
DEPTH OUT	
DEPTH IN	253
TOTAL FTG.	
TOTAL HRS. RUN	
COND. T.B. GAGE	/ /
GPM/ PD-PSI	

MUD RECORD

TIME			1200
WEIGHT			9.1+
PRESSURE GRADIENT			
VISC.-SEC.			47
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S			
pH			9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
1	BIT		FT.
2			
1	STB RMR	GD	FT.
1	D.C. ID	OD	FT.
1	STB RMR	GD	FT.
5	D.C. ID	OD	FT.
1	STB RMR	OD	FT.
1			
2			
1			
6	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.

WT. OF STRING: LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JET 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. T.B. GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
1	BIT		FT.
2			
1	STB RMR	GD	FT.
1	D.C. ID	OD	FT.
1	STB RMR	GD	FT.
5	D.C. ID	OD	FT.
1	STB RMR	OD	FT.
1			
2			
1			
6	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.

WT. OF STRING: LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 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 RM-R CORE-C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SURVEY POINTS COMPLETION
1887												
2515												

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
0001	0230	1½		Drilling 1887 - 1915
0230	0400	1½		Ream 1887 - 1915
0400	0600	2		Drilling 1915 - 1945
0600	0630	½		Ream 1887 - 1945

DRILLER: [illegible]

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SURVEY POINTS COMPLETION
1945	2200				40	2	900	7½	60	6½		

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
0200	0600	4		Drilling 1945 - 2257

DRILLER: [illegible]

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SURVEY POINTS COMPLETION
2270	2657	3/1										
2657	2670				40	45	1200	7½				P

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
1800	2230	4½		Drilling 2257 - 2670
2230		1½		Trip

DRILLER: [illegible]

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	350#		
GELEX	[illegible]		
H2O - 3-10 BBL			

DRILLING CREW PAYROLL DATA

C 23514

DATE: MARCH 22-74

WELL NAME & NO.: PINTO MOUNTAIN A-4

COMPANY: AMOCO PRODUCTION CO.

TOOL PUSHER: [illegible] — RIG NO. 72

MORNING TOUR 0001 P.M. 0530 A.M.

CREW	SOC. SEC. NO.	NAME	HRS.
DRILLER	[illegible]	JOHN [illegible]	12
DRKMAN	[illegible]	[illegible]	12
MTRMAN	[illegible]	[illegible]	12
FIREMAN			
FLRMAN	[illegible]	[illegible]	12
FLRMAN	[illegible]	[illegible]	12
FLRMAN			

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

DAY TOUR [illegible] A.M. [illegible] P.M.

CREW	SOC. SEC. NO.	NAME	HRS.
DRILLER	[illegible]	[illegible]	12
DRKMAN	[illegible]	[illegible]	12
MTRMAN	[illegible]	[illegible]	12
FIREMAN			
FLRMAN	[illegible]	[illegible]	12
FLRMAN	[illegible]	[illegible]	12
FLRMAN	[illegible]	[illegible]	12

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR _____ P.M. _____ P.M.

CREW	SOC. SEC. NO.	NAME	HRS.
DRILLER			
DRKMAN			
MTRMAN			
FIREMAN			
FLRMAN			
FLRMAN			
FLRMAN			

NO. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT

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A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

C 23513

DAILY DRILLING REPORT — REPORT NO. 5

LEASE	WELL NO.	API WELL NUMBER	DATE
POINTER MOUNTAIN	A-4	A.S.-60-300-123-4501	02-21-74

OPERATOR	CONTRACTOR	RIG NO.
DAVIS CONSOLID.	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
	[illegible] Loffland

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5"	19.5#	E	6 5/8	4½ IF	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-Duplex	15
2	Emsco	D-Duplex	16

LEGAL LAND DESCRIPTION: POINTER MOUNTAIN Lease A-4

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	20"	U.S.S.	94#	6	259		243

Cemented w/ 400 sks. 3% CaCl

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED
7/8	10	

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	7½	9	9½
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS		1½	
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY	½		
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			2½

COMPLETION: A. PERF'R'T'N; B. TBG TRIPS; C. TREATING; D. SWABBING; E. TESTING; F. ADDIT'N'L; G.

TOTALS	8	9	5

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 21

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour)

NO.				
1	BIT 12¼		125	FT.
1	8" D.C.		90	
	STB RMR	OD		FT.
3	D.C. ID	OD	8"	FT.
1	STB RMR	OD		FT.
	D.C. ID	OD		FT.
	STB RMR	OD		FT.
2	7" D.C.		180	
2	6" D.C.		120	
1	6" D.C.		30	
16	STANDS DP		1501	FT.
9	SINGLES DP		279	FT.
	KELLY DOWN		40	FT.
	TOTAL		1850	FT.
WT. OF STRING			60,000	LBS.

BIT RECORD

BIT NO.	3
SIZE	12¼
MFG.	Hughes
TYPE	OWV-J
JETS 1 32"	3-14-14
SER. NO.	214457
DEPTH OUT	
DEPTH IN	549
TOTAL FTG.	1301
TOTAL HRS. RUN	22½
COND. 1/8's T/B GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME	6001	0300	0630
WEIGHT	9.2+	9.2+	9.1
PRESSURE GRADIENT	463	463	1173
VISC.-SEC.	45	43	45
PV/YP	/	/	19/11
GELS	/	/	12/16
WL -CC'S			10
pH	9.5	9.5	Nil
SOLIDS %			6.6

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Caustic	50 sks		
Gel	20 sks		
Lime	4 sks		

HORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.				
1	BIT 12¼		125	FT.
1	8" D.C.		90	
	STB RMR	OD		FT.
3	D.C. ID	OD	8"	FT.
1	STB RMR	OD		FT.
	D.C. ID	OD	6"	FT.
1	STB RMR	OD	6"	FT.
2	7" D.C.		180	
2	6" D.C.		120	
1	6" D.C.		30	
16	STANDS DP		1501	FT.
9	SINGLES DP		279	FT.
	KELLY DOWN		40	FT.
	TOTAL		1850	FT.
WT. OF STRING			60,000	LBS.

BIT RECORD

BIT NO.	3
SIZE	12¼
MFG.	Hughes
TYPE	OWV-J
JETS 1/32"	3-14-14
SER. NO.	214457
DEPTH OUT	
DEPTH IN	549
TOTAL FTG.	1301
TOTAL HRS. RUN	22½
COND. 1/8's T/B GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME	0001	0300	0630
WEIGHT	9.2+	9.2+	9.1
PRESSURE GRADIENT	463	463	1173
VISC.-SEC.	45	43	45
PV/YP	/	/	19/11
GELS	/	/	12/16
WL -CC'S			10
pH	9.5	9.5	Nil
SOLIDS %			6.6

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Caustic	50 sks		
Gel	20 sks		
Lime	4 sks		

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.				
1	BIT 12¼		125	FT.
1	8" D.C.		90	
	STB RMR	OD		FT.
3	D.C. ID	OD	8"	FT.
1	STB RMR	OD		FT.
	D.C. ID	OD	6"	FT.
1	STB RMR	OD	6"	FT.
2	7" D.C.		180	
2	6" D.C.		120	
1	6" D.C.		30	
16	STANDS DP		1501	FT.
9	SINGLES DP		279	FT.
	KELLY DOWN		40	FT.
	TOTAL		1850	FT.
WT. OF STRING			60,000	LBS.

BIT RECORD

BIT NO.	3
SIZE	12¼
MFG.	Hughes
TYPE	OWV-J
JETS 1/32"	3-14-14
SER. NO.	214457
DEPTH OUT	
DEPTH IN	549
TOTAL FTG.	1301
TOTAL HRS. RUN	22½
COND. 1/8's T/B GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME	0001	0300	0630
WEIGHT	9.2+	9.2+	9.1
PRESSURE GRADIENT	463	463	1173
VISC.-SEC.	45	43	45
PV/YP	/	/	19/11
GELS	/	/	12/16
WL -CC'S			10
pH	9.5	9.5	Nil
SOLIDS %			6.6

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Caustic	50 sks		
Gel	20 sks		
Lime	4 sks		

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.				
1	BIT 12¼		125	FT.
1	8" D.C.		90	
	STB RMR	OD		FT.
3	D.C. ID	OD	8"	FT.
1	STB RMR	OD		FT.
	D.C. ID	OD	6"	FT.
1	STB RMR	OD	6"	FT.
2	7" D.C.		180	
2	6" D.C.		120	
1	6" D.C.		30	
16	STANDS DP		1501	FT.
9	SINGLES DP		279	FT.
	KELLY DOWN		40	FT.
	TOTAL		1850	FT.
WT. OF STRING			60,000	LBS.

BIT RECORD

BIT NO.	3
SIZE	12¼
MFG.	Hughes
TYPE	OWV-J
JETS 1/32"	3-14-14
SER. NO.	214457
DEPTH OUT	
DEPTH IN	549
TOTAL FTG.	1301
TOTAL HRS. RUN	22½
COND. 1/8's T/B GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME	0001	0300	0630
WEIGHT	9.2+	9.2+	9.1
PRESSURE GRADIENT	463	463	1173
VISC.-SEC.	45	43	45
PV/YP	/	/	19/11
GELS	/	/	12/16
WL -CC'S			10
pH	9.5	9.5	Nil
SOLIDS %			6.6

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Caustic	50 sks		
Gel	20 sks		
Lime	4 sks		

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR'D RM'R CORE'C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
434					45	30	600	6¼	59	6½		

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
1045	2	N						

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	0700	7	2	Drilling 12¼ hole
0700	0730	½	10	Deviation survey
0730	1130	4	2	Drilling 12¼ hole

DRILLER

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR'D RM'R CORE'C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
1355	1461	D			48	25	700	6¼		6½	63	5
1461	1509	D			42	25	700	6¼	60			5

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
0001	0600	6	2	Drilling 12¼ hole
0600	0700	1	9	Circ. & cond. for logs
0700	0900	2	5	Short trip 10 stands
0900	1000	1	9	Circ. & cond. for logs
1000	1030	½	5	Short trip 10 stands
1030	1130	1	9	Circ. & cond. for logs

DRILLER

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR'D RM'R CORE'C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
1509	1672	D			45	25	900	6¼	58	6½		5

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
1672	1¼	N						

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1100	1400	3	2	Drilling 12¼ hole
1400	1515	1½	5	Short trip 5 stands
1515	1730	2	2	Drilling 12¼ hole
1730	1830	1	9	Circ. & cond. for logs
1830	2130	3	5	Short trip 20 stands
2130	2400	2½	9	Circ. & cond. for logs

DRILLER

DRILLING CREW PAYROLL DATA

C 23513

DATE March 21, 74

WELL NAME & NO. POINTER MOUNTAIN A-4

COMPANY Davis Consolid. Oil Co.

TOOL PUSHER [illegible] Loffland RIG NO. 72

MORNING TOUR — 0001 P.M. 0800 A.M.

CREW	SOC. SEC. NO.	NAME	HRS.
DRILLER	441 96 7759	John Grusenmeyer	12
DRKMAN	468 84 3179	Harry Stella	12
MTRMAN	466 32 1452	Tony Sparks	12
FIREMAN			
FLRMAN	526 [illegible]	[illegible]	12
FLRMAN	459 [illegible]	[illegible]	12
FLRMAN			

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

DAY TOUR — [illegible] A.M. [illegible] P.M.

CREW	SOC. SEC. NO.	NAME	HRS.
DRILLER	[illegible]	[illegible]	12
DRKMAN	[illegible]	[illegible]	12
MTRMAN	[illegible]	[illegible]	12
FIREMAN			
FLRMAN	[illegible]	[illegible]	12
FLRMAN	703 33 3572	Lloyd A Jr.	12
FLRMAN	713 74 [illegible]	Bill Layton	12

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR — 1600 P.M. 2400 P.M.

CREW	SOC. SEC. NO.	NAME	HRS.
DRILLER			
DRKMAN			
MTRMAN			
FIREMAN			
FLRMAN			
FLRMAN			
FLRMAN			

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

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FORM 3T6 APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

C 23512

DAILY DRILLING REPORT — REPORT NO. 20

LEASE	WELL NO.	API WELL NUMBER	DATE
PAINTED MOUNTAIN	A-4	A-55-20-30-123-45W	03-20-74

OPERATOR	CONTRACTOR	RIG NO.
AMOCO CANADA LTD.	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER — Ol Loughlon

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5"	16.60	E	6 5/8	4 1/2 IF	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	D-1000	18"
2	EMSCO	D-300	16"

LEGAL LAND DESCRIPTION — PAINTED MOUNTAIN A-55

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	20	USS	94 H40	6	243		247
		CEMENTED W/ 400 SKS. TO SURFACE					

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED
1 1/2	10	

FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	7¾	7½	7¾
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY	¼	½	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				
A	PERF'R'T'N			
B	TBG TRIPS			
C	TREATING			
D	SWABBING			
E	TESTING			
F	ADDIT'NL			
G				
	TOTALS	5	8	6

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	20
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

COMPLETION

DRILLING ASSEMBLY (At end of tour)

NO.				
1	BIT 17½		1.25	FT.
1	PBL SUB		4.00	
	STB RMR	OD		FT.
3	D.C. ID 11	OD	89.61	FT.
1	STB RMR	OD	1.66	FT.
6	D.C. ID 9"	OD	176.77	FT.
1	STB RMR	OD	1.45	FT.
37	D.C.		985.65	
2	13" D.C.		57.08	
1	C.O.		2.45	
5	STANDS DP		1452.52	FT.
2	SINGLES DP		57.04	FT.
	KELLY DOWN		40.15	FT.
	TOTAL		4166.00	FT.
WT. OF STRING			417,000	LBS.

BIT RECORD

BIT NO.	3
SIZE	17½
MFG.	REED
TYPE	YT3-J
JETS 1 32"	16/16/16
SER. NO.	916557
DEPTH OUT	
DEPTH IN	999
TOTAL FTG.	3167
TOTAL HRS. RUN	12¾
COND. 1/8's T/B GAGE	4/4/WT/A
GPM/ PD-PSI	/

MUD RECORD

	0001	0400	0700
TIME			
WEIGHT	9.1	9.0+	0.2
PRESSURE GRADIENT			
VISC.-SEC.	43	37	42
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S			
pH	10.0	9.5	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	400#		
CELEX	6 sx		
H20-S-TGUM			

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SURV.-P.P.-P.P. COM.-I.C.
922	945		46		47	30	1100	6½	58			
945	945				47	30	900	6½	58			S

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
945	2½°	S						

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	0515	5¼		DRILLING 17½ HOLE
0515	0700	1¾		WIRE LINE SURVEY
0700	0900	2		DRILLING 17½ HOLE

DRILLER J. Loughlon

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.				
1	BIT 17½		1.25	FT.
1	PBL SUB		4.00	
	STB RMR	OD		FT.
3	D.C. ID 11	OD	89.61	FT.
1	STB RMR	OD	1.66	FT.
6	D.C. ID 9"	OD	176.77	FT.
1	STB RMR	OD	1.45	FT.
37	D.C.		985.65	
2	13" D.C.		57.08	
1	C.O.		2.45	
5	STANDS DP		1452.52	FT.
2	SINGLES DP		57.04	FT.
	KELLY DOWN		40.15	FT.
	TOTAL		4166.00	FT.
WT. OF STRING			417,000	LBS.

BIT RECORD

BIT NO.	3
SIZE	17½
MFG.	REED
TYPE	YT3-J
JETS 1 32"	16/16/16
SER. NO.	916557
DEPTH OUT	999
DEPTH IN	1003
TOTAL FTG.	104
TOTAL HRS. RUN	3¼
COND. 1/8's T/B GAGE	4/4/WT/A
GPM/ PD-PSI	/

MUD RECORD

	0700	1200	2000
TIME			
WEIGHT	9		
PRESSURE GRADIENT			
VISC.-SEC.	40		
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S			
pH	11.0		
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	200#		
CELEX	4 sx		
H20-S-TGUM			

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SURV.-P.P.-P.P. COM.-I.C.
164	1003	D			47	30	1000	6½	58			
					47	30	700	6½	58			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
945	2½°	S						
1003	2½°	S						

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0515	1730	12	2	DRILLING 17½ HOLE
1730	1800	½	4	CIRC & COND FOR TRIP
1800	1900	1	1	DROP SURVEY & TRIP OUT

DRILLER

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.				
1	BIT 17½		1.25	FT.
1	PBL SUB		4.00	
	STB RMR	OD		FT.
7	D.C. ID 11	OD	89.61	FT.
1	STB RMR	OD	1.66	FT.
1	D.C. ID 9"	OD	31.07	FT.
1	STB RMR	OD	1.45	FT.
37	D.C.		985.65	
2	13" D.C.		57.08	
1	C.O.		2.45	
6	STANDS DP		556.62	FT.
1	SINGLES DP		29.61	FT.
	KELLY DOWN		39.51	FT.
	TOTAL		1856.00	FT.
WT. OF STRING			75,000	LBS.

BIT RECORD

BIT NO.	3
SIZE	17½
MFG.	REED
TYPE	YT3-J
JETS 1-32"	16/16/16
SER. NO.	916557
DEPTH OUT	1003
DEPTH IN	1149
TOTAL FTG.	146
TOTAL HRS. RUN	9¾
COND. 1/8's T/B/ GAGE	4/4/WT/A
GPM/ PD-PSI	/

MUD RECORD

	1600	2000	2230
TIME			
WEIGHT	9.0	9.2	9.2+
PRESSURE GRADIENT			
VISC.-SEC.	36	44	45
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S			
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SURV.-P.P.-P.P. COM.-I.C.
1003	1034	D			47	30	900	6½	58	6½		

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
		X						

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1100	1115	¾	3	DRLG 17½ HOLE
1115	1130	½		REPAIR LINE SUNDRY 1010
1130	2400	12½		DRLG 17½ HOLE

DRILLER

EVENING TOUR

DRILLING CREW PAYROLL DATA

DATE March 20 1974 — C 23512

WELL NAME & NO. Painted Mountain A-4

COMPANY Amoco Canada

TOOL PUSHER Ol Loughlon — RIG NO. 72

MORNING TOUR 0001 P.M. 0800 A.M.

CREW	SOC. SEC. NO.	NAME	HRS.
DRILLER	466 965 709	JOHN COUGHLIN	8 12
DRKMAN	668 967 939	BOBBY STILLA	8 12
MTRMAN	665 121 482	JOHN SPARR	8 12
FIREMAN			
FLRMAN	620 675 199	ALLEN CARDARELL	8 12
FLRMAN	619 111 150	KLAUS RECKMANN	8 12
FLRMAN			

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

DAY TOUR 0800 A.M. ZERO P.M.

CREW	SOC. SEC. NO.	NAME	HRS.
DRILLER	466 965 709	D. Loughlon	12
DRKMAN	668 967 939	BOBBY STILLA	12
MTRMAN	665 121 482	JOHN SPARR	12
FIREMAN			
FLRMAN	620 675 199	ALLEN CARDARELL	12
FLRMAN	619 111 150	KLAUS RECKMANN	12
FLRMAN			

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR ____ P.M. ____ P.M.

CREW	SOC. SEC. NO.	NAME	HRS.
DRILLER			
DRKMAN			
MTRMAN			
FIREMAN			
FLRMAN			
FLRMAN			
FLRMAN			

NO. OF DAYS ____ SINCE LAST LOST TIME ACCIDENT

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APPROVED (Rev. Jan. 1/71)

FORM 3T6 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

C 23511

DAILY DRILLING REPORT — REPORT NO. 11

LEASE	WELL NO.	API WELL NUMBER	DATE
Pawnee "A"	B-4	15-55-60-30-123-45	03-12-84

OPERATOR	CONTRACTOR	RIG NO.
Office of Chairman Zoo	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER — R C Loveless

LEGAL LAND DESCRIPTION: Pawnee Plantation B-55

WIRE LINE RECORD — REEL NO.

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5"	19.50	E	6 5/8	NC50	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Ideco	D-700	12"
3	Ideco	D-90	12"

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	PKR. TO CSG. HD.	SET AT
	9 5/8"	USS	36# K-55	6	252		273
			40#				
		Combined w/ 9 5/8" csg			22' csg		

WIRE LINE RECORD: SIZE 15/16" — NO. LINES 6 — 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 3/4		5
3. REAMING		6 1/2	5
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS	1	3	3 1/4
7. LUBRICATE RIG			
8. REPAIR RIG			1/2
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. Other	2	2 1/2	
22.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	5	5	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	11.77
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

DRILLING ASSEMBLY (At end of tour) — BIT RECORD — MUD RECORD

NO.	DRILLING ASSEMBLY		BIT RECORD		MUD RECORD			
1	BIT 17 1/2	1.25 FT.	BIT NO.	2	TIME	0001	0730	0730
1	Bit Sub	4.01	SIZE	17 1/2	WEIGHT	9.0	9.0	9.0
	STB RMR OD	FT.	MFG.	Reed	PRESSURE GRADIENT			
3	D.C. ID 11" OD	89.11 FT.	TYPE	FDT	VISC.-SEC.	41	40	37
1	STB RMR 9" OD	6.46 FT.	JETS 1/32"	18 18 18	PV/YP	/	/	/
6	D.C. ID 7" OD	178.77 FT.	SER. NO.	RH 3547	GELS.	/	/	/
1	STB RMR 9" OD	1.45 FT.	DEPTH OUT	289	WL -CC'S.			
27	STANDS DP	784.6 FT.	DEPTH IN	289	pH	9.0	9.0	9.0
2	SINGLES DP	57.96 FT.	TOTAL FTG.		SOLIDS %			
1	KELLY	39.65	TOTAL HRS. RUN					
41	STANDS DP	1191.41 FT.	COND. 1/8" T.B. GAGE		MUD & CHEMICALS ADDED			
2	SINGLES DP	59.92 FT.	GPM/ PD-PSI	/ /	TYPE	AMT.	TYPE	AMT.
	KELLY DOWN	39.52 FT.						
	TOTAL	2391.00 FT.						
WT. OF STRING	95,000	LBS.						

NO.	DRILLING ASSEMBLY		BIT RECORD		MUD RECORD			
1	BIT 17 1/2	1.25 FT.	BIT NO.	3	TIME			1100
1	Bit Sub	4.01	SIZE	17 1/2	WEIGHT			9.0
	STB RMR OD	FT.	MFG.	Reed	PRESSURE GRADIENT			
3	D.C. ID 11" OD	89.11 FT.	TYPE	FDT	VISC.-SEC.			37
1	STB RMR 9" OD	6.46 FT.	JET 1/32"	18 18 18	PV/YP	/	/	/
6	D.C. ID 7" OD	178.77 FT.	SER. NO.	RH 3547	GELS.	/	/	/
1	STB RMR 9" OD	1.45 FT.	DEPTH OUT		WL -CC'S.			
27	STANDS DP	784.6 FT.	DEPTH IN	289	pH			9.0
2	SINGLES DP	57.96 FT.	TOTAL FTG.		SOLIDS %			
1	KELLY	39.65	TOTAL HRS. RUN					
41	STANDS DP	1191.41 FT.	COND. 1/8" T.B. GAGE		MUD & CHEMICALS ADDED			
2	SINGLES DP	59.92 FT.	GPM/ PD-PSI	/ /	TYPE	AMT.	TYPE	AMT.
	KELLY DOWN	39.52 FT.			H20-76PM			
	TOTAL	2391.00 FT.						
WT. OF STRING	95,000	LBS.						

NO.	DRILLING ASSEMBLY		BIT RECORD		MUD RECORD			
1	BIT 17 1/2	1.25 FT.	BIT NO.	3	TIME	1400	2000	0700
1	Bit Sub	4.00	SIZE	17 1/2	WEIGHT	9.0	9.0	9.0
	STB RMR OD	FT.	MFG.	Reed	PRESSURE GRADIENT			
3	D.C. ID 11" OD	93.11 FT.	TYPE	Y73-J	VISC.-SEC.	40	40	41
1	STB RMR 9" OD	1.10 FT.	JETS 1/32"	18 18 18	PV/YP	/	/	/
6	D.C. ID 7" OD	171.77 FT.	SER. NO.	RH 3547	GELS.	/	/	/
1	STB RMR 9" OD	1.45 FT.	DEPTH OUT		WL -CC'S.			
37	STANDS DP	1080.65 FT.	DEPTH IN	289	pH	9.0	9.5	9.0
2	SINGLES DP	59.09 FT.	TOTAL FTG.	33	SOLIDS %			
1	KELLY	2.65	TOTAL HRS. RUN	5				
5	STANDS DP	462.52 FT.	COND. 1/8" T.B. GAGE		MUD & CHEMICALS ADDED			
	SINGLES DP	FT.	GPM/ PD-PSI	/ /	TYPE	AMT.	TYPE	AMT.
	KELLY DOWN	39.40 FT.			Gel	15 sx	Water	90 BPH
	TOTAL	1222.00 FT.			Lime	35 sx		
WT. OF STRING	95,000	LBS.			Caustic	1/2		
					Soda Ash	1/2		

MORNING TOUR

FOOTAGE FROM	FOOTAGE TO	DR.-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
521	521				45	40	1100	4 3/4	47	6 1/2	58	P

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	530	1/2	X						

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	0230	2 1/2	2	Drilling 17 1/2 Hole
0230	0245	1/4	11	Survey
0245	1200	4 1/4	2	Drilling 17 1/2 Hole
1200	0001	1	6	Wash & Ream to Bottom

DRILLER: T. Taylor

DAY TOUR

FOOTAGE FROM	FOOTAGE TO	DR.-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
521								6 3/4		6 1/2		

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0600	0630	1/2	6	Finish Running 13 3/8" Csg
0630	0930	3	14	Change Out 5" Equip. to 4 1/2" Equip. Pick up BHA. Ck. TOC @ 200'
0930	0930	1/2	6	Rig up to Run 9 5/8" Csg
0930	1000	1/2	5	Run 6 Jts 9 5/8" Csg Stab in Csg Head Land @ 273' KB
1000	1100	1	5	Rig up Dowell Cmt. Csg.
1100				Pump 100 BBL Fresh H2O Ahead of Cmt.

DRILLER: J. Hunsucker

EVENING TOUR

FOOTAGE FROM	FOOTAGE TO	DR.-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
521	922	D		23'	41	35	1000	6 3/4	61	6 1/2		5

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1600	1645	3/4	6	Finish Running 13 3/8"
1645	1715	1/2	21	Break Circ. & W.O.B. (No Fill)
1715	1930	1 3/4	2	Drlg 17 1/2 Hole
1930	2015	1 3/4	8	Move Rig Fuel Tank and Light Plant Out of Cellar
2015	2400	3 1/4	2	Drilling Hole

DRILLER: J. Hunsucker

C 23510

DAILY DRILLING REPORT

REPORT NO. 12

LEASE	WELL NO.	API WELL NUMBER	DATE
Pena NCT-A	2-21	42-383-32403-00	6-25-77

OPERATOR	CONTRACTOR	RIG NO.
Hill & Hunt Corp.	LOFFLAND BROTHERS COMPANY	14

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

	O.D. SIZE	WT./FT.	GRADE	TOOL JT C.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
	5"	19.5#	E	6 1/4	4½ IF	1	1	Emsco	D-360	12"
							2	Emsco	D-360	12"

LEGAL LAND DESCRIPTION Pena Lease, Lavaca Co., Texas

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	10"	Lone Star	32.75#	6	256		262
			24.00#				

Cemented w/ 150 sx Class H + 2% CaCl

WIRE LINE RECORD — REEL NO.

SIZE 1 3/16 — NO. LINES 16 — 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	8	7½	8
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY		½	
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.

HRS. W/OPR. D.P.

HRS. WO/D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD 12

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 17½	1.25	FT.
1	Bit Sub	4.11	
	STB RMR OD		FT.
3	D.C. ID 11 OD	87.41	FT.
1	STB RMR 8½ OD	1.46	FT.
1	D.C. ID 8" OD	174.39	FT.
1	STB RMR 8½ OD	1.45	FT.
3	7" DC	88.65	
3	4½ DP	97.06	
1	4½	2.47	
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN	43.11	FT.
	TOTAL	412.57	FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	2
SIZE	17½
MFG.	Reed
TYPE	HP43J
JETS 1 32"	15 15 15
SER. NO.	516540
DEPTH OUT	
DEPTH IN	384
TOTAL FTG.	357
TOTAL HRS. RUN	47¾
COND. 1/8's T/B GAGE	R 1 1
GPM/ PD-PSI	/ /

MUD RECORD

TIME			
WEIGHT	9.5	9.5	9.5
PRESSURE GRADIENT		493	
VISC.-SEC.	41	41	38
PV/YP	1/	10/5	7/
GELS.	1/	3/8	1/
WL -CC'S		12.4	
pH	9.5	9.5	10
SOLIDS %		3	
SAND %		trace	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	15		
Lime	2		

FOOTAGE FROM	FOOTAGE TO	DR'G RM'R CORE'C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
727	773	D		Chalk w/ thin Shale Stringers	45	40	1400	7¾	117	6½	58	P

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	0600	6	2	Drilling 1175' Rate

DRILLER

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 17½	1.25	FT.
1	BIT SUB	4.06	
	STB RMR OD		FT.
3	D.C. ID 11 OD	99.11	FT.
1	STB RMR 8½ OD	1.46	FT.
½	D.C. ID 8" OD	174.75	FT.
1	STB RMR 8½ OD	1.45	FT.
3	7" D.C.	99.15	
2	4½ DP	58.68	
1	8½	2.47	
29	STANDS DP	769.69	FT.
	SINGLES DP		FT.
	KELLY DOWN	43.43	FT.
	TOTAL	1213.00	FT.
WT. OF STRING		93,000	LBS.

BIT RECORD

BIT NO.	2
SIZE	17½
MFG.	Reed
TYPE	HP43J
JET 1/32"	15 14 15
SER. NO.	516540
DEPTH OUT	
DEPTH IN	387
TOTAL FTG.	425
TOTAL HRS. RUN	57½
COND. 1/8's T/B GAGE	Rung NO 1
GPM/ PD-PSI	/ /

MUD RECORD

TIME	0800	1200	1400
WEIGHT	8.6+	8.4	9.0
PRESSURE GRADIENT	452	467	485
VISC.-SEC.	36	37	43
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S			
pH	9.5	9.0	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	540#		
CELEX	20#		
CAUSTIC	50#		
H20-10-12	6 BBLS	FRESH	WATER

FOOTAGE FROM	FOOTAGE TO	DR'G RM'R CORE'C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
773	912	D			45	40	1400	6¾	117	6½	58	P

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
760	1¾	S						

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0800	0815	¼	2	Drilling 1175' to 1192'
0815	0830	¼	18	Directional Survey
0830	1100	2½	2	Drilling 1192' to 1312'

DRILLER

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 17½	1.25	FT.
1	R-Sub	4.06	
	STB RMR OD		FT.
3	D.C. ID 11 OD	99.11	FT.
1	STB RMR 8½ OD	1.46	FT.
½	D.C. ID 8" OD	174.75	FT.
1	STB RMR 8½ OD	1.45	FT.
3	7" DC	99.15	
3	4½ DP	97.06	
1	8½	2.47	
29	STANDS DP	769.69	FT.
	SINGLES DP		FT.
	KELLY DOWN	43.43	FT.
	TOTAL	1213.00	FT.
WT. OF STRING		93,000	LBS.

BIT RECORD

BIT NO.	2
SIZE	17½
MFG.	Reed
TYPE	HP43J
JETS 1/32"	15 15 15
SER. NO.	516540
DEPTH OUT	
DEPTH IN	384
TOTAL FTG.	357
TOTAL HRS. RUN	47¾
COND. 1/8's T/B GAGE	R 1 1
GPM/ PD-PSI	/ /

MUD RECORD

TIME	1600		2200
WEIGHT	9.0+		10.0
PRESSURE GRADIENT	467		467
VISC.-SEC.	29		41
PV/YP	/	/	11/1
GELS.	/	/	2/2
WL -CC'S			11.2
pH	9.5		10.0
SOLIDS %			4
SAND %			1.25

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
H20-10-12	6 BBLS		

FOOTAGE FROM	FOOTAGE TO	DR'G RM'R CORE'C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
912	956	D		DUNDEE CLEAN #1 COMP	45	40	1400	6¾	117	6½	58	P

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1600	0001	8	2	Drilling 1175' Rate

DRILLER

C 23509

DAILY DRILLING REPORT

REPORT NO. 17

LEASE	WELL NO.	API WELL NUMBER	DATE
Pearson [illegible]	4-22	[illegible]	6-17-74

OPERATOR	CONTRACTOR	RIG NO.
[illegible]	LOFFLAND BROTHERS COMPANY	13

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
	[illegible]

O.F. SIZE	WT./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 H	1	1	[illegible]	D [illegible]	12
						2	[illegible]	D 700	12

LEGAL LAND DESCRIPTION [illegible] 4-22-25

WIRE LINE RECORD REEL NO.

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	20	[illegible]	94 H-40	1	353		348
			24				
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

SIZE 1 3/8 NO. LINES 4 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	7½	4½
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY		½	½
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		5	12	7

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	17
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT 17½	1.25 FT.	BIT NO.	2
1	BIT SUB	31.00	SIZE	17½
	STB RMR OD	FT.	MFG.	REED
3	D.C. ID 11 OD	271.31 FT.	TYPE	Y33-J
1	STB RMR 9 OD	1.10 FT.	JETS 1/32"	16 16 12
6	D.C. ID 7 OD	182.22 FT.	SER. NO.	R16080
1	STB RMR 9 OD	1.42 FT.	DEPTH OUT	
3	7" DC	88.15	DEPTH IN	356
3	12 HWDC	87.05	TOTAL FTG.	322
1	S/C	3.40	TOTAL HRS. RUN	16½
	STANDS DP	11.52 FT.	COND. 1/8's T/B GAGE	2 1 1
	SINGLES DP	FT.	GPM/ PD-PSI	/ /
	KELLY DOWN	40.00 FT.		
	TOTAL	356.00 FT.		
WT. OF STRING	70,000 LBS.			

MUD RECORD			
TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH	8.0	8.0	8.0
SOLIDS %			
MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AMT.
[illegible]	[illegible]		
[illegible]	3	[illegible]	[illegible]

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT 17½	1.25 FT.	BIT NO.	2
1	BIT SUB	31.00	SIZE	17½
	STB RMR OD	FT.	MFG.	REED
3	D.C. ID 11 OD	99.61 FT.	TYPE	Y33-J
1	STB RMR 9 OD	1.45 FT.	JET 1/32"	16 16 12
6	D.C. ID 7 OD	183.77 FT.	SER. NO.	R16080
1	STB RMR 9 OD	1.45 FT.	DEPTH OUT	
3	7" DC	88.15	DEPTH IN	356
3	12 HWDC	87.05	TOTAL FTG.	391
1	S/C	3.40	TOTAL HRS. RUN	22
29	STANDS DP	1027.61 FT.	COND. 1/8's T/B GAGE	2 1 1
1	SINGLES DP	31.53 FT.	GPM/ PD-PSI	/ /
	KELLY DOWN	40.00 FT.		
	TOTAL	1417.00 FT.		
WT. OF STRING	90,000 LBS.			

MUD RECORD			
TIME	0800	1200	1400
WEIGHT	8.7	9.7	9.7
PRESSURE GRADIENT			.452
VISC.-SEC.	45	41	38
PV/YP	/	/	4/7
GELS	/	/	2/10
WL -CC'S			12
pH	9.5	10.0	10.0
SOLIDS %			3
MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AMT.
CAUSTIC	50#	GEL-EX	400#
H20-10	5701		
CAUSTIC	50		
GEL	100#		

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT 17½	1.45 FT.	BIT NO.	2
1	BIT SUB	31.00	SIZE	17½
	STB RMR OD	FT.	MFG.	REED
3	D.C. ID 11 OD	271.31 FT.	TYPE	Y33-J
1	STB RMR 9 OD	1.10 FT.	JETS 1/32"	16 16 12
6	D.C. ID 7 OD	191.77 FT.	SER. NO.	R16080
1	STB RMR 9 OD	1.45 FT.	DEPTH OUT	
3	7" DC	88.15	DEPTH IN	356
3	12 HWDC	87.05	TOTAL FTG.	342
1	S/C	3.40	TOTAL HRS. RUN	41¾
27	STANDS DP	977.46 FT.	COND. 1/8's T/B/ GAGE	2 1 1
	SINGLES DP	FT.	GPM/ PD-PSI	/ /
	KELLY DOWN	37.00 FT.		
	TOTAL	1329.22 FT.		
WT. OF STRING	90,000 LBS.			

MUD RECORD			
TIME	1600	1930	
WEIGHT	8.7	8.7	
PRESSURE GRADIENT	450	450	
VISC.-SEC.	46	38	39
PV/YP	/	/	4/12
GELS	/	/	2/4
WL -CC'S			11.6
pH	9.5	9.5	9.5
SOLIDS %			3
SAND			½
MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AMT.
GEL	150	LBS	
GELEX	6	LBS	
H2O	5	BBL PUT	

DAY TOUR

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL-S PARM-P COMP-C
542	679	D			45	40	1400	6¼	47	6½	58	P

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0001	0500	5	2	Drilling 17½ Hole

DRILLER [illegible]

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL-S PARM-P COMP-C
679	679	69		DUMP & CLEAN MUD SETTLING PIT	45	40	1400	6¼	47	6½	58	C
			1	TRIP								

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	679	1°	X						

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0500	0600	1	3	DRILLING 17½ HOLE
0600	0630	½	10	WIRELINE SURVEY
0630	1600	9½	2	DRILLING 17½ HOLE

DRILLER [illegible]

EVENING TOUR

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL-S PARM-P COMP-C
679	709	D			45	50	1400	6¼	47	6½	58	

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	679	1°	X						

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1600	1645	¾	2 3	DRILLING 17½ Hole
1645	1700	¼	10	WIRELINE SURVEY
1700	1900	2	2	DRILLING 17½ HOLE

DRILLER [illegible]

C 23508

DAILY DRILLING REPORT

REPORT NO. 14

LEASE	WELL NO.	API WELL NUMBER	DATE
Powell "A"	2-4	42-55-C-123-452	Oct 16-74

OPERATOR	CONTRACTOR	RIG NO.
Mesa Canada Ltd	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: JC Lindsey

LEGAL LAND DESCRIPTION: Powell "A" #2-4 SE

WIRE LINE RECORD — RESL NO.

D.P. SIZE	WT./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 IF	1	1	Emsco	DXXC	18"
						2	Emsco	D375	18"

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
20	USS	94.55	6	253		243
		H-40				
	Consolidated	Vetco SER	300 csg			

WIRE LINE RECORD: SIZE 1 3/8 — NO. LINES 14 — 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	6½	7½
3	REAMING	½		
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS	2		½
7	LUBRICATE RIG		½	
8	REPAIR RIG			
	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				
	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
	TOTALS			

COMPLETION

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO. D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	14
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)			BIT RECORD		
1	BIT 17½	1.65	FT.	BIT NO.	1	2
1	9 Stabs	40'		SIZE	17½	17½
	STB RMR OD		FT.	MFG.	Reed	Reed
3	D.C. ID 11 OD	60.11	FT.	TYPE	J33	J33-J
1	STB RMR 12 OD	4.10	FT.	JETS 1 32"	16 16 16	16 16 16
1	D.C. ID 9 OD	30.11	FT.	SER. NO.	514774	EL6496
1	STB RMR 9 OD	4.45	FT.	DEPTH OUT	356	
3	9 DC	88.15		DEPTH IN	243	351
1	4 3/4 DC	31.50		TOTAL FTG.	143	44
				TOTAL HRS. RUN	21½	4
	STANDS DP		FT.	COND. 1/8's T/B GAGE	5 2	2 2
	SINGLES DP		FT.	GPM/ PD-PSI		
	KELLY DOWN		FT.			
	TOTAL		FT.			
WT. OF STRING	280,000		LBS.			

MUD RECORD			
TIME		0830	0830
WEIGHT		8.8	8.8
PRESSURE GRADIENT			
VISC.-SEC.		36	35
PV/YP	/	/	7/
GELS	/	/	4
WL-CC'S			
pH		9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	100	Lcm	125

NO.	DRILLING ASSEMBLY (At end of tour)			BIT RECORD		
1	BIT 17½	RED	FT.	BIT NO.	2	
1	Reed 9 Stabs	400		SIZE	17½	
	STB RMR OD		FT.	MFG.	Reed	
3	D.C. ID 11 OD	90.66	FT.	TYPE	J33-J	
1	STB RMR 12 OD	4.10	FT.	JETS 1/32"	16 16 16	
6	D.C. ID 9 OD	171.77	FT.	SER. NO.	EL6496	
1	STB RMR 9 OD	4.45	FT.	DEPTH OUT		
3	9 DC	88.15		DEPTH IN	356	
2	4 3/4 DC	57.08		TOTAL FTG.	95	
1	DC	2.07		TOTAL HRS. RUN	17¾	
	STANDS DP		FT.	COND. 1/8's T/B GAGE	2 2 1	/ /
2	SINGLES DP	31.45	FT.	GPM/ PD-PSI		
	KELLY DOWN	39.00	FT.			
	TOTAL	850.00	FT.			
WT. OF STRING	80,000		LBS.			

MUD RECORD			
TIME	0800	1200	1400
WEIGHT	8.7	8.7	8.6
PRESSURE GRADIENT			
VISC.-SEC.	43	44	42
PV/YP	/	/	/
GELS	/	/	/
WL-CC'S			
pH	9.0	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
CAUSTIC	100#		
H2O	400 BBL	Red Mud	

NO.	DRILLING ASSEMBLY (At end of tour)			BIT RECORD		
1	BIT 17½	1.65	FT.	BIT NO.	2	
1	Reed 9 Stabs	400		SIZE	17½	
	STB RMR OD		FT.	MFG.	Reed	
3	D.C. ID 11 OD	87.61	FT.	TYPE	J33-J	
1	STB RMR 12 OD	4.10	FT.	JETS 1/32"	16 16 16	
6	D.C. ID 9 OD	171.77	FT.	SER. NO.	EL6496	
1	STB RMR 9 OD	4.45	FT.	DEPTH OUT		
3	9 DC	88.15		DEPTH IN	356	
2	4 3/4 DC	57.08		TOTAL FTG.	157	
1	DC	2.07		TOTAL HRS. RUN	18½	
1	STANDS DP	31.45	FT.	COND. 1/8's T/B GAGE	2 2 1	/ /
8	SINGLES DP	247.00	FT.	GPM/ PD-PSI		
	KELLY DOWN	39.00	FT.			
	TOTAL	845.23	FT.			
WT. OF STRING	90,000		LBS.			

MUD RECORD			
TIME	1600	1830	
WEIGHT	8.9	8.8	8.8
PRESSURE GRADIENT			
VISC.-SEC.	37	42	44
PV/YP	/	/	12/
GELS	/	/	14
WL-CC'S			
pH	9.5	9.5	8.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	21		
GELEX	10		
Barite	21		
Fresh H2O	50	Hydrated Lime	60

DAY TOUR

FOOTAGE

FROM	TO	DR'D RM'R CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
351	431	D			45	40	1100	6¾	47	6½	55	P

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
0001	0200	2	1	Hold Safety Rig & Rig up Unit #2
0200	0400	2	3	Ream Under Gage Hole Fr 312 to 351 - 39'
0400	0600	2	2	Drill 17½" Hole

DRILLER: [illegible]

FOOTAGE

FROM	TO	DR'D RM'R CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
431	631	D		Dupuy Creek Sand	40	45	1100	6¾	47	6½	55	P
				Fair Oil Show								

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
0600	0730	1½	2	Drilling 17½" Hole
0730	0745	¼	7-21	Rig Service & Function BOP
0745	0945	2	2	Drilling 17½" Hole
0945	1000	¼	21	Drilling Fish - Hole
1000	1130	1½	2	Drilling 17½" Hole

DRILLER: [illegible]

EVENING TOUR

FOOTAGE

FROM	TO	DR'D RM'R CORE'D	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
631	642	D			40	45	1100	6¾	47	6½	55	P

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
642	½	X						

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1130	1500	2	2	Drilling 17½" Hole
1500	1515	¼	½	Wireline Survey @ 642 - ½°
1515	2400	5 3/4	2	Drilling Fr 642 to 642

DRILLER: [illegible]

C 23507

DAILY DRILLING REPORT

REPORT NO. 15

LEASE	WELL NO.	API WELL NUMBER	DATE
Pinto Pit	A-4	A-55-20-3c-WB-45 ol	03-12-22

OPERATOR	CONTRACTOR	RIG NO.
Apache Corporation	LOFFLAND BROTHERS COMPANY	22

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
5"	19.5#	E	6 5/8"	4 1/2 IF	1	1	Emsco	D-100	15"
						2	Emsco	D-700	16"

LEGAL LAND DESCRIPTION Pinto Pit A-4-5S

WIRE LINE RECORD REEL NO.

SIZE 13/16 NO. LINES FT. SLIPPED

FT. CUT OFF PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
20"	USS	94# H-40	6	253		243
	Cemented w/ 450 sx				3.2 bbl	

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	9 3/4	7	6
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			1 1/2
7	LUBRICATE RIG			
8	REPAIR RIG		1/2	
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY	1/4		1/4
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21	O T =		1/2	1 1/2
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TRG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		9 3/4	9	5

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	15
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 17 1/2	1.25	FT.
1	R.L.S.	4.00	
	STB RMR OD		FT.
3	D.C. ID 11" OD	691.61	FT.
1	STB RMR 9 7/8 OD	3.81	FT.
2	D.C. ID 9" OD	178.29	FT.
1	STB RMR 9 7/8 OD	1.45	FT.
1	12"	1.45	
	STAN DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL	956.61	FT.

WT. OF STRING 74,250# LBS.

BIT RECORD

BIT NO.	#1
SIZE	17 1/2
MFG.	Reed
TYPE	HP51-J
JETS 1/32"	18 18 16
SER. NO.	RW674
DEPTH OUT	
DEPTH IN	243
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	/	/	27
GELS	/	/	37
WL-CC'S			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	4 sx		
Caustic	1 gal		
Lime	1 sx		

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 17 1/2	1.25	FT.
1	R.L.S.	5.00	
	STB RMR OD		FT.
3	D.C. ID 11" OD	901.61	FT.
1	STB RMR 9 7/8 OD	3.81	FT.
2	D.C. ID 9" OD	178.29	FT.
1	STB RMR 9 7/8 OD	1.45	FT.
2	12"	2.00	
3	[illegible]	[illegible]	
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN	39.41	FT.
	TOTAL	1085.80	FT.

WT. OF STRING [illegible] LBS.

BIT RECORD

BIT NO.	#1
SIZE	17 1/2
MFG.	
TYPE	HP51-J
JETS 1/32"	18 18 16
SER. NO.	RW674
DEPTH OUT	
DEPTH IN	243
TOTAL FTG.	105
TOTAL HRS. RUN	9 1/2
COND. 1/8's T/B/ GAGE	[illegible]
GPM/ PD-PSI	

MUD RECORD

TIME	800	1200	1600
WEIGHT	8.4	8.4	8.5
PRESSURE GRADIENT			
VISC.-SEC.	32	32	31
PV/YP	/	/	/
GELS	/	/	/
WL-CC'S			
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	4 sx		
Caustic	1 gal		
Lime	1 sx		

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 17 1/2	1.25	FT.
1	M.T.S.H.	4.00	
	STB RMR OD		FT.
3	D.C. ID 11" OD	891.61	FT.
1	STB RMR 9 7/8 OD	3.81	FT.
2	D.C. ID 9" OD	178.29	FT.
1	STB RMR 9 7/8 OD	1.45	FT.
2	[illegible]	[illegible]	
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN	39.41	FT.
	TOTAL	1085.80	FT.

WT. OF STRING [illegible] LBS.

BIT RECORD

BIT NO.	1
SIZE	17 1/2
MFG.	Reed
TYPE	HP51-J
JETS 1/32"	18 18 16
SER. NO.	RW674
DEPTH OUT	351
DEPTH IN	243
TOTAL FTG.	108
TOTAL HRS. RUN	9 1/2
COND. 1/8's T/B/ GAGE	[illegible]
GPM/ PD-PSI	

MUD RECORD

TIME	400		
WEIGHT	8.7		
PRESSURE GRADIENT			
VISC.-SEC.	35		
PV/YP	/	/	/
GELS	/	/	/
WL-CC'S			
pH	9.5		
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	4 sx		
Caustic	1 gal		
Lime	1 sx		

DAY TOUR

FOOTAGE FROM	FOOTAGE TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000 #	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SURF-S PART-P COMP-C
213	257	D			60	35	2000	6 1/2	60			S

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	196	3/4	X						

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
2400	700	7 3/4	2	Drilling 22°/ Hole
		1/4	10	Survey

DRILLER

FOOTAGE FROM	FOOTAGE TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SURF-S PART-P COMP-C
957	1345		49		45	40	1400	6 1/2	117	6 1/2	117	C

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0600	0630	1/2	9	RIG SERVICE & FUNCTION TEST BOP
0630	1130	5	2	DRILLING 17½" HOLE
1130	1200	1/2	9-7	RIG SERVICE & FUNCTION TEST BOP
1200	1600	4	2	DRILLING 17½" HOLE
				DUMP & CLEAN SHALE TANK.

DRILLER

EVENING TOUR

FOOTAGE FROM	FOOTAGE TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SURF-S PART-P COMP-C
348	351	T		Leak Test	65	45	1600	6 1/2	117	6 1/2	52	P
				1/3 BBL Fell								
				@ 100 PSI								

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	375	1/4	X						

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1100	1145	3/4	6	Hoist Kelly Pull Liners To Run Leak Test
1145	1845	1/4	21	Rig up to Leak Test & Test Same
1845	1915	1/2	6	Run in w/ DC
1845	2115	2 1/2	2	Drilling 17½" Hole
2115	2130	1/4	10	Survey
2130	2400	2 1/2	2	Drilling

DRILLER

C 23506

DAILY DRILLING REPORT

REPORT NO. 14

LEASE	WELL NO.	API WELL NUMBER	DATE
Pointed Mountain	A-4	A-55-20-2C-123-45	03-14-74

OPERATOR	CONTRACTOR	RIG NO.
Amoco Canada Ltd	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
5"	19.50	E	6 5/8	4½ IF	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-350	18"
2	Emsco	D-700	18"

LEGAL LAND DESCRIPTION Pointed Mountain A-4-55

WIRE LINE RECORD REEL NO.

SIZE 13/16 | NO. LINES 10 | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
20	USS	91 H-40		253		243
CEMENTED			11 SX	SKS	300 cu ft	

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL			13½
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			1½
6	TRIPS	1		
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.	½		
15	TEST B.O.P.	5½	3½	
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21	OTHER	1	½	
22	Rig Repair		4	
23				

COMPLETION

A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	2	8	5

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.			
HRS. W/OPR. D.P.			
HRS. WO D.P.			
HRS. STANDBY			
TOTAL DAY WORK			
NO. OF DAYS FROM SPUD	14		
CUMULATIVE ROTATING HRS.			
TOTAL MUD COST			

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 17½	1.25 FT.	
1	B.H. Sub	4.00	
	STB RMR OD	FT.	
3	D.C. ID 11" OD	92.44 FT.	
1	STB RMR 8½ OD	1.45 FT.	
3	D.C. ID 7" OD	93.07 FT.	
1	STB RMR 8½ OD	1.45 FT.	
1	Sub	2.42	
	STANDS DP	FT.	
	SINGLES DP	FT.	
	KELLY DOWN	54 FT.	
	TOTAL	243.55 FT.	
WT. OF STRING	40,000	LBS.	

BIT RECORD

BIT NO.	1
SIZE	17½
MFG.	Reed
TYPE	131J
JETS 1/32"	16 16 16
SER. NO.	21174
DEPTH OUT	
DEPTH IN	243
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.

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT	4.25 FT.	
1	B.H. Sub	4.00	
	STB RMR OD	FT.	
3	D.C. ID 9" OD	89.44 FT.	
1	STB RMR OD	1.45 FT.	
1	Sub	2.04	
	STANDS DP	FT.	
	SINGLES DP	FT.	
	KELLY DOWN	54.00 FT.	
	TOTAL	243.00 FT.	
WT. OF STRING	45,000	LBS.	

BIT RECORD

BIT NO.	6
SIZE	17½
MFG.	Reed
TYPE	131J
JETS 1/32"	15 15 15
SER. NO.	81674
DEPTH OUT	
DEPTH IN	243
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.

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 17½	1.25 FT.	
1	B.H. Sub	4.00	
	STB RMR OD	FT.	
3	D.C. ID 11" OD	92.44 FT.	
1	STB RMR 8½ OD	1.45 FT.	
3	D.C. ID 7" OD	93.07 FT.	
1	STB RMR 8½ OD	1.45 FT.	
1	Sub	2.42	
	STANDS DP	FT.	
	SINGLES DP	FT.	
	KELLY DOWN	54 FT.	
	TOTAL	243.00 FT.	
WT. OF STRING	40,000	LBS.	

BIT RECORD

BIT NO.	1
SIZE	17½
MFG.	Reed
TYPE	131J
JETS 1/32"	16 16 16
SER. NO.	21174
DEPTH OUT	
DEPTH IN	243
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.			
1	BIT 17½	1.25 FT.	
1	B.H. Sub	4.00	
	STB RMR OD	FT.	
3	D.C. ID 11" OD	92.44 FT.	
1	STB RMR 8½ OD	1.45 FT.	
3	D.C. ID 7" OD	93.07 FT.	
1	STB RMR 8½ OD	1.45 FT.	
1	Sub	2.42	
	STANDS DP	FT.	
	SINGLES DP	FT.	
	KELLY DOWN	54 FT.	
	TOTAL	243.00 FT.	
WT. OF STRING	40,000	LBS.	

BIT RECORD

BIT NO.	1
SIZE	17½
MFG.	Reed
TYPE	131J
JETS 1/32"	16 16 16
SER. NO.	21174
DEPTH OUT	
DEPTH IN	243
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

FROM	TO	DR.D RM.P CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PART'L-P COM'L-C
243												

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
2400	0030	½	14	Finish nipping up Top Cement at 125'
0030	0130			Rig up floor Pick up 5½" DCs & Bha
0130	0230	1	31	TIH 17½" B.T
0230	0530	1		Make up Bit & RIH Pick up 9 DC
0530	0600	5½	15	Try to close Hydrill Leak on rig Rubber

DRILLER [illegible]

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL-S PART'L-P COM'L-C
243					30	11	500	6¾	45	6"		S

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0800	1100	3	15	Work on accumulator
1100	1130	½		Press. up to 1500 psi Held OK
1130	1145	¼	22	Make up BHA
1145	[illegible]		21	

DRILLER [illegible]

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL-S PART'L-P COM'L-C
243	913	D			30	30	500	6¾	45	6½		S

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0600	1700	11	2	Drilled 17½ Hole
1700	1815	1¼	3	Circ. Sweep around Prep to POOH
1815	1945	1½	3	POOH
1945	2400	5 3/4	2	Drilled 17½ Hole

DRILLER [illegible]

FORM 3T6

APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

C 23505

DAILY DRILLING REPORT

REPORT NO. 12

LEASE	WELL NO.	API WELL NUMBER	DATE
Pollard N-7	4-7	42-50-60-20-102-45 01	03-12-74

OPERATOR	CONTRACTOR	RIG NO.
Hugoton Energy Corp	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.60	E	6⅜	NC 46	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-360	12"
2	Emsco	D-360	12"

LEGAL LAND DESCRIPTION Pollard N7W 4-55-

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	8⅝	USS	24#	2	83		343

WIRE LINE RECORD REEL NO.

SIZE 1 3/16 NO. LINES 16 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.	6	9	9
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TOG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		6	8	10

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	13		
CUMULATIVE ROTATING HRS.			
TOTAL MUD COST			

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	MUD RECORD
	BIT	FT.	BIT NO.	TIME
			SIZE	WEIGHT
	STB RMR OD	FT.	MFG.	PRESSURE GRADIENT
	D.C. ID OD	FT.	TYPE	VISC.-SEC.
	STB RMR OD	FT.	JETS 1 32"	PV/YP 1 1 1
	D.C. ID OD	FT.	SER. NO.	GELS 1 1 1
	STB RMR OD	FT.	DEPTH OUT	WL -CC'S
			DEPTH IN	pH
			TOTAL FTG.	SOLIDS %
			TOTAL HRS. RUN	
	STANDS DP	FT.	COND. 1/8's T/B GAGE	MUD & CHEMICALS ADDED
	SINGLES DP	FT.	GPM/ PD-PSI	TYPE AMT. TYPE AMT.
	KELLY DOWN	FT.		
	TOTAL	FT.		
WT. OF STRING		LBS.		

FOOTAGE FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHL'S PARKER'S COMB'S
343												

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
7:00	8:00	2	21	Wait on Cmt Rel Recvr Test with Te Hco Hold a Key
8:00	9:00	1	14	Nipple up B.O.P.

DRILLER

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	MUD RECORD
	BIT	FT.	BIT NO.	TIME
			SIZE	WEIGHT
	STB RMR OD	FT.	MFG.	PRESSURE GRADIENT
	D.C. ID OD	FT.	TYPE	VISC.-SEC.
	STB RMR OD	FT.	JET 1/32"	PV/YP / / /
	D.C. ID OD	FT.	SER. NO.	GELS / / /
	STB RMR OD	FT.	DEPTH OUT	WL -CC'S
			DEPTH IN	pH
			TOTAL FTG.	SOLIDS %
			TOTAL HRS. RUN	
	STANDS DP	FT.	COND. 1/8's T/B GAGE	MUD & CHEMICALS ADDED
	SINGLES DP	FT.	GPM/ PD-PSI	TYPE AMT. TYPE AMT.
	KELLY DOWN	FT.		
	TOTAL	FT.		
WT. OF STRING		LBS.		

FOOTAGE FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL'S PARKER'S COMB'S
343								6¾		6½		

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	11:00	5	14	Nipple up B.O.P.

DRILLER L. Loveless

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	MUD RECORD
	BIT	FT.	BIT NO.	TIME
			SIZE	WEIGHT
	STB RMR OD	FT.	MFG.	PRESSURE GRADIENT
	D.C. ID OD	FT.	TYPE	VISC.-SEC.
	STB RMR OD	FT.	JETS 1/32"	PV/YP / / /
	D.C. ID OD	FT.	SER. NO.	GELS / / /
	STB RMR OD	FT.	DEPTH OUT	WL -CC'S
			DEPTH IN	pH
			TOTAL FTG.	SOLIDS %
			TOTAL HRS. RUN	
	STANDS DP	FT.	COND. 1/8's T/B GAGE	MUD & CHEMICALS ADDED
	SINGLES DP	FT.	GPM/ PD-PSI	TYPE AMT. TYPE AMT.
	KELLY DOWN	FT.		
	TOTAL	FT.		
WT. OF STRING		LBS.		

FOOTAGE FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHL'S PARKER'S COMB'S
343												

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
1600	2400	8	14	Nipple up B.O.P. & pressure Accumulator Test OK

DRILLER

C 23504

DAILY DRILLING REPORT

REPORT NO. 12

LEASE	WELL NO.	API WELL NUMBER	DATE
Pointer Estate	11-16	42-345-10-30-00 Actual	March 14 '57

OPERATOR	CONTRACTOR	RIG NO.
Pioneer Prod. Co.	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4½	16.60	E				1		Duplex	12
						2		Duplex	12

LEGAL LAND DESCRIPTION

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	8 5/8"	[illegible]	24#	6			

WIRE LINE RECORD — RECORD NO.

SIZE 1/2 — NO. LINES 10 — 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	1		
13	WAIT ON CEMENT	4	5	5
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21	Wait on Cmt	5		3
22				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		10	5	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	12		
CUMULATIVE ROTATING HRS.			
TOTAL MUD COST			

MORNING TOUR

NO. — DRILLING ASSEMBLY (At end of tour)

BIT			FT.
STB RMR	OD		FT.
D.C. ID	OD		FT.
STB RMR	OD		FT.
D.C. ID	OD		FT.
STB RMR	OD		FT.
STANDS DP			FT.
SINGLES	DP		FT.
KELLY DOWN			FT.
TOTAL			FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1 32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 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.

FOOTAGE

FROM	TO	DR.D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHLUM-P PARTEE-P COMPTC
0								6½		6½		S

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
2400	0030	½	12	Circ. Cmt.
0030	0600	5½	12	Pull Pump & Casing
0600	0700	1	12	Displace Mud.
0700	1100	4	12	W.O.C. Cut off Csg. Free Pull Land Csg. Hanger & Start Out Lay Down Rig Circ. Out Cmt.
1100		7		Cut off Csg. & Weld on Head

DRILLER

DAY TOUR

NO. — DRILLING ASSEMBLY (At end of tour)

BIT			FT.
STB RMR	OD		FT.
D.C. ID	OD		FT.
STB RMR	OD		FT.
D.C. ID	OD		FT.
STB RMR	OD		FT.
STANDS DP			FT.
SINGLES	DP		FT.
KELLY DOWN			FT.
TOTAL			FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JET 1 32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 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.

FOOTAGE

FROM	TO	DR.D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHLUM-P PARTEE-P COMPTC
2400								6¾		6½		

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
0600	1100	5		Clean Mud Tank Down to Suction Pump Pick Cmt Jt and Circ & Cond Mud

DRILLER

EVENING TOUR

NO. — DRILLING ASSEMBLY (At end of tour)

BIT			FT.
STB RMR	OD		FT.
D.C. ID	OD		FT.
STB RMR	OD		FT.
D.C. ID	OD		FT.
STB RMR	OD		FT.
STANDS DP			FT.
SINGLES	DP		FT.
KELLY DOWN			FT.
TOTAL			FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1 32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 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.

FOOTAGE

FROM	TO	DR.D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHLUM-P PARTEE-P COMPTC
								6¾		6½		

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
1100	2300	5	13	Wt. on Csg. & Cut Csg. Out of Cellar Cut & Ream Csg. & Tbg. Hd. on Head
2300	2400	1		Nipple up Csg. Head

DRILLER

FORM 3T6 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

C 23503

DAILY DRILLING REPORT

REPORT NO. 11

LEASE	WELL NO.	API WELL NUMBER	DATE
Kenneth Ives	4-A	30-123-[illegible]	March 11th

OPERATOR	CONTRACTOR	RIG NO.
Pubco Petroleum L.L.C.	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
Tracy J. Cherry	[illegible]

O.D. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
5"	[illegible]	E	[illegible]	[illegible]	1	1	[illegible]	D-[illegible]	12
						2	[illegible]	D-[illegible]	12

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO.

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

SIZE 1 3/4" — NO. LINES 10 — 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	MCRN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	[illegible]	[illegible]	
3. REAMING	[illegible]	[illegible]	
4. CORING			
5. CONDITION MUD & CIRCULATE		1/4	[illegible]
6. TRIPS		1/2	
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY		1/2	
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			[illegible]
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.			[illegible]
22.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	[illegible]	[illegible]	[illegible]

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 11

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
1	BIT	1.10	FT.
1	[illegible]	[illegible]	
	STB RMR OD		FT.
	D.C. ID [illegible] OD	[illegible]	FT.
1	STB RMR [illegible] OD	1.[illegible]	FT.
2	D.C. ID [illegible] OD	[illegible]	FT.
1	STB RMR [illegible] OD	[illegible]	FT.
1	[illegible]	[illegible]	
	STANDS DP		FT.
2	SINGLES DP	[illegible]	FT.
	KELLY DOWN	12.30	FT.
	TOTAL	[illegible]	FT.
	WT. OF STRING	[illegible]	LBS.

BIT RECORD

BIT NO.	2 [illegible]
SIZE	[illegible]
MFG.	[illegible]
TYPE	[illegible]
JETS 1/32"	
SER. NO.	[illegible]
DEPTH OUT	
DEPTH IN	[illegible]
TOTAL FTG.	11
TOTAL HRS. RUN	14
COND. 1/8's T.B. GAGE	[illegible]
GPM. PD-PSI	/ /

MUD RECORD

TIME	[illegible]	[illegible]	
WEIGHT	9.3	[illegible]	
PRESSURE GRADIENT			
VISC.-SEC.	[illegible]	[illegible]	
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	[illegible]	[illegible]	
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]	[illegible]		
Gel	Ezy		

NO.	DRILLING ASSEMBLY (At end of tour)		
1	BIT 3[illegible]	1.[illegible]	FT.
1	[illegible]	[illegible]	
	STB RMR OD		FT.
2	D.C. ID [illegible] OD	[illegible]	FT.
1	STB RMR [illegible] OD	[illegible]	FT.
3	D.C. ID [illegible] OD	[illegible]	FT.
1	STB RMR [illegible] OD	[illegible]	FT.
1	[illegible]	[illegible]	
	STANDS DP		FT.
3	SINGLES DP	[illegible]	FT.
	KELLY DOWN	[illegible]	FT.
	TOTAL	[illegible]	FT.
	WT. OF STRING	[illegible]	LBS.

BIT RECORD

BIT NO.	[illegible]
SIZE	[illegible]
MFG.	[illegible]
TYPE	[illegible]
JET 1/32"	
SER. NO.	[illegible]
DEPTH OUT	243
DEPTH IN	[illegible]
TOTAL FTG.	14
TOTAL HRS. RUN	[illegible]
COND. 1/8's T/B GAGE	[illegible]
GPM/ PD-PSI	/ /

MUD RECORD

TIME	[illegible]	[illegible]	
WEIGHT	[illegible]	[illegible]	
PRESSURE GRADIENT			
VISC.-SEC.	[illegible]		
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	[illegible]	[illegible]	
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]	[illegible]		

NO.	DRILLING ASSEMBLY (At end of tour)		
	BIT		FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
	WT. OF STRING		LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B GAGE	
GPM/ PD-PSI	/ /

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SURVEYS PUMPS CORES
[illegible]	240	R		[illegible]	70	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	P

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
[illegible]	0200	[illegible]	3	[illegible]

DRILLER [illegible]

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SURVEYS PUMPS CORES
240	243	R			70	2/5	400	6 1/2	52	6 1/2	52	P

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
243	3/4	X						

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0200	1400	12	3	Reaming 12 1/4" hole to 3[illegible]
1400	1515	1 1/4	5	Circ Hole Prior To Running Csg
1515	1600	3/4	2	Hoist & Survey

DRILLER [illegible]

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SURVEYS PUMPS CORES
243								6 1/2		[illegible]		

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1600	1730	1 1/2	21	Tri T. Break Bit
1730	1830	1		Tri T. Break Bit
1830	2330	4	12	RI [illegible] 20°
2330	2330	1	5	Circ Csg
2330	0200	1/2	12	Directional [illegible]

DRILLER [illegible]

EVENING TOUR

C 23502

DAILY DRILLING REPORT

REPORT NO. 10

LEASE	WELL NO.	API WELL NUMBER	DATE
[illegible]	A-4	A-35-10-30-1-23-2-[illegible]	11-[illegible]-74

OPERATOR	CONTRACTOR	RIG NO.
[illegible]	LOFFLAND BROTHERS COMPANY	72

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4	[illegible]	E	[illegible]	[illegible]	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO.

SIZE 14 — NO. LINES 10 — FT. SLIPPED

FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	4		
3. REAMING	12	6	6
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS	12		2
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	24	[illegible]	[illegible]

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	10
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT	[illegible]	[illegible] FT.
1	[illegible]	[illegible]	[illegible]
1	STB RMR [illegible] OD	[illegible]	FT.
3	D.C. ID [illegible] OD	[illegible]	FT.
1	STB RMR [illegible] OD	[illegible]	FT.
2	D.C. ID [illegible] OD	[illegible]	FT.
1	STB RMR [illegible] OD	[illegible]	FT.
1	[illegible]	[illegible]	[illegible]
	STANDS DP		FT.
1	SINGLES DP	92	FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING [illegible]			LBS.

BIT RECORD

BIT NO.	2A	3A
SIZE	[illegible]	[illegible]
MFG.	[illegible]	[illegible]
TYPE	[illegible]	[illegible]
JETS 1 32"	[illegible]	[illegible]
SER. NO.	[illegible]	[illegible]
DEPTH OUT	[illegible]	
DEPTH IN	[illegible]	[illegible]
TOTAL FTG.	[illegible]	
TOTAL HRS. RUN	[illegible]	
COND. 1-8's T.B. GAGE	2 1 1	
GPM/ PD-PSI	[illegible]	

MUD RECORD

TIME	[illegible]	[illegible]	[illegible]
WEIGHT	[illegible]	[illegible]	[illegible]
PRESSURE GRADIENT			
VISC.-SEC.	47	[illegible]	[illegible]
PV/YP	[illegible]	[illegible]	[illegible]
GELS.	[illegible]	[illegible]	[illegible]
WL-CC'S.			
pH	[illegible]	[illegible]	
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT [illegible]	[illegible]	[illegible] FT.
1	[illegible]	[illegible]	[illegible]
	STB RMR [illegible] OD	[illegible]	FT.
3	D.C. ID [illegible] OD	[illegible]	FT.
1	STB RMR [illegible] OD	[illegible]	FT.
	D.C. ID [illegible] OD	[illegible]	FT.
	STB RMR [illegible] OD	[illegible]	FT.
1	[illegible]	[illegible]	[illegible]
	STANDS DP		FT.
1	SINGLES DP	[illegible]	FT.
	KELLY DOWN	[illegible]	FT.
	TOTAL	[illegible]	FT.
WT. OF STRING [illegible]			LBS.

BIT RECORD

BIT NO.	3A	
SIZE	[illegible]	
MFG.	[illegible]	
TYPE	[illegible]	
JET 1 32"	[illegible]	
SER. NO.	[illegible]	
DEPTH OUT	239	
DEPTH IN	[illegible]	
TOTAL FTG.	1921	
TOTAL HRS. RUN	[illegible]	
COND. 1-8's T.B. GAGE		
GPM/ PD-PSI		

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	[illegible]	[illegible]	[illegible]
GELS.	[illegible]	[illegible]	[illegible]
WL-CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT [illegible]	[illegible]	[illegible] FT.
1	[illegible]	[illegible]	[illegible]
	STB RMR [illegible] OD	[illegible]	FT.
3	D.C. ID [illegible] OD	[illegible]	FT.
1	STB RMR [illegible] OD	[illegible]	FT.
2	D.C. ID [illegible] OD	[illegible]	FT.
1	STB RMR [illegible] OD	[illegible]	FT.
1	[illegible]	[illegible]	[illegible]
	STANDS DP		FT.
1	SINGLES DP	[illegible]	FT.
	KELLY DOWN	[illegible]	FT.
	TOTAL	[illegible]	FT.
WT. OF STRING [illegible]			LBS.

BIT RECORD

BIT NO.	2A	2A
SIZE	[illegible]	[illegible]
MFG.	[illegible]	[illegible]
TYPE	[illegible]	[illegible]
JETS 1-32"	[illegible]	[illegible]
SER. NO.	[illegible]	[illegible]
DEPTH OUT	[illegible]	[illegible]
DEPTH IN	[illegible]	[illegible]
TOTAL FTG.	[illegible]	[illegible]
TOTAL HRS. RUN	[illegible]	[illegible]
COND. 1-8's T.B. GAGE	[illegible]	[illegible]
GPM/ PD-PSI	[illegible]	[illegible]

MUD RECORD

TIME	[illegible]	[illegible]	[illegible]
WEIGHT	[illegible]	[illegible]	[illegible]
PRESSURE GRADIENT			
VISC.-SEC.	[illegible]	[illegible]	[illegible]
PV/YP	[illegible]	[illegible]	[illegible]
GELS.	[illegible]	[illegible]	[illegible]
WL-CC'S.	[illegible]		
pH	[illegible]	[illegible]	[illegible]
SOLIDS %	[illegible]		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]			

FOOTAGE

FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL-S PARTN-P COMP-C
202	262	D		1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	S
217	221	R		14	50	[illegible]	500	[illegible]	62	[illegible]	[illegible]	S

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
2400	0615	6	2	[illegible]
06	0745	1½	1	[illegible] Run In.
0745	0840	1½	3	[illegible] 202 ft. 20 Hrs

DRILLER [illegible]

DAY TOUR

FOOTAGE

FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL-S PARTN-P COMP-C
221	239	R		5	50	[illegible]	500	13/16				S

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
0600	1100	5	2	Drilling Ream - 17½" Hole To 21" Hole

DRILLER [illegible]

EVENING TOUR

FOOTAGE

FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL-S PARTN-P COMP-C
239	254	R		5	35	35	450	6¼	62	6½	65	P
					70	35	400	6¼	53	6½	58	P

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
1800	1830	½	6	Wait For Rig Equipment
1830	2400	5½	3	Ream 17½ Hole To 21"

DRILLER [illegible]

APPROVED APPROVED

FORM 3T6

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

C 23501

DAILY DRILLING REPORT

REPORT NO. 7

LEASE: Fowler Unit | WELL NO.: E-4 | API WELL NUMBER: - - - - | DATE: 2-21-04

OPERATOR: Pure Canada Ltd. | CONTRACTOR: LOFFLAND BROTHERS COMPANY | RIG NO.: 72

SIGNATURE OF OPERATOR'S REPRESENTATIVE | SIGNATURE OF CONTRACTOR'S TOOL PUSHER

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO. | SIZE | NO. LINES | FT. SPOOLED | FT. CUT OFF | PRESENT LENGTH | TON MI. OR TRIPS SINCE LAST CUT | CUMULATIVE TON MI. OR TRIPS

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
5	19.50	E	6 5/8	NC 50	1	1	Emsco	D-375	12
						2	Emsco	D-375	12

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	8	14½	7½
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS		1	
7	LUBRICATE RIG			½
8	REPAIR RIG			½
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	ACTION		½	
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8	16	

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	7
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT	17½	FT.
1	Hole Opener	9 5/8	
	STB RMR OD		FT.
3	D.C. ID OD	6 1/4 2 1/4	FT.
1	STB RMR OD	8	FT.
1	D.C. ID OD	6 1/4 2 1/4	FT.
1	STB RMR OD	8	FT.
1			
	STANDS DP		FT.
1	SINGLES DP	31.00	FT.
	KELLY DOWN		FT.
	TOTAL	31.00	FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	4A	5A
SIZE	17½	17½
MFG.	Smith	Smith
TYPE	F-3	F-3
JETS 1/32"	20 20 20	20 20 20
SER. NO.	RD 20	RD 20
DEPTH OUT	220	330
DEPTH IN	0	220
TOTAL FTG.	220	110
TOTAL HRS. RUN	4½	1 3/4
COND. 1-8's T-B GAGE		
GPM; PD-PSI	/	/

MUD RECORD

TIME	1	1	1
WEIGHT	8.5	8.5	8.5
PRESSURE GRADIENT			
VISC.-SEC.	40	40	40
PV/YP	/	/	/
GELS.	/	/	/
WL-CC'S			
pH	10.0	10.0	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SURVEY-S PAPER-P CORE-C
220	330	D			50	20	650	6½	60	6½		S

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0600	1300	7	2	Drlg 17½" Hole

DRILLER

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT	17½	FT.
1	Hole Opener	9 5/8	
	STB RMR OD		FT.
3	D.C. ID OD	6 1/4 2 1/4	FT.
1	STB RMR OD	8	FT.
2	D.C. ID OD	6 1/4 2 1/4	FT.
1	STB RMR OD	8	FT.
1			
	STANDS DP		FT.
1	SINGLES DP	31.00	FT.
	KELLY DOWN		FT.
	TOTAL	31.00	FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	4A	5A
SIZE	17½	17½
MFG.	Smith	Smith
TYPE	F-3	F-3
JETS 1/32"	20 20 20	20 20 20
SER. NO.	RD 20	RD 20
DEPTH OUT	220	330
DEPTH IN	0	220
TOTAL FTG.	220	110
TOTAL HRS. RUN	4½	1 3/4
COND. 1-8's T-B GAGE	2 2	/
GPM; PD-PSI	/	/

MUD RECORD

TIME	1	1	1
WEIGHT	8.5	8.5	8.5
PRESSURE GRADIENT			
VISC.-SEC.	40	40	40
PV/YP	/	/	/
GELS.	/	/	/
WL-CC'S			
pH	10.0	10.0	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SURVEY-S PAPER-P CORE-C
330	335	D			50	20	650	6½	60			S

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0600	1345	7¾	2	Drlg 17½ Hole
1345	1415	½	21	Mix Pill & Trip
1415	1600	1¾	2	Drlg 17½" Hole

DRILLER

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT	17½	FT.
1	Hole Opener	9 5/8	
	STB RMR OD		FT.
3	D.C. ID OD	6 1/4 2 1/4	FT.
1	STB RMR OD	8	FT.
2	D.C. ID OD	6 1/4 2 1/4	FT.
1	STB RMR OD	8	FT.
1			
	STANDS DP		FT.
2	SINGLES DP	62.00	FT.
	KELLY DOWN	40.00	FT.
	TOTAL	242.	FT.
WT. OF STRING		59,000	LBS.

BIT RECORD

BIT NO.	5A	
SIZE	17½	
MFG.	Smith	
TYPE	F-3	
JETS 1/32"	20 20 20	
SER. NO.	RD 20	
DEPTH OUT		
DEPTH IN	330	
TOTAL FTG.		
TOTAL HRS. RUN		
COND. 1-8's T-B GAGE		
GPM; PD-PSI	/	/

MUD RECORD

TIME	1	1	1
WEIGHT	8.5	8.5	8.5
PRESSURE GRADIENT			
VISC.-SEC.	40	40	40
PV/YP	/	/	/
GELS.	/	/	/
WL-CC'S			
pH	10.0	10.0	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	10		
Caustic	1 sx		

FOOTAGE

FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SURVEY-S PAPER-P CORE-C
335	575	D			50	45	650	6½	60	6½		S

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
215	¾	X						

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1600	1615	¼	10	Comm & Survey
1615	2400	7¾	2	Drlg 17½" Hole

DRILLER

FORM 3T6 APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

C 21880

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
OPERATOR		CONTRACTOR **LOFFLAND BROTHERS COMPANY**	RIG NO.
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION

WIRE LINE RECORD REEL NO.

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1.	RIG UP AND TEAR DOWN			
2.	DRILL ACTUAL			
3.	REAMING			
4.	CORING			
5.	CONDITION MUD & CIRCULATE			
6.	TRIPS			
7.	LUBRICATE RIG			
8.	REPAIR RIG			
9.	CUT OFF DRILLING LINE			
10.	DEVIATION SURVEY			
11.	WIRE LINE LOGS			
12.	RUN CASING & CEMENT			
13.	WAIT ON CEMENT			
14.	NIPPLE UP B.O.P.			
15.	TEST B.O.P.			
16.	DRILL STEM TEST			
17.	PLUG BACK			
18.	SQUEEZE CEMENT			
19.	FISHING			
20.	DIR. WORK			
21.				
22.				
23.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
	TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1-8's T-B- GAGE	
GPM PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV YP	
GELS.	
WL -CC'S.	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE: FROM | TO | DR.D RM-R CORE-C | CORE NO. | FORMATION (SHOW CORE RECOVERY) | ROTARY RPM | WT. ON BIT 1000# | PUMP PRESS | PUMP NO. – LINER SIZE | S.P.M. | PUMP NO. – LINER SIZE | S.P.M. | METHOD RUN SCHLUM PARFL-P COMP-D-C

DEVIATION RECORD: DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG: FROM | TO | ELAPSED TIME | CODE NO. | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

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	
JET 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1-8's T-B- GAGE	
GPM PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV YP	
GELS.	
WL -CC'S.	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE: FROM | TO | DR.D RM-R CORE-C | CORE NO. | FORMATION (SHOW CORE RECOVERY) | ROTARY RPM | WT. ON BIT 1000# | PUMP PRESS | PUMP NO. – LINER SIZE | S.P.M. | PUMP NO. – LINER SIZE | S. P. M. | METHOD RUN SCHLUM PARFL-P COMP-D-C

DEVIATION RECORD: DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG: FROM | TO | ELAPSED TIME | CODE NO. | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

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 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1-8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	
GELS.	
WL -CC'S.	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE: FROM | TO | DR.D RM-R CORE-C | CORE NO. | FORMATION (SHOW CORE RECOVERY) | ROTARY RPM | WT. ON BIT 1000# | PUMP PRESS | PUMP NO. – LINER SIZE | S.P.M. | PUMP NO. – LINER SIZE | S.P.M. | METHOD RUN SCHLUM PARFL-P COMP-D-C

DEVIATION RECORD: DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG: FROM | TO | ELAPSED TIME | CODE NO. | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

FORM 3T6 APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

C 21879

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
OPERATOR		CONTRACTOR **LOFFLAND BROTHERS COMPANY**	RIG NO.
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION

WIRE LINE RECORD REEL NO.

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	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	MORN.	DAY	EVE.
1.	RIG UP AND TEAR DOWN			
2.	DRILL ACTUAL			
3.	REAMING			
4.	CORING			
5.	CONDITION MUD & CIRCULATE			
6.	TRIPS			
7.	LUBRICATE RIG			
8.	REPAIR RIG			
9.	CUT OFF DRILLING LINE			
10.	DEVIATION SURVEY			
11.	WIRE LINE LOGS			
12.	RUN CASING & CEMENT			
13.	WAIT ON CEMENT			
14.	NIPPLE UP B.O.P.			
15.	TEST B.O.P.			
16.	DRILL STEM TEST			
17.	PLUG BACK			
18.	SQUEEZE CEMENT			
19.	FISHING			
20.	DIR. WORK			
21.				
22.				
23.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS				

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO. D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD		
	BIT	FT.	BIT NO.		TIME		
			SIZE		WEIGHT		
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT		
	D.C. ID OD	FT.	TYPE		VISC.-SEC.		
	STB RMR OD	FT.	JETS 1/32"		PV YP		
	D.C. ID OD	FT.	SER. NO.		GELS		
	STB RMR OD	FT.	DEPTH OUT		WL -CC'S		
			DEPTH IN		pH		
			TOTAL FTG.		SOLIDS %		
			TOTAL HRS. RUN				
	STANDS DP	FT.	COND. 1/8"s T/B GAGE		MUD & CHEMICALS ADDED		
	SINGLES DP	FT.	GPM PD-PSI		TYPE AMT.	TYPE AMT.	
	KELLY DOWN	FT.					
	TOTAL	FT.					
WT. OF STRING		LBS.					

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD		
	BIT	FT.	BIT NO.		TIME		
			SIZE		WEIGHT		
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT		
	D.C. ID OD	FT.	TYPE		VISC.-SEC.		
	STB RMR OD	FT.	JETS 1/32"		PV YP		
	D.C. ID OD	FT.	SER. NO.		GELS		
	STB RMR OD	FT.	DEPTH OUT		WL -CC'S		
			DEPTH IN		pH		
			TOTAL FTG.		SOLIDS %		
			TOTAL HRS. RUN				
	STANDS DP	FT.	COND. 1/8"s T/B GAGE		MUD & CHEMICALS ADDED		
	SINGLES DP	FT.	GPM PD-PSI		TYPE AMT.	TYPE AMT.	
	KELLY DOWN	FT.					
	TOTAL	FT.					
WT. OF STRING		LBS.					

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD		
	BIT	FT.	BIT NO.		TIME		
			SIZE		WEIGHT		
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT		
	D.C. ID OD	FT.	TYPE		VISC.-SEC.		
	STB RMR OD	FT.	JETS 1/32"		PV/YP		
	D.C. ID OD	FT.	SER. NO.		GELS		
	STB RMR OD	FT.	DEPTH OUT		WL -CC'S		
			DEPTH IN		pH		
			TOTAL FTG.		SOLIDS %		
			TOTAL HRS. RUN				
	STANDS DP	FT.	COND. 1/8"s T/B GAGE		MUD & CHEMICALS ADDED		
	SINGLES DP	FT.	GPM PD-PSI		TYPE AMT.	TYPE AMT.	
	KELLY DOWN	FT.					
	TOTAL	FT.					
WT. OF STRING		LBS.					

MORNING TOUR

FOOTAGE FROM / TO | DR. D RM. R CORE. C | CORE NO. | FORMATION (SHOW CORE RECOVERY) | ROTARY RPM | WT. ON BIT 1000# | PUMP PRESS | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SCL-S PAPPEL-P COMP.-C

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM / TO | ELAPSED TIME | CODE NO. | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

DAY TOUR

FOOTAGE FROM / TO | DR. D RM. R CORE. C | CORE NO. | FORMATION (SHOW CORE RECOVERY) | ROTARY RPM | WT. ON BIT 1000# | PUMP PRESS | PUMP NO. LINER SIZE | 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

DRILLER

EVENING TOUR

FOOTAGE FROM / TO | DR. D RM. R CORE. C | CORE NO. | FORMATION (SHOW CORE RECOVERY) | ROTARY RPM | WT. ON BIT 1000# | PUMP PRESS | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SCL-S PAPPEL-P COMP.-C

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM / TO | ELAPSED TIME | CODE NO. | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

Form 3T6

APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

C 21878

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
OPERATOR		CONTRACTOR **LOFFLAND BROTHERS COMPANY**	RIG NO.
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION

LAS: CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

WIRE LINE RECORD — REEL NO.

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

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 32" | SER. NO. | DEPTH OUT | DEPTH IN | TOTAL FTG. | TOTAL HRS. RUN | COND. 1 8's T B GAGE | GPM PD-PSI

MUD RECORD

TIME | WEIGHT | PRESSURE GRADIENT | VISC.-SEC. | PV/YP | GELS | WL -CC'S | pH | SOLIDS %

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

MORNING TOUR

FOOTAGE / 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. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL-S PAR'L-P COM'D-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

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 | JET 1 32" | SER. NO. | DEPTH OUT | DEPTH IN | TOTAL FTG. | TOTAL HRS. RUN | COND. 1 8's T B GAGE | GPM PD-PSI

MUD RECORD

TIME | WEIGHT | PRESSURE GRADIENT | VISC.-SEC. | PV/YP | GELS | WL -CC'S | pH | SOLIDS %

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

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 SCL-S PAR'L-P COM'D-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

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 32" | SER. NO. | DEPTH OUT | DEPTH IN | TOTAL FTG. | TOTAL HRS. RUN | COND. 1 8's T B GAGE | GPM PD-PSI

MUD RECORD

TIME | WEIGHT | PRESSURE GRADIENT | VISC.-SEC. | PV/YP | GELS | WL -CC'S | pH | SOLIDS %

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE / 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 SCL-S PAR'L-P COM'D-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

EVENING TOUR

Form 3T6

APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

C 21877

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
OPERATOR		**CONTRACTOR** LOFFLAND BROTHERS COMPANY	RIG NO.
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION

WIRE LINE RECORD REEL NO.

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	MUD RECORD
	BIT	FT.	BIT NO.	TIME
			SIZE	WEIGHT
	STB RMR OD	FT.	MFG.	PRESSURE GRADIENT
	D.C. ID OD	FT.	TYPE	VISC.-SEC.
	STB RMR OD	FT.	JETS 1/32"	PV-YP
	D.C. ID OD	FT.	SER. NO.	GELS
	STB RMR OD	FT.	DEPTH OUT	WL -CC'S
			DEPTH IN	pH
			TOTAL FTG.	SOLIDS %
			TOTAL HRS. RUN	
	STANDS DP	FT.	COND. 1/8's T/B GAGE	MUD & CHEMICALS ADDED
	SINGLES DP	FT.	GPM/ PD-PSI	TYPE AMT. TYPE AMT.
	KELLY DOWN	FT.		
	TOTAL	FT.		
WT. OF STRING		LBS.		

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	MUD RECORD
	BIT	FT.	BIT NO.	TIME
			SIZE	WEIGHT
	STB RMR OD	FT.	MFG.	PRESSURE GRADIENT
	D.C. ID OD	FT.	TYPE	VISC.-SEC.
	STB RMR OD	FT.	JETS 1/32"	PV-YP
	D.C. ID OD	FT.	SER. NO.	GELS
	STB RMR OD	FT.	DEPTH OUT	WL -CC'S
			DEPTH IN	pH
			TOTAL FTG.	SOLIDS %
			TOTAL HRS. RUN	
	STANDS DP	FT.	COND. 1/8's T/B GAGE	MUD & CHEMICALS ADDED
	SINGLES DP	FT.	GPM/ PD-PSI	TYPE AMT. TYPE AMT.
	KELLY DOWN	FT.		
	TOTAL	FT.		
WT. OF STRING		LBS.		

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	MUD RECORD
	BIT	FT.	BIT NO.	TIME
			SIZE	WEIGHT
	STB RMR OD	FT.	MFG.	PRESSURE GRADIENT
	D.C. ID OD	FT.	TYPE	VISC.-SEC.
	STB RMR OD	FT.	JETS 1/32"	PV-YP
	D.C. ID OD	FT.	SER. NO.	GELS
	STB RMR OD	FT.	DEPTH OUT	WL -CC'S
			DEPTH IN	pH
			TOTAL FTG.	SOLIDS %
			TOTAL HRS. RUN	
	STANDS DP	FT.	COND. 1/8's T/B/ GAGE	MUD & CHEMICALS ADDED
	SINGLES DP	FT.	GPM/ PD-PSI	TYPE AMT. TYPE AMT.
	KELLY DOWN	FT.		
	TOTAL	FT.		
WT. OF STRING		LBS.		

EVENING TOUR

FOOTAGE FROM / TO | DR..D RM..R CORE..C | CORE NO. | FORMATION (SHOW CORE RECOVERY) | ROTARY RPM | WT. ON BIT 1000# | PUMP PRESS | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. 2 LINER SIZE | PUMP NO. 2 S.P.M. | METHOD RUN SGL.-S PARL.-P COMP.-C

DEVIATION RECORD | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG FROM / TO | ELAPSED TIME | CODE NO. | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

FOOTAGE FROM / TO | DR..D RM..R CORE..C | CORE NO. | FORMATION (SHOW CORE RECOVERY) | ROTARY RPM | WT. ON BIT 1000# | PUMP PRESS | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. 2 LINER SIZE | PUMP NO. 2 S.P.M. | METHOD RUN SGL.-S PARL.-P COMP.-C

DEVIATION RECORD | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG FROM / TO | ELAPSED TIME | CODE NO. | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

FOOTAGE FROM / TO | DR..D RM..R CORE..C | CORE NO. | FORMATION (SHOW CORE RECOVERY) | ROTARY RPM | WT. ON BIT 1000# | PUMP PRESS | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PARL.-P COMP.-C

DEVIATION RECORD | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG FROM / TO | ELAPSED TIME | CODE NO. | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

FORM 3T6 APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

C 21876

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE

OPERATOR

CONTRACTOR
LOFFLAND BROTHERS COMPANY

RIG NO.

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION

WIRE LINE RECORD REEL NO.

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8		

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO. | DRILLING ASSEMBLY (At end of tour) | BIT RECORD | MUD RECORD

DRILLING ASSEMBLY		BIT RECORD	MUD RECORD
BIT	FT.	BIT NO.	TIME
		SIZE	WEIGHT
STB RMR OD	FT.	MFG.	PRESSURE GRADIENT
D.C. ID OD	FT.	TYPE	VISC.-SEC.
STB RMR OD	FT.	JETS 1 32"	PV YP
D.C. ID OD	FT.	SER. NO.	GELS
STB RMR OD	FT.	DEPTH OUT	WL -CC'S
		DEPTH IN	pH
		TOTAL FTG.	SOLIDS %
		TOTAL HRS. RUN	
STANDS DP	FT.	COND. 1/8's T.B. GAGE	MUD & CHEMICALS ADDED: TYPE / AMT. / TYPE / AMT.
SINGLES DP	FT.	GPM PD-PSI	
KELLY DOWN	FT.		
TOTAL	FT.		
WT. OF STRING	LBS.		

DAY TOUR

NO. | DRILLING ASSEMBLY (At end of tour) | BIT RECORD | MUD RECORD

DRILLING ASSEMBLY		BIT RECORD	MUD RECORD
BIT	FT.	BIT NO.	TIME
		SIZE	WEIGHT
STB RMR OD	FT.	MFG.	PRESSURE GRADIENT
D.C. ID OD	FT.	TYPE	VISC.-SEC.
STB RMR OD	FT.	JET 1 32"	PV/YP
D.C. ID OD	FT.	SER. NO.	GELS
STB RMR OD	FT.	DEPTH OUT	WL -CC'S
		DEPTH IN	pH
		TOTAL FTG.	SOLIDS %
		TOTAL HRS. RUN	
STANDS DP	FT.	COND. 1/8's T/B GAGE	MUD & CHEMICALS ADDED: TYPE / AMT. / TYPE / AMT.
SINGLES DP	FT.	GPM PD-PSI	
KELLY DOWN	FT.		
TOTAL	FT.		
WT. OF STRING	LBS.		

EVENING TOUR

NO. | DRILLING ASSEMBLY (At end of tour) | BIT RECORD | MUD RECORD

DRILLING ASSEMBLY		BIT RECORD	MUD RECORD
BIT	FT.	BIT NO. 1	TIME
		SIZE 2	WEIGHT
STB RMR OD	FT.	MFG. 5	PRESSURE GRADIENT
D.C. ID OD	FT.	TYPE	VISC.-SEC.
STB RMR OD	FT.	JETS 1/32"	PV/YP
D.C. ID OD	FT.	SER. NO. 2	GELS
STB RMR OD	FT.	DEPTH OUT	WL -CC'S
		DEPTH IN 0	pH
		TOTAL FTG. 7	SOLIDS %
		TOTAL HRS. RUN	
STANDS DP	FT.	COND. 1/8's T/B/ GAGE	MUD & CHEMICALS ADDED: TYPE / AMT. / TYPE / AMT.
SINGLES DP	FT.	GPM/ PD-PSI	
KELLY DOWN	FT.		
TOTAL	FT.		
WT. OF STRING	LBS.		

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR..D RM..R CORE..C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL-S PAR-EL-P COM-D-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM / TO | ELAPSED TIME | CODE NO. | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR..D RM..R CORE..C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL-S PAR-EL-P COM-D-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM / TO | ELAPSED TIME | CODE NO. | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR..D RM..R CORE..C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL-S PAR-EL-P COM-D-C
					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

DRILLER

Form 3T6

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A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

C 21875 DAILY DRILLING REPORT REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

O.P. SIZE	WT., FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
						1			
						2			

LEGAL LAND DESCRIPTION

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

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
1	BIT	FT.	BIT NO.		TIME	
			SIZE		WEIGHT	
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT	
	D.C. ID OD	FT.	TYPE		VISC.–SEC.	
	STB RMR OD	FT.	JETS 1 32nds		PV YP	
	D.C. ID OD	FT.	SER. NO.		GELS	
	STB RMR OD	FT.	DEPTH OUT		WL –CC'S	
			DEPTH IN		pH	
			TOTAL FTG.		SOLIDS %	
			TOTAL HRS. RUN			
	STANDS DP	FT.	COND. 1/8's T B GAGE		MUD & CHEMICALS ADDED	
	SINGLES DP	FT.	GPM, PD–PSI		TYPE AMT. TYPE AMT.	
	KELLY DOWN	FT.				
	TOTAL	FT.				
WT. OF STRING		LBS.				

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
1	BIT	FT.	BIT NO.		TIME	
			SIZE		WEIGHT	
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT	
	D.C. ID OD	FT.	TYPE		VISC.–SEC.	
	STB RMR OD	FT.	JET 1/32nds		PV/YP	
	D.C. ID OD	FT.	SER. NO.		GELS	
	STB RMR OD	FT.	DEPTH OUT		WL –CC'S	
			DEPTH IN		pH	
			TOTAL FTG.		SOLIDS %	
			TOTAL HRS. RUN			
	STANDS DP	FT.	COND. 1/8's T/B GAGE		MUD & CHEMICALS ADDED	
	SINGLES DP	FT.	GPM/ PD–PSI		TYPE AMT. TYPE AMT.	
	KELLY DOWN	FT.				
	TOTAL	FT.				
WT. OF STRING		LBS.				

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
1	BIT	FT.	BIT NO.		TIME	
			SIZE		WEIGHT	
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT	
	D.C. ID OD	FT.	TYPE		VISC.–SEC.	
	STB RMR OD	FT.	JETS 1/32nds		PV/YP	
	D.C. ID OD	FT.	SER. NO.		GELS	
	STB RMR OD	FT.	DEPTH OUT		WL –CC'S	
			DEPTH IN		pH	
			TOTAL FTG.		SOLIDS %	
			TOTAL HRS. RUN			
	STANDS DP	FT.	COND. 1/8's T/B GAGE		MUD & CHEMICALS ADDED	
	SINGLES DP	FT.	GPM/ PD–PSI		TYPE AMT. TYPE AMT.	
	KELLY DOWN	FT.				
	TOTAL	FT.				
WT. OF STRING		LBS.				

EVENING TOUR

MORNING TOUR

FOOTAGE FROM	FOOTAGE TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL.–S PARFL.–P COMPL.–C

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

DAY TOUR

FOOTAGE FROM	FOOTAGE 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

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

EVENING TOUR

FOOTAGE FROM	FOOTAGE TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL.–S PARFL.–P COMPL.–C
71	515	D			50	54		6½	47	6½		S
		14										

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	75	¼							

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0600	0900	6	2	
0900	93[illegible]	11½	21	
93[illegible]	2330	14	11	
2330	0600	12	2	

DRILLER

FORM 3TG APPROVED APPROVED A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

C 21874

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE

OPERATOR

CONTRACTOR **LOFFLAND BROTHERS COMPANY**

RIG NO.

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

LEGAL LAND DESCRIPTION

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

	D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1.	RIG UP AND TEAR DOWN			
2.	DRILL ACTUAL			
3.	REAMING			
4.	CORING			
5.	CONDITION MUD & CIRCULATE			
6.	TRIPS			
7.	LUBRICATE RIG			
8.	REPAIR RIG			
9.	CUT OFF DRILLING LINE			
10.	DEVIATION SURVEY			
11.	WIRE LINE LOGS			
12.	RUN CASING & CEMENT			
13.	WAIT ON CEMENT			
14.	NIPPLE UP B.O.P.			
15.	TEST B.O.P.			
16.	DRILL STEM TEST			
17.	PLUG BACK			
18.	SQUEEZE CEMENT			
19.	FISHING			
20.	DIR. WORK			
21.				
22.				
23.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS				

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.

BIT			FT.
STB RMR	OD		FT.
D.C. ID	OD		FT.
STB RMR	OD		FT.
D.C. ID	OD		FT.
STB RMR	OD		FT.
STANDS DP			FT.
SINGLES DP			FT.
KELLY DOWN			FT.
TOTAL			FT.

WT. OF STRING LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. T-B-G's T.B. GAGE	
GPM, PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	/ / /
GELS.	/ / /
WL -CC'S.	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SURFACE PARTIAL COMPLETE
					35		1700	6 1/2	49	6 1/2		S

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

DRILLER

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	
JET 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. T-B-G's T.B. GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	/ / /
GELS.	/ / /
WL -CC'S.	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SURFACE PARTIAL 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

DRILLER

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 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	/ / /
GELS.	/ / /
WL -CC'S.	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SURFACE PARTIAL 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

DRILLER

C 21873

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE

OPERATOR

CONTRACTOR
LOFFLAND BROTHERS COMPANY

RIG NO.

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION

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. OR TRIPS

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

TIME DISTRIBUTION - HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL			
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS				

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. 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	
	BIT	FT.	BIT NO.	
			SIZE	
	STB RMR OD	FT.	MFG.	
	D.C. ID OD	FT.	TYPE	
	STB RMR OD	FT.	JETS 1 32"	
	D.C. ID OD	FT.	SER. NO.	
	STB RMR OD	FT.	DEPTH OUT	
			DEPTH IN	
			TOTAL FTG.	
			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 RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	/ / /
GELS	
WL -CC'S	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	FOOTAGE TO	DR.-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL-S PARFL-P COMPL-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

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.	JET 1 32"	
	D.C. ID OD	FT.	SER. NO.	
	STB RMR OD	FT.	DEPTH OUT	
			DEPTH IN	
			TOTAL FTG.	
			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 RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	/ / /
GELS	/ / /
WL -CC'S	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	FOOTAGE TO	DR.-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL-S PARFL-P COMPL-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT	FT.	BIT NO.	1A
1			SIZE	12
1	STB RMR OD	FT.	MFG.	Smith
1	D.C. ID OD	FT.	TYPE	F2
1	STB RMR OD	FT.	JETS 1/32"	
1	D.C. ID OD	FT.	SER. NO.	2773
	STB RMR OD	FT.	DEPTH OUT	
			DEPTH IN	C
			TOTAL FTG.	45
			TOTAL HRS. RUN	3½
	STANDS DP	FT.	COND. 1/8's T/B/ GAGE	2 2 2
	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	FOOTAGE TO	DR.-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL-S PARFL-P COMPL-C
0								6½		6½		

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1100	1730	6½	1	
1730	2100	3½	2	
2100	2400	2½	5	

DRILLER

C 21872

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. 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.	CIRCULATION MUD & CIRCULATE			
6.	TRIPS			
7.	LUBRICATE RIG			
8.	REPAIR RIG			
9.	CUT OFF DRILLING LINE			
10.	DEVIATION SURVEY			
11.	WIRE LINE LOGS			
12.	RUN CASING & CEMENT			
13.	WAIT ON CEMENT			
14.	NIPPLE UP B.O.P.			
15.	TEST B.O.P.			
16.	DRILL STEM TEST			
17.	PLUG BACK			
18.	SQUEEZE CEMENT			
19.	FISHING			
20.	DIR. WORK			
21.				
22.				
23.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS				

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
	BIT	FT.	BIT NO.		TIME	
			SIZE		WEIGHT	
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT	
	D.C. ID OD	FT.	TYPE		VISC.–SEC.	
	STB RMR OD	FT.	JETS 1 32"		PV YP	
	D.C. ID OD	FT.	SER. NO.		GELS.	
	STB RMR OD	FT.	DEPTH OUT		WL –CC'S.	
			DEPTH IN		pH	
			TOTAL FTG.		SOLIDS %	
			TOTAL HRS. RUN			
	STANDS DP	FT.	COND. 1/8's T.B. GAGE		MUD & CHEMICALS ADDED	
	SINGLES DP	FT.	GPM/ PD–PSI		TYPE AMT. TYPE AMT.	
	KELLY DOWN	FT.				
	TOTAL	FT.				
WT. OF STRING		LBS.				

FOOTAGE FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL–S PAR'L–P COM'D–C
								5 3/4		6 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

DRILLER

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
	BIT	FT.	BIT NO.		TIME	
			SIZE		WEIGHT	
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT	
	D.C. ID OD	FT.	TYPE		VISC.–SEC.	
	STB RMR OD	FT.	JET 1/32"		PV. YP	
	D.C. ID OD	FT.	SER. NO.		GELS.	
	STB RMR OD	FT.	DEPTH OUT		WL –CC'S.	
			DEPTH IN		pH	
			TOTAL FTG.		SOLIDS %	
			TOTAL HRS. RUN			
	STANDS DP	FT.	COND. 1/8's T/B/ GAGE		MUD & CHEMICALS ADDED	
	SINGLES DP	FT.	GPM/ PD–PSI		TYPE AMT. TYPE AMT.	
	KELLY DOWN	FT.				
	TOTAL	FT.				
WT. OF STRING		LBS.				

FOOTAGE FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL–S PAR'L–P COM'D–C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
	BIT	FT.	BIT NO.		TIME	
			SIZE		WEIGHT	
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT	
	D.C. ID OD	FT.	TYPE		VISC.–SEC.	
	STB RMR OD	FT.	JETS 1/32"		PV/YP	
	D.C. ID OD	FT.	SER. NO.		GELS.	
	STB RMR OD	FT.	DEPTH OUT		WL –CC'S.	
			DEPTH IN		pH	
			TOTAL FTG.		SOLIDS %	
			TOTAL HRS. RUN			
	STANDS DP	FT.	COND. 1/8's T/B/ GAGE		MUD & CHEMICALS ADDED	
	SINGLES DP	FT.	GPM/ PD–PSI		TYPE AMT. TYPE AMT.	
	KELLY DOWN	FT.				
	TOTAL	FT.				
WT. OF STRING		LBS.				

FOOTAGE FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL–S PAR'L–P COM'D–C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

Form 3T6

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A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

C 21871

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION

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

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MURN.	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.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.			
HRS. W/OPR. D.P.			
HRS. WO/D.P.			
HRS. STANDBY			
TOTAL DAY WORK			
NO. OF DAYS FROM SPUD			
CUMULATIVE ROTATING HRS.			
TOTAL MUD COST			

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES	DP	FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1 32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN.	
COND. 1/8's T. B. CAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	
GELS	
WL -CC'S.	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.

FORMATION (SHOW CORE RECOVERY)

ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR.-P THR.-T COMB.-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

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	
JET 1 32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	
GELS	
WL -CC'S.	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.

FORMATION (SHOW CORE RECOVERY)

ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR.-P THR.-T COMB.-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

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 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	
GELS	
WL -CC'S.	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.

FORMATION (SHOW CORE RECOVERY)

ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR.-P THR.-T COMB.-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

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A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

C 21870

DAILY DRILLING REPORT

REPORT NO. Amoco A-4 Pointed Mountain A-55

LEASE	WELL NO.	API WELL NUMBER	DATE
			6

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION

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

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1.	RIG UP AND TEAR DOWN		f	
2.	DRILL ACTUAL			
3.	REAMING			
4.	CORING			
5.	CONDITION MUD & CIRCULATE			
6.	TRIPS			
7.	LUBRICATE RIG			
8.	REPAIR RIG			
9.	CUT OFF DRILLING LINE			
10.	DEVIATION SURVEY			
11.	WIRE LINE LOGS			
12.	RUN CASING & CEMENT			
13.	WAIT ON CEMENT			
14.	NIPPLE UP B.O.P.			
15.	TEST B.O.P.			
16.	DRILL STEM TEST			
17.	PLUG BACK			
18.	SQUEEZE CEMENT			
19.	FISHING			
20.	DIR. WORK			
21.				
22.				
23.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS				

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES	DP	FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1/32"	/ / /
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 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.

FOOTAGE FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL. PARFL-P COMPLEC

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

DRILLER

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	
JET 1/32"	/ / /
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.

FOOTAGE FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL. PARFL-P COMPLEC

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

DRILLER

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 1/32"	/ / /
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.

FOOTAGE FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL. PARFL-P COMPLEC

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

DRILLER

C 21869

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
			25
OPERATOR		CONTRACTOR LOFFLAND BROTHERS COMPANY	RIG NO.
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION

WIRE LINE RECORD REEL NO.

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

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'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
	BIT	FT.	BIT NO.		TIME	
			SIZE		WEIGHT	
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT	
	D.C. ID OD	FT.	TYPE		VISC.–SEC.	
	STB RMR OD	FT.	JETS 1/32"		PV/YP	/ / /
	D.C. ID OD	FT.	SER. NO.		GELS.	/ / /
	STB RMR OD	FT.	DEPTH OUT		WL –CC'S.	
			DEPTH IN		pH	
			TOTAL FTG.		SOLIDS %	
			TOTAL HRS. RUN			
	STANDS DP	FT.	COND. 1/8's T/B GAGE		MUD & CHEMICALS ADDED	
	SINGLES DP	FT.	GPM/ PD–PSI	/ / /	TYPE AMT. TYPE AMT.	
	KELLY DOWN	FT.				
	TOTAL	FT.				
	WT. OF STRING	LBS.				

FOOTAGE FROM	TO	DR.–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHL–S PAT'L–P COM'L–C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

C 21868

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
			24

OPERATOR

CONTRACTOR **LOFFLAND BROTHERS COMPANY** RIG NO.

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION

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

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

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.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	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. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.

BIT			FT.
STB RMR	OD		FT.
D.C. ID	OD		FT.
STB RMR	OD		FT.
D.C. ID	OD		FT.
STB RMR	OD		FT.
STANDS DP			FT.
SINGLES	DP		FT.
KELLY DOWN			FT.
TOTAL			FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	
GELS.	
WL -CC'S.	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

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 SOL'S PAPER-P 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

DRILLER

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	
JET 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	
GELS.	
WL -CC'S.	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

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 SOL'S PAPER-P 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
0500				Rock up Move rig Rig up
				Fire up Pump mud
1500		10		Run 8 5/8 csg Cmt

DRILLER L. Cleveland

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 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	
GELS.	
WL -CC'S.	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SOL'S PAPER-P 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

DRILLER

FORM 376 APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

C -21867

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
OPERATOR		CONTRACTOR **LOFFLAND BROTHERS COMPANY**	RIG NO.
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION

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

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

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.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
BIT			FT.
STB	RMR	OD	FT.
D.C.	ID	OD	FT.
STB	RMR	OD	FT.
D.C.	ID	OD	FT.
STB	RMR	OD	FT.
STANDS DP			FT.
SINGLES	DP		FT.
KELLY DOWN			FT.
TOTAL			FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	/

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.–SEC.	
PV/YP	/
GELS	/
WL –CC'S	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

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 PWR–P COM–C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

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	
JET 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	/

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.–SEC.	
PV/YP	/
GELS	/
WL –CC'S	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

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 PWR–P COM–C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0600				HOOK UP SUCTION TO D-1000 & D-700
				FLOW DRILL LINE SUCTION ON D-1000
	1900	10		HOLD WARM UP DERRICK & FLOORMEN

DRILLER J. Loveland

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 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	/

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.–SEC.	
PV/YP	/
GELS	/
WL –CC'S	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR'D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN PWR–P COM–C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

Form 3T6 APPROVED APPROVED

A.A.O.D.C.–A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

C · 21866

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
OPERATOR		CONTRACTOR LOFFLAND BROTHERS COMPANY	RIG NO.
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION

WIRE LINE RECORD REEL NO.

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

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.			
COMPLETION A. PERF'R'T'N			
B. TAG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES	DP	FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1 32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	
GELS.	
WL -CC'S.	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR'D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000 #	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PAR-P COM-C

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

DRILLER

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES	DP	FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JET 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	
GELS.	
WL -CC'S.	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR'D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000 #	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PAR-P COM-C

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
0800				START BLOW & CIRC. START
				MAKE UP WATER LINES & CIRC START
	9:00	12		START USE LIGHT PLANT
				INST. SAT UP CHEVRON PRIMARY PUMP HOOK

DRILLER L. Loveland

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES	DP	FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	
GELS.	
WL -CC'S.	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR'D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000 #	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PAR-P COM-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

FORM 3T6

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A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

C 21865

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
OPERATOR		CONTRACTOR **LOFFLAND BROTHERS COMPANY**	RIG NO.
SIGNATURE OF OPERATOR'S REPRESENTA		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION

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

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

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.				
COMPLETION	A. PERF'R'T'N			
	B. TSG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS				

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO. — DRILLING ASSEMBLY (At end of tour)

BIT			FT.
STB RMR	OD		FT.
D.C. ID	OD		FT.
STB RMR	OD		FT.
D.C. ID	OD		FT.
STB RMR	OD		FT.
STANDS DP			FT.
SINGLES	DP		FT.
KELLY DOWN			FT.
TOTAL			FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T.B GAGE	
GPM PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	
GELS.	
WL -CC'S.	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

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 SCR.-S PART.-P COM.-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

DAY TOUR

NO. — DRILLING ASSEMBLY (At end of tour)

BIT			FT.
STB RMR	OD		FT.
D.C. ID	OD		FT.
STB RMR	OD		FT.
D.C. ID	OD		FT.
STB RMR	OD		FT.
STANDS DP			FT.
SINGLES	DP		FT.
KELLY DOWN			FT.
TOTAL			FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JET 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	
GELS.	
WL -CC'S.	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

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 SCR.-S PART.-P COM.-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0800	[illegible]			WORK ON [illegible] STRAIN LINES
				[illegible]
	1400	10		[illegible]

DRILLER J. Jourdan

EVENING TOUR

NO. — DRILLING ASSEMBLY (At end of tour)

BIT			FT.
STB RMR	OD		FT.
D.C. ID	OD		FT.
STB RMR	OD		FT.
D.C. ID	OD		FT.
STB RMR	OD		FT.
STANDS DP			FT.
SINGLES	DP		FT.
KELLY DOWN			FT.
TOTAL			FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	
GELS.	
WL -CC'S.	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCR.-S PART.-P COM.-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

EVENING TOUR

FORM 3T6 APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

C 21864

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
OPERATOR		CONTRACTOR LOFFLAND BROTHERS COMPANY	RIG NO.
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

WIRE LINE RECORD REEL NO.

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

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			
12. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.			
HRS. W/OPR. D.P.			
HRS. WO/D.P.			
HRS. STANDBY			
TOTAL DAY WORK			

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

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 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.–SEC.	
PV/YP	
GELS	
WL –CC'S	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

MORNING TOUR

FOOTAGE

FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHLUM. PARFIT-S COMP.-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

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	
JET 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.–SEC.	
PV/YP	
GELS	
WL –CC'S	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

FOOTAGE

FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHLUM. PARFIT-S COMP.-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0515				
	1000	10		

121 jts 5½ csg.

DRILLER L. Fawcett

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 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.–SEC.	
PV/YP	
GELS	
WL –CC'S	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE

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 SCHLUM. PARFIT-S COMP.-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

FORM 3T6 APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

C 21863

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE 19
OPERATOR		CONTRACTOR LOFFLAND BROTHERS COMPANY	RIG NO.
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	

60°24' 05.021" 123°54' 39.056"

LEGAL LAND DESCRIPTION Unit A Sec 55 Grid 60°30'N 123°45' W

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	RKB. 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'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.

BIT		FT.
STB RMR	OD	FT.
D.C. ID	OD	FT.
STB RMR	OD	FT.
D.C. ID	OD	FT.
STB RMR	OD	FT.
STANDS DP		FT.
SINGLES DP		FT.
KELLY DOWN		FT.
TOTAL		FT.
WT. OF STRING		LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T.B. GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	/
GELS.	/
WL -CC'S.	/
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.D RM-R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PARTIC-P CORE-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

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	
JET 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T.B. GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	/
GELS.	/
WL -CC'S.	/
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.D RM-R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PARTIC-P CORE-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

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 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T.B. GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	/
GELS.	/
WL -CC'S.	/
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.D RM-R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PARTIC-P CORE-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

Form 3T6

APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

C 21862

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
			12-4

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION Unit A Sec 55 Grid 60°30'N 123°45'W

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

WIRE LINE RECORD REEL NO.

SIZE	NO. LINES	FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.

BIT		FT.
STB RMR	OD	FT.
D.C. ID	OD	FT.
STB RMR	OD	FT.
D.C. ID	OD	FT.
STB RMR	OD	FT.
STANDS DP		FT.
SINGLES DP		FT.
KELLY DOWN		FT.
TOTAL		FT.
WT. OF STRING		LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	/
GPM/ PD–PSI	/

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.–SEC.	
PV/YP	/
GELS	/
WL –CC'S.	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.

FORMATION (SHOW CORE RECOVERY) | ROTARY RPM | WT. ON BIT 1000# | PUMP PRESS | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SCI.–S PAR'L–P COMP.–C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0800				Rig up Pull Bolts Prep to move
				Move on Location

DRILLER

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	
JET 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	/
GPM/ PD–PSI	/

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.–SEC.	
PV/YP	/
GELS	/
WL –CC'S.	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.

FORMATION (SHOW CORE RECOVERY) | ROTARY RPM | WT. ON BIT 1000# | PUMP PRESS | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SCI.–S PAR'L–P COMP.–C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0800	[illegible]			Set Conductor Pipe Cement Work Tag Hard
				Rig Down Tear
				Move on Location Level Tank Build Cat Walk Rig
	1900	10		Work on Crown Lines

DRILLER J. Lawson

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 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	/
GPM/ PD–PSI	/

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.–SEC.	
PV/YP	/
GELS	/
WL –CC'S.	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.

FORMATION (SHOW CORE RECOVERY) | ROTARY RPM | WT. ON BIT 1000# | PUMP PRESS | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SCI.–S PAR'L–P COMP.–C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

Form 3T6 APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

C 21861

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE

OPERATOR	CONTRACTOR	RIG NO.
	LOFFLAND BROTHERS COMPANY	

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER

LEGAL LAND DESCRIPTION: Unit A Sec 55 Grid 60°30'N 123°45'W

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO. D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
BIT			FT.
STB RMR	OD		FT.
D.C. ID	OD		FT.
STB RMR	OD		FT.
D.C. ID	OD		FT.
STB RMR	OD		FT.
STANDS DP			FT.
SINGLES	DP		FT.
KELLY DOWN			FT.
TOTAL			FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B. GAGE	
GPM/ PD–PSI	

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.–SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

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 SCH'S PART'L P COMP'L C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

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	
JET 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.–SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

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 SCH'S PART'L P COMP'L C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

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 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.–SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR..D RM–R CORE..C	CORE NO.

FORMATION (SHOW CORE RECOVERY)

ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCH'S PART'L P COMP'L C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

Form 3T6

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A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

C 21860

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
OPERATOR		CONTRACTOR **LOFFLAND BROTHERS COMPANY**	RIG NO.
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION: Unit A Sec 55 Grid 60°30'N 123°45'W

WIRE LINE RECORD — REEL NO.

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	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	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. W/O D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
BIT			FT.
STB RMR	OD		FT.
D.C. ID	OD		FT.
STB RMR	OD		FT.
D.C. ID	OD		FT.
STB RMR	OD		FT.
STANDS DP			FT.
SINGLES	DP		FT.
KELLY DOWN			FT.
TOTAL			FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	
GELS	
WL -CC'S	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

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 SCHLUM. P.D. COMB.

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

DRILLER

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	
JET 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	
GELS	
WL -CC'S	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

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 SCHLUM. P.D. COMB.

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
0500				
	800			

DRILLER

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 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	
GELS	
WL -CC'S	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHLUM. P.D. COMB.

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

DRILLER

Form 3T6 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

C 21859

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
OPERATOR		CONTRACTOR LOFFLAND BROTHERS COMPANY	RIG NO.
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION: Unit A Sec. 55 Grid 60°30'N 123°45'W

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

	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			
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. CIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. W/O D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.

BIT		FT.
STB RMR	OD	FT.
D.C. ID	OD	FT.
STB RMR	OD	FT.
D.C. ID	OD	FT.
STB RMR	OD	FT.
STANDS DP		FT.
SINGLES	DP	FT.
KELLY DOWN		FT.
TOTAL		FT.
WT. OF STRING		LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	/ / /
GELS	/ / /
WL-CC'S	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

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	
JET 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	/ / /
GELS	/ / /
WL-CC'S	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

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

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

DRILLER

DAY TOUR

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	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

DRILLER

EVENING TOUR

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN

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

DRILLER

FORM 3T6

APPROVED

APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

ADDITIONAL INFORMATION

WELL TERMINATION RECORD (with attachment)

National Energy Board | Office national de l'énergie

WELL TERMINATION RECORD

This record is submitted in compliance with Section 184 of the *Canada Oil and Gas Drilling Regulations*.

Well Name: AMOCO A-4 POINTED MOUNTAIN (ASS) Area: POINTED MOUNTAIN

Grid Area: Field / Pool: NAHANNI

Interest Final Lat 60° 24' 5.004" Long: 123° 54' 39.096"

Drilling Elevations- 460.37 (ASL GL Geoid 455.68

Spud Date: 1974 / MAR / 01 R.R.: 1974 / AUG / 08 Total Depth: 3757.0

O.D. (mm)	Weight (kg/m)	Grade	Depth Set (m KB)	Cement (m³)
508	136.65	H-40	74.07	15.7
339.7	81.3/90.9/101.4	K-55	762.0	61.3
244.5	70.1/64.8/59	N-80, S-95 S-95	2502.2	136.8
177.8	34.3/38.4	N-80/S00-95	3757	24.2

PLUGGING PROGRAM

Approval of the following program was obtained by (person) J. L. BROWN, BP CANADA

from (person) ANDREW GRAW of the NEB

by means of FAX on JAN 19, 2001

Type of Plug	Interval (m KB)	Felt	Cement (m³)
PERMANENT BRIDGE PLUG W/ CEMENT ON TOP (10m)	3060.0 → 3049.25 mKB		
BRIDGE PLUG @ 2185.0 mKB W/ CEMENT ON TOP TO 1979 mKB			
BRIDGE PLUG @ 780.0 mKB W/ CEMENT ON TOP TO ~715 mKB			

* ALSO, SEE ATTACHED WELLBORE SCHEMATIC FOR MORE INFORMATION.

Lost Circulation/Overpressure Zones:

Equipment left on Seafloor (Describe):

Provision for Re-entry (Describe and attach sketch): WELLHEAD WAS LEFT IN PLACE TO CHECK FOR GAS MIGRATION.

Cores: Type: Interval:

Other Downhole Completion/Suspension

I certify on the basis of personal knowledge of operations undertaken at the above named well that the above information is accurate.

Signed: Steven T. Kendrick Title: COMPLETIONS ENGINEER

Name: STEVEN T. KENDRICK Date: NOVEMBER 6, 2001

Company: BP CANADA

Well Status

Suspended ☐

Completed ☐

Abandoned ☑

Acknowledged by: T M Dalton

Chief Conservation Officer

Date: Nov 21/01

File: 60-30-123-45

UWI: 300A556030123452 WID: 911

Canada

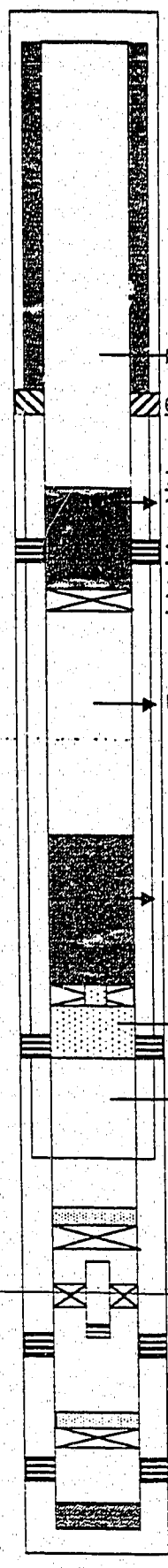
DATE: 01-01-29

DOWN HOLE PROFILE

WELL NAME BP A-4 Pointed Mountain
LOCATION A-55 (A-4)

KB ELEV	460.37	M
KB CF:	455.68	M
KB THF	4.69	M
TD	3756.96	MKB
PBTD:	715.00	MKB

Conductor Casing	508.0mm, H-80, 8rd ST&C to 136.65 mKB
SURFACE CASING	339.7mm, K-55, 8rd ST&C, 81.3, 90.97 & 101.4 kg/m at 762.0 mKB
Intermediate CSG	244.5mm, N-80, S-95 & SOO-95 at 70.09, 64.87 &-59.0 kg/m
	8rd LT&C to 2502.23 mKB
PRODUCTION CSG	177.8 mm, N-80, 8 rd LT&C, N-80, & SOO-95 at 34.3 & 38.4 kg/m to
	3757.0 mKB
PERFS	Nahanni
ZONE	3180.0 - 3449.0 mKB (Abandoned)
	3630.17 - 3642.36 mKB (Abandoned)



Inhibited Fresn Water

600.0 - 601.0 mKB Cemented circulation perforations tested to 13,200 KPA
intermediate cemented to surface 1998 with 12.5t, 0:1:0 'G' +0.5% T-10, 0.4%D-24 w/0.5m3 good returns

715.0 mKB
1.2m3 0:1:0 Class 'G' + 0.5% CFR + 0.4% HALAD 447 Squeezed for 12 hours

769.0 - 770.0 mKB

780.0 mKB Baker Bridge Plug

Inhibited Fresh Water

1977.0 mKB

4.16m3 1870 kg/m3 0:1:0 Class 'G', 35% SSA-1, 0.75% CFR-3 & 0.3% HR-12

2185.0 mKB Baker Model K-1 3BB W/L Set Cement Retainer
1.1m3, 16% Direxit 300, Aqueolic, Canada Ltd. (1.3m3 pumped with 1.1m3 into formation)
2192.0-2193.0 mKB

Inhibited Fresh Water

Intermediate TD at 2502.23 mKB

3049.25 mKB 10 Vertical meters Thermal Cement

3060.0 mKB Wireline Set Bridge Plug

Baker Model 'D' Production Packer with Tail Assy.

Nahanni 3128.8 - 3449.73 mKB

Baker Model 'D' Production Packer topped with cement
Nahanni 3630.17 - 3662.36 mKB

3756.96 mKB

Report by: Dusty Fay/Larry Cunningham