

Drilling Authority No. 129

Date Issued

WELL NAME Pan American - Shell Ekikisa L-19

FIELD

Area:

LOCATION: Unit 1 Section 19 Grid 61-02 - 116-00

Latitude 60-56-36 Longitude 116-02-28

From Established Reference Marker

Rig Release Date:

Status

Information Release Date

CHANGE OF NAME:

DATE RECEIVED	INDEX
	Application for a Drilling Authority. Well Completion Data. Well History Report.
	Application to Amend a Drilling Authority.
	Application to change a Well Name.
	Application to Abandon a Well or Suspend Drilling.
	Application to Alter Condition of a Well. Well History Supplement. Well Completion Data. Work-over Report No.
	Application to Commingle Production before Measurement.
	Data for Back Pressure Test on Natural Gas Wells — Monograph 7 Method.
	Data for Back Pressure Test on Natural Gas Wells — Vitter's Method.
	M.P.R. — Oil — Calculations.
	New Oil Well Report.
	New Gas Well Report.
	Well Inspection Report.
	Rig Inspection Report.
	Battery Inspection Report.
	Equipment Report.
	Well Card.
	Well Visit.
	Daily Drilling Reports.
	Logs. Large scale Small scale

CEMENTING RECORD (Plug, Squeeze, etc.)				PERFORATING RECORD (Bullet, Jet)				SERVICING RECORD (Acidizing, Fracing, etc.)			
Date	From	To	Remarks	Date	From	To	Remarks	Date	From	To	Remarks
April 13 & 14/64	Surface	T.D.	550 sacs of cement used.				H/A				N/A

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.	P.P.B.H.P.	I.H.P.	F.H.P.	REMARKS
														N/A

Lab. No.	Sample	From	To	Source	Remarks	PRESENT STATUS OF WELL			
					N/A	Oil		(Interval)	
						Gas		(Interval)	
						Dry		D/I.	
						Susp			

Company **Pan American Petroleum Corporation**
 Signed by *[Signature]*
 Title **Exploration Group Supervisor**
 Date **May 8, 1964**

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



DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
RESOURCES 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 made hereby to amend Drilling Authority No. 129, concerning Pan American - Shell Kakisa D-19

(Name and Number of Well)

The following amendments are required:

We would like to move the location approximately 3400' northeast of the original location. The co-ordinates are as follows: Grid area: 61° 00'; 118° 00'

Latitude 60° 58' 36"

Longitude 118° 03' 28"

which changes the well name to Pan American - Shell Kakisa L-19

Reasons for the amendments:

This is considered a more desirable location on the basis of information from the drilled wells.

Dated at Calgary, this 19th day of March, 1964.

Signed by *[Signature]*

Title Exploration Group Supervisor

Company Pan American Petroleum Corporation

(For Resources Division use only)

APPROVED

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

Date 19th March, 1964

[Signature]
Assistant Oil Conservation Engineer

Forms to be submitted to the Oil Conservation Engineer, Calgary, Alberta.



DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
RESOURCES DIVISION

Application to Abandon a Well or Suspend Drilling

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

Name and number of well **Pan American - Shell Station L-19**
Location: Unit **60°38'36"** Section **19** Grid **61°00' 118°00'**
Latitude **60°38'36"** Longitude **118°03'28"**
From Established Reference Marker

Permit No. **3131** Lease No. **—**
Pan American Petroleum Corporation
Shell Oil Co. of Canada Ltd.
(Permitter, Licensee, Lessee)

Date of commencement of proposed programme **April 14, 1964**

OIL, GAS, AND WATER ENCOUNTERED (Depths)

Oil at **Nil**
Gas at **Nil**
Water at **Nil**
Total Depth **2436 (-1689 subsea)** Date of last operations **April 14, 1964**
Present condition of well

Plugged and abandoned.

CASING RECORD

Casing Elev O.D. Inches	Weight	Amount	Set At— XCD	Back of Cement	Method	Amount Pulled
1. 7"	20 lb.	191.9 feet	+ 555.2	90	circulate	Nil
2.			subsea			
3.						
4.						
5.						

PROPOSED ABANDONMENT PROGRAMME

Plug		Geological Formation	Number of Sacks of Cement	Remarks
No.	Position			
			550 sacs	Hole plugged from surface to T.D.

The following logs have been run **I.E.S., Sonic Gamma Ray Caliper by Schlumberger Logging.**
Other operations proposed **Nil.**

Operations to be carried out by **Big Indian Drilling Co.** Contractor Licence No. **23702**
Address **Calgary, Alberta** Address **Calgary, Alberta**
Responsible Agent in field **K. R. Coburn**
Dated at **Calgary, Alberta** this **21st** Day of **April** 19 **64**
Signed by **[Signature]** Company **Pan American Petroleum Corporation**
Title **Exploration Group Supervisor** Exploratory Licence No. **650**

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

(For RESOURCES DIVISION use only)

APPROVAL

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

Confirming oral approval given 13th April 1964

Dated **23rd April**, 19 **64**

Forms to be submitted in triplicate to Oil Conservation Engineer, Calgary, Alberta



DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
RESOURCES DIVISION

Application for a Drilling Authority

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

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

Name and number of well **Pan American - Shell Kalisa D-19**
Location: Unit **D** Section **19** Grid **61° 00'; 118° 00'**
Latitude **60° 58' 10"** Longitude **118° 03' 39"**
From Established Reference Marker

Elevation: Ground **790** K.B. **794** feet above sea-level.
Well is expected to produce from **Slave Point** formation at a depth
of about **2300'** feet.

Area assigned to well

(for Oil Conservation Engineer's use only)

Permit No. **3181** Lease No. **—** Acreage **62,244**
Permittee, licensee, or lessee **Pan American Petroleum Corporation - Shell Oil Co. of Canada Ltd.**
Exploratory Licence No. **650**
Surface owned by Crown or **Crown**

Petroleum and natural-gas rights owned by **Pan American Petroleum Corporation - Shell Oil Co. of Canada Ltd.**
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	Brand	New or Used	Estimated Depth	Sacks of Cement
1. 7"	20	J-55	Domestic	Used	200'	50
2.						
3.						
4.						
5.						

Expected water, gas, and oil horizons and type of control equipment **Gas and oil - Slave Point.**
B.O.P. arrangement. Double gate valve on bottom - one close on pipe or kelly, the other close on nothing. Top Began, which will close on pipe or kelly.

Well will be drilled with (Rotary) Rig No. **17** by **Rig Indian Drilling**
(Cable) (Drilling Contractor or company)
Calgary, Alberta

Responsible agent of applicant:— Contractor's Licence No. **23702**
At well **K. R. Coburn** At registered office **J. F. Trotter**
Address **Bentall Bldg., Calgary** Address **Bentall Bldg., Calgary**
It is understood that if changes become necessary, notice of the change of plan will be submitted.
Dated at **Calgary, Alberta**, this **23rd** day of **December**, 1963
Signed by **[Signature]** Company **Pan American Petroleum Corporation**
Title **Exploration Group Supervisor** Licence No. **650**

(For Resources Division use only)

APPROVED

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

The Company will submit to this office on Tuesday of each week the latest reports received by radio on the progress of the well.

Dated **30th December**, 1963

Forms to be submitted to Oil Conservation Engineer, Calgary, Alberta.

WELL HISTORY REPORT

PAN AMERICAN-SHELL KAKISA I-19

WELL HISTORY REPORT

PAN AMERICAN - SHELL KAKISA J-19

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The following is the Well History Report for the Pan American-Shell Kakisa L-19 well. This well was drilled jointly between Pan American Petroleum Corporation and Shell Oil Company of Canada Limited.

Section I - Summary of Well Data

- (a) Name of Well
Pan American-Shell Kakisa L-19.
- (b) Permittee, Licensee or Lessee
Pan American Petroleum Corporation - Shell Oil Company of Canada, Ltd.
- (c) Operator
Pan American Petroleum Corporation, Bentall Building, Calgary, Alberta.
- (d) Location
Unit L, Section 19, Grid 61°00', 118°00'
Latitude 60°58' 36"
Longitude 118°03' 28"
- (e) Co-ordinates
This test was not a development well.
- (f) Permit Number
3181
- (g) Drilling Contractor
Big Indian Drilling Company, Limited., Calgary, Alberta.
Rig No. 17, a heavy duty 2000 Gardner Denver.
- (h) Drilling Authority
No. 129, December 30, 1963.
- (i) Classification
New field well.
- (j) Elevations
K.B. +747 subsea
Ground +738 subsea.
- (k) Spudded
April 1, 1964.
- (l) Completion Date
April 14, 1964.
- (m) Total Depth and Plugged Back Total Depth
Drilling depth: 2436 (-1689 subsea)
Logging depth: 2439 (-1692 subsea)
The hole was cemented from surface to T.D., 550 sacs of cement was used.

(n) Well Status
Tight

(o) Rig Released
April 14, 1964

(p) Hole Size
9" 0-205 feet
6 1/4" 205-2436 feet

(q) Casing
7" surface casing was cemented to 193^{10'} feet. Casing specifications 7"
weight 20 pounds, grade J-55, brand domestic (The casing was set
using 90 sacs of cement).

Section II - Geological Summary

(a) Formation Tops

I.E.S. Log Tops

	<u>Depth</u>	<u>Subsea</u>
Hay River Shale	730	+ 17
Spence River Shale	1837	-1090
Pine Point	2133	-1386
Chinchaga	2343	-1596
Basal Sand	2390	-1643
Granite	2432	-1685

Sample Tops

Hay River Shale	830	- 83
Spence River Shale	1837	-1090
Pine Point	2110?	-1363
Chinchaga	2340	-1593
Basal Sand	2403	-1656
Granite	2414	-1667

(b)

Cored Intervals

Depth 2157-2183' (-1410 to -1436 subsea)

Formation - Pine Point

Recovery - 26 feet.

(c) Core Description

- 2157-2159 Shale dk. brn. sl. calc. with abund. corals, coenities type
grd. to med. dk. brn. limes; limesilt, bit. with few corals
and small foss. frags., trace bleeding oil.
- 2159-2160 Limestone med. brn. limesilt with few skeletal frags. trace
inter. grn. por. & lime oil very poor permeability.
- 2160-2161 Long vertical fractures with lime oil, few dk brn. bit. sh.
inter.
- 2161-2162 Few corals, bit. lime. med-limesilt with few foss. frags.
- 2162-2163 Very abund. corals in lime mud poss. strom or amphipora.
- 2163-2164 Very bitum. in part with abund. small frags. of corals and
crinoids.
- 2164-2165 Small brack. abund. corals coenite type.
- 2165-2166 Ls. very fine sand, abund. coenite type.
- 2166-2167 Becoming very bitu. to dk. brn. sh.
- 2167-2168 Shale dk. brack., calc. bard bar.
- 2168-2169 ls. lt. to med. brn. and fn. grn. pell., few small bracks. sl. bit.
- 2169-2170 Ls. med. brn. lime bud with aund. corals & crinoid frags,
slightly bitum.
- 2170-2183 Ls. med. brn. lime mud with abund. corals and crinoid frags.,
sl. bitum. few small brack. fairly common, thin sh.

Coring Times -

<u>Depths</u>	<u>Time - Minutes per foot</u>
2157	

35

2158

25

<u>Depth</u>	<u>Time - Minutes per foot</u>
2159	18
2160	20
2161	24
2162	25
2163	28
2164	28
2165	24
2166	24
2167	29
2168	24
2169	26
2170	25
2171	31
2172	35
2173	33
2174	17
2175	29
2176	24
2177	28
2178	29
2179	25
2180	32
2181	29
2182	28
2183	

(d) Sample Description
 0 to
 30 No samples taken.

40 to
 180 Unconsolidated glacial sand and gravel.
 190 Ss. lt. gy.-lt. grn. gy., v.f.-f. grn., calc., silt. glauc.,
 trace por.
 200 Ss and siltstone aa.
 210 Sh., m. brn. gy., soft, sli. calc., trace sh. rusty red with abund.
 cse. qtz. grns.
 220 Sh., m. brn. gy.-m. gy. grn., sli. ca.c., soft, abd. rusty
 red sh. , aa.
 230 Sh. aa.
 240 Siltstone, v.f.ss., lt. gy. grn. qtz., calc., soft, trace foss.
 250 Ss., lt. gy. grn., v.f.-f. grn. quartz, v. calc., well
 sorted, sub-rounded.
 260 Ss. aa., grading to sandy ls., slit. skeletal abd. beach frags.
 270 aa. interbedded calc., ss., and sandy ls., aa.
 280 Sh., m. gy. grn.-m. gy. brn., slit. calc., soft.
 290 Sh. aa., with trace Ss. v. lt. gy., v.f. grn., silt., qtz., v.calc.
 300 Sh. lt. gry-grn., slit. calc.
 310 Ls., lt.gy.-lt.gy.brn.lime silt., slit. arg., trace brach, trace qtz.
 and silt.
 320 Siltstone, lt. gry. grn., calc., grading to silty ls.
 330 aa.
 340 Ls. tan, clean lime mud with siltstone and Ls. aa.
 350 Sh., lt. gy. grn., v. calc., sli. silty in part.
 360 aa., abd. rusty red sh. with abd. qtz grn. (cave?).
 370 Ls., lt. gy. lime mud, silty-sandy in part, sli. arg.
 380 aa., lime mud with few f. grn. pellets or skeletal grains.
 390 aa.
 400 aa. becoming silty in part.
 410 aa.
 420 aa.
 430 aa.
 440 aa. few skeletal grains in lime mud, silty in part.
 450 aa. becoming very silty to sandy, few skeletal grains.
 460 aa. skeletal in part, crinoids.
 470 aa. possible lime silt to lime sand, but textures indistinct.
 480 aa.
 490 aa. interbedded lime muds-lime silts, few crinoids.
 500 aa. trace skeletal sand.
 510 Ls. lt. brn., lt. gy., lime mud-lime silt, trace skeletal sand, silty
 in part.
 520 aa. tan, lime mud.
 530 aa.
 540 aa.
 550 aa. sli. arg. lime mud to lime silt.

560 Ls., tan, lime mud, trace lt. gy. grn. sh.
 570 aa. increase in arg. content in Ls.
 580 aa.
 590 aa.
 600 aa. abd. lt. grn., calc. sh.
 610 aa. trace clean, tan lime sand.
 620 Ls., lt. brn., clean lime mud, few grains, brachs.
 630 aa.
 640 aa.
 650 aa.
 660 aa. becoming silty in part.
 670 aa. increase in silt content.
 680 aa.
 690 aa. trace lime sand - silt.
 700 aa. silty in part.
 710 aa. very silty in part-calc. siltstone.
 720 Ls., lt. gy.-lt. gy. grn., silty to very silty, trace lt. grn. calc. sh.
 730 to
 830 aa.
 840 Sh. lt. gy. grn., v. calc., lumpy.
 850 aa.
 860 to
 950 aa.
 960 aa. trace arg. ls.
 970 to
 1010 aa.
 1020 aa. trace lt. brn. arg. limestone.
 1030 aa.
 1040 aa. abd. silty arg. ls.
 1050 to
 1090 aa.
 1100 Ls. light brn. gy., lime mud with few v.f. - f. grns., slit. arg.
 1110 Ls., lt. brn. gy., lime mud with few v.f.-f. grns. slit.arg.
 1120 aa.
 1130 Sh., lt. gy. grn., calc. with Ls. aa.
 1140 aa.
 1150 aa.
 1160 Ls. lt. gy. brn., lime mud-lime silt, sli. silty, sli. arg.
 1170 aa.
 1180 aa. becoming more arg.
 1190 aa.
 1200 aa.
 1210 aa.
 1220 aa. sample 50% grn. sh.
 1230 aa.
 1240 aa.
 1250 aa.
 1260 aa. decrease in Ls. content, sample mainly grn. shale.

1270 aa.
 1280 aa.
 1290 aa.
 1300 aa.
 1310 Sh. lt. gy. grn., calc., trace lt. gy. Ls.
 1320 Sh., aa. more abd. Ls., lt. gy. recryst. sli. silty.
 1330 Sh. and Ls. aa.
 1340 aa.
 1350 aa. trace brach.
 1360 to
 1530 aa.
 1540 aa. trace dk. brn., non-calc., silty sh.
 1550 Siltstone, m.-dk. brn. sli. calc., arg., hard, dense.
 1560 aa. siltstone aa. and dk. brn, silty sh.
 1570 Sh. m.-dk. brn., silty, sli. calc.
 1580 aa.
 1590 aa. becoming dk. brn. bituminous.
 1600 aa. sample 75% grn. shale.
 1610 aa. br. shale, may be cave from above.
 1620 aa. mainly gy. grn. sh., trace only of dk. brn. sh.
 1630 aa.
 1640 aa.
 1650 aa.
 1660 to
 1830 Sh. lt. gy. grn., sli. calc. in part, splintery, trace m.-dk. brn. silty sh.
 1840 aa. abd. sh., m-dk. brn., silty, calc. hard.
 1850 to
 1940 Sh., lt. gy.-grn., sli. calc. and dk. brn. sh. aa.
 1950 Ls., lt.-m. brn., lime mud, recrystal., bit., with trace dk. brn. calc. sh. aa.
 1960 Sh., dk. brn., calc., hard, petrolif. odor, bit., blocky.
 1970 Sh. aa., trace, lt.-m. brn. Ls., sli. bit., recrystal. lime mud.
 1980 aa. very calc. sh. to bit. Ls.
 1990 Ls. lt. gy. brn., bit. to very bit.
 2000 aa.
 2010 aa.
 2020 aa.
 2030 aa. abd. lt. gy. grn. sh.
 2040 aa.
 2050 aa. grn. sh. content increasing.
 2060 aa.
 2070 aa.
 2080 aa.
 2090 aa.
 2100 aa.
 2110 aa. trace m. brn. bit. Ls.
 2120 Ls. m. brn., lime mud, bit.
 2130 Ls., lt.-m. brn., lime mud with v.f. grn. non-skeletal grains, sli. bit.
 2140 aa. lt.-dk. brn. lime mud, sli. bit. to very bit.
 2150 Ls., lt.-dk. brn., lime mud to cse. CA abd. amph., corals.

- 2160 aa. poss. strom., trace oil stain, trace pr. por., sli. dol.
 2170 aa. lime mud to lime silt, sli. bit., abd. coenities, corals, few skeletal frags.
 2180 aa. Lime mud bit., brachs, common throughout.
 2190 aa.
 2200 aa.
 2210 Ls., lt.-m. brn., lime mud, sli. bit. in part, pelletoidal in part, fairly abnd. foss. frags.
 2220 Ls., lt. brn., cse. grn., poorly sorted crinoidal sand, lime mud and blk. bit. matrix.
 2230 Ls., m. brn., crinoidal sand in abd. bit. lime mud matrix.
 2240 aa. abd. crinoids in lime mud, bit. in part.
 2250 aa. decreasing amounts of crinoids.
 2260 aa.
 2270 aa. abnd. crinoids in clean to sli. bit. lime mud.
 2280 aa. trip sample, v. poor aa.
 2290 aa.
 2300 Ls., tan, mainly clean lime mud with few skeletal grains and trace recrystal. f. grn. lime sand, sli. trace pin point por.
 2310 aa. tan, chalky lime mud lime silt with few foss. frags. and grains.
 2320 aa. sli. trace pin point por., very chalky Ls.
 2330 aa. sli. increase in amount of por. with some dead ? oil stain.
 2340 aa. sli. trace pin point por. and oil stain in chalky lime, poss. trace tan dol.
 2350 Dol., tan, cryptoxln, massive dense, homogenius, trace cryptoxln, anhy.
 2360 Dol., m. brn., cryptoxln, small patches of anhydrite, plus tan bedded anhyd.
 2370 Dol. aa. trace relief f. grn. texture, trace anhydrite, trace heavy dk. oil stain.
 2380 Dol. aa. sli. trace anhydrite.
 2390 aa. irregular patches of anhydrite in the dol.
 2400 aa. sli. pale orange tinge to dol. aa., with interbedded grn. sh. sli. calc., blocky.
 2410 Ss., white, qtz., few pink felds, f.-cse. grn., pr. sort, subrounded, calcite matrix.
 2420 aa. more feldspar and grading to granite, qtz., pink felds and biotite.
 2430 to
 2436 Granite, pink felds, white-pale grn. qtz., dk. grn. biotite cse. grn.
 T.D.

Section III - Engineering Summary

- (a) Report of Drill Stem Tests
No tests run.

- (b) Casing Record
7" surface casing was run to 193 feet (no casing set below the surface casing).

- (c) Bit Record

<u>Bit No.</u>	<u>Size</u>	<u>Hrs. Drilling</u>	<u>Depth Out</u>
1	9" OSC	15	205
2	6 1/2" DT	18.5	840
3	6 1/2" DT	24.5	1695
4	6 1/2" OSC 3	27	2100
5	6 1/2" OSC 3	6.5	2157
6	6 1/8" Diamond	11.5	2183
7	6 1/2" OSC	18.5	2280
8	6 1/2" OSC	19.75	2380
9	6 1/2" OWV	12.5	2436

- (d) Mud Report

<u>Type</u>	<u>Amount Used</u>
Magco Gel	8,700 lbs.
Fibre seal	400
Sapp	200
Sawdust	2,100
Spersene	1,950
Tenathin	1,100
Mylo gel	900
Caustic Soda	750
Soda Ash	300

- (e) Deviation Record
No deviation test run as the well will be cemented from surface to T.D. upon completion.

- (f) Abandonment Plugs
The hole was cemented from surface to T.D., no plugs were set. (550 sacs of cement was used).

- (g) Lost Circulation Zones
There were no lost circulation zones.

- (h) Report of Blowouts
There were no blowouts.

Section IV - Logs

An I.E.S. and a Sonic, Gamma Ray and Caliper log was run on April 13, 1964, from base of surface casing to 2439' (one copy of each log is enclosed with this report).

Section V - Analysis

(a) Core Analysis

A core was cut from 2157 to 2183 feet in the Pine Point formation. (A detailed description of the core is outlined in Section II (c)).

(b) Water Analysis

No water encountered.

(c) Gas Analysis

No gas encountered.

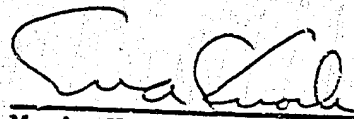
(d) Oil Analysis

Slight amounts of bleeding oil was evident in core cut from 2157 to 2183 feet. Quantity was minute and no analysis was made.

Section VI - Completion Summary

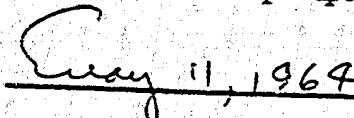
- (a) Tubing Record
The well was plugged off with cement.
- (b) Perforation Record
No intervals were perforated.
- (c) Cementation Record
No plugs were set. The well was cemented from surface to T.D., upon abandonment. (550 sacs of cement was used).
- (d) Acidization and Fracturing Record
Not applicable.
- (e) Back Pressure and Production Tests
Not applicable.

Signed by:



M. A. Knock,
Exploration Group Supervisor

Dated:





PAN AM - SHELL
KAKISA No.3 (E 20)

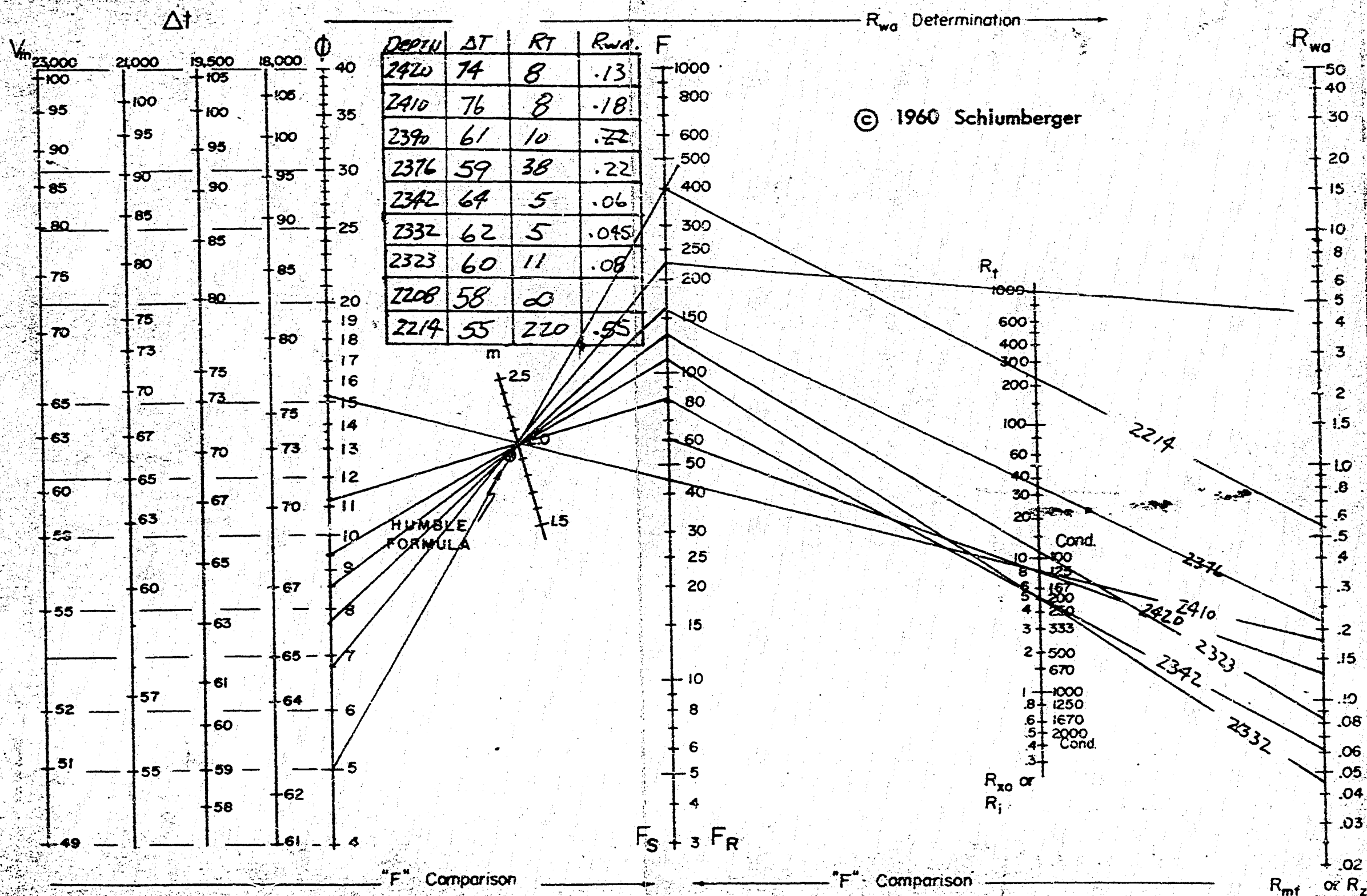
PAN AM - SHELL
KAKISA L-19

PAN AM - SHELL
KAKISA No.4 (D-19)

CO. PAN AMERICAN PETROLEUM CORPORATION

WELL PAN AM-SHELL KAKISA L-19.

R_{wa} AND F_R / F_S COMPARISON METHODS: FOR CONSOLIDATED FORMATIONS



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

FIRST TOUR FROM 6.00 A.M. TO 8.00 A.M.

FIRST TOUR FROM 6.00 A.M. TO 8.00 A.M.

MOVING OUT FROM KAKISA LAKE TO
ENTERPRISE

**DRILLER'S
SIGNATURE**

12. CO	MOVE
--------	------

MOVING FROM KAKITA LAKE TO
ENTERPRISE N.W.T

DRILLER'S
SIGNATURE

DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.

DRILLER'S
SIGNATURE

H.R. Coburn
PAN AMERICAN REPRESENTATIVE


CONTRACTOR'S REPRESENTATIVE

PAN AMERICAN PETROLEUM CORPORATION
DAILY DRILLING REPORT

RIG NUMBER 17 CONTRACTOR'S NAME BIG IRON DRILLING CO 24 HOUR PERIOD ENDING AT MIDNIGHT APRIL 14 1964
LEASE NAME POW. IN S. 36. 40. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 83

FIRST TOUR FROM 12 M. TO 1-3 M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
1.00	2.00	CEMENT			Lay Down D.P. - DC?
2.00	3.00				TEAR OUT.
					A 4 PLUG 100 SACS
					2 nd CACI

DAYWORK: HOURS _____ RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE		BIT NO.	SIZE	KIND
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
									DRILLER'S SIGNATURE <i>[Signature]</i>	

SECOND TOUR FROM 8.00 A.M. TO 7.00 P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8.00	7.00	Rig out			Teas rig shown & load equipment to move out.

DAYWORK: HOURS _____ RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE		BIT NO.	SIZE	KIND
		DEVIATION INSTRUMENT			DEPTH		DEGREES OFF			
									DRILLER'S SIGNATURE	

THIRD TOUR FROM _____ M. TO _____ M.

[illegible]

DAYWORK: HOURS _____ RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE		BIT NO.	SIZE	KIND
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
								DRILLER'S SIGNATURE		

APPROVED

K. R. Coburn
PAN AMERICAN REPRESENTATIVE

APPROVED

~~CONTRACTOR'S REPRESENTATIVE~~

PAN AMERICAN PETROLEUM CORPORATION

DAILY DRILLING REPORT

RIG NUMBER 17 CONTRACTOR'S NAME BIG INDIAN DRILLING CO. 24 HOUR PERIOD ENDING AT MIDNIGHT APRIL 13/64 1964
 LEASE NAME PAN AM SHEL MARISA WELL NO. L-19 FIELD WILDCAT

FIRST TOUR FROM 12 P.M. TO 8 A.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
12 ⁰⁰	8 ⁰⁰		2392	2430	DRILLING

DAYWORK: HOURS 8 RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	RH.	BIT NO.	SIZE	KIND
		12 PM	98	53	5.2	3/32	13.0	9	6 1/4	OWV
		6 AM	10	58						
		DEVIATION INSTRUMENT			DEPTH		DEGREES OFF			
									DRILLER'S SIGNATURE <i>W.D. Hawke</i>	

SECOND TOUR FROM 8 A.M. TO 8 P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8 ⁰⁰	9 ⁴⁵	DRILLING	2430	2436	GRANIT
9 ⁴⁵	10 ¹⁵				CIRCULATE FOR B.H. SAMPLE
10 ¹⁵	12 ¹⁵				PULL OUT.
12 ¹⁵	1 ⁰⁰				RIG UP SLUMBERGER
					CLEAN OUT MUD TANK Haul WATER. SPOT
	6 ¹⁵				CEMENT PUMP & START MOVE CEMENT.
6 ¹⁵	8 ⁰⁰				RUN IN HOLE -

DAYWORK: HOURS 12 RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE		BIT NO.	SIZE	KIND
10	SPER SENE	8.	9.8	117	5.5			9.	6 1/4	OWV
4.	TANNATHIN	10	10.1	117						
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
								DRILLER'S SIGNATURE		
										

THIRD TOUR FROM 8 P.M. TO 12 P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8 ⁰⁰	8 ³⁰				RIG TO CEMENT.
8 ³⁰	9 ⁰⁰				RUN PLUG #1 w/ 150 SXX.
9 ⁰⁰	10 ⁰⁰				HAUL WATER.
10 ⁰⁰	10 ³⁰				RUN PLUG #2 w/ 150 SXX.
10 ³⁰	11 ³⁰				HAUL WATER.
11 ³⁰	12 ⁰⁰				RUN PLUG #3 w/ 150 SXX.

DAYWORK: HOURS 8 RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

LOG SHEET										
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE		BIT NO.	SIZE	KIND
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
								DRILLER'S SIGNATURE <i>W.D. Hawke</i>		

APPROVED

K.R. Colburn
PAN AMERICAN REPRESENTATIVE

APPROVED

W.D. Hawke
CONTRACTOR'S REPRESENTATIVE

PAN AMERICAN PETROLEUM CORPORATION

DAILY DRILLING REPORT

RIG NUMBER 17 CONTRACTOR'S NAME PIC INDIAN DRILLING CO. 24 HOUR PERIOD ENDING AT MIDNIGHT APRIL 12/64 1964
 LEASE NAME PAN AM SHELL FISHING WELL NO 6-19 FIELD WILDCAT

FIRST TOUR FROM 12 P. M. TO 8 P. M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
12 ⁰⁰	8 ⁵⁰		2292	2337	DRILLING

DAYWORK: HOURS 9 RATE HOURS RATE HOURS W/D PIPE

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	P.N.	BIT NO.	SIZE	KIND
	600	2 AM	10.2	52	4.4	3/32	13.0	8	6 1/4	OSC-
		6 AM	10.0	50						
		DEVIATION INSTRUMENT			DEPTH		DEGREES OFF			
							DRILLER'S SIGNATURE		W.D. Hawke	

SECOND TOUR FROM 8 A. M. TO 8 P. M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8 ⁰⁰	3 ⁰⁰	DRILLING	2337		LIMESTONE
3 ⁰⁰	6 ⁰⁰	DRILLING	2380		DOLOMITE
6 ⁰⁰	8 ⁰⁰	1			PULL OUT

DAYWORK: HOURS 12 RATE HOURS RATE HOURS W/D PIPE

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	P.F.	BIT NO.	SIZE	KIND
3	SODA ASH	10 AM	9.8	47	5.1	1/32		8	6 1/4	OSC,
1	CAUSTIC	4 PM		49						
6	SPERSENE.	DEVIATION INSTRUMENT			DEPTH		DEGREES OFF			
3	TANMATHIN						1			
2	MV LOGEL								DRILLER'S SIGNATURE D. Long.	

THIRD TOUR FROM 8 P. M. TO 12 P. M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8 ⁰⁰	9 ¹⁵				RUN IN
9 ¹⁵	12 ⁰⁰		2380	2392	DRILLING DOLOMITE

DAYWORK: HOURS 4 RATE HOURS RATE HOURS W/D PIPE

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE		BIT NO.	SIZE	KIND
600 ⁰⁰	GEL							9	6 1/4 GALV	OSC
150 ⁰⁰	SPERSENE	10 PM 9.8 55								
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
								DRILLER'S SIGNATURE W.D. HAWKES		

APPROVED

K.R. Loburn
PAN AMERICAN REPRESENTATIVE

APPROVED

W.D. Hawkes
CONTRACTOR'S REPRESENTATIVE

PAN AMERICAN PETROLEUM CORPORATION

DAILY DRILLING REPORT

RIG NUMBER 17 CONTRACTOR'S NAME Big Indian Drilling 24 HOUR PERIOD ENDING AT MIDNIGHT April 11/64 1964
 LEASE NAME Pan Am Shell House WELL NO. 1-19 FIELD WILDCAT

FIRST TOUR FROM 12 P.M. TO 8 P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
1200	1230		2175	2180	Run 6 1/8 - 6 1/4
1230	800		2180	2225	Drilling

DAYWORK: HOURS 4 RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

DAYWORK: HOURS										
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	PH.	BIT NO.	SIZE	KIND
		2000	103	55				7	6 1/4	OSC
		600	103	47	5.2	3/32	13.0			
		DEVIATION INSTRUMENT			DEPTH		DEGREES OFF			
							DRILLER'S SIGNATURE		W.D. Hawks	

SECOND TOUR FROM 8 A.M. TO 8 P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8.6		Drilling	2225	2280	Run in
6.8					PULLING OUT OF HOLE

DAYWORK: HOURS 12 RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

DAYWORK: HOURS										
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	PH.	BIT NO.	SIZE	KIND
2	CAUSTIC	100	100	43	-			7	6 1/4	OSC.
2	TANNATHIN	45								
2	MYLOGEL	DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
17	MAGCO GEL									
								DRILLER'S SIGNATURE 		

THIRD TOUR FROM 8 P.M. TO 12 P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8	1015				Run in
1015	1200		2280	2292	Drilling

DAYWORK: HOURS 8 RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

DATA WORKING RECORD										
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND	
500	Gel						8	6 1/4	OSC	
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
								DRILLER'S SIGNATURE W.D. Hawks		

APPROVED _____

PAN AMERICAN REPRESENTATIVE

APPROVED _____

CONTRACTOR'S REPRESENTATIVE

PAN AMERICAN PETROLEUM CORPORATION

DAILY DRILLING REPORT

RIG NUMBER 17 CONTRACTOR'S NAME BIG INDIAN DRILLING 24 HOUR PERIOD ENDING AT MIDNIGHT APRIL 10/64 1964
 LEASE NAME PAN AM. SUEB KATISA WELL NO. 2-19 FIELD WILDCAT

FIRST TOUR FROM 12 P.M. TO 8 A.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
12 ⁰⁰	230				PULL OUT. MEASURE OUT.
230					PICK UP AND CHECK CORE DR. TAKE RUBBER OUT
	400				OF JETS. - INSTALL NEW O' RING
4 ⁰⁰	630				RUN IN W/ CORE DR. - SET BACK CDC: PICK UP 5 SINGLES
630	645				CIRC TO BOTTOM, DROP BALL
645	800		2157	2159	CUT CORE #1

DAYWORK: HOURS 4 RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
		7 ⁰⁰ AM	9.8	58	3.2	2/32	PF336	6 1/4	D
		DEVIATION INSTRUMENT		DEPTH	DEGREES OFF				
							DRILLER'S SIGNATURE <u>W.D. HANCOCK</u>		

SECOND TOUR FROM 8⁰⁰ A.M. TO 8⁰⁰ P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8 ⁰⁰	630	Coring	2159	2153	2157 2158 35 2164 2165 28 2171 2172 31 2178 2179 24
					2158 2159 25 2165 2166 24 72 73 35 2179 80 25
					2159 2160 18 2166 2167 24 73 74 33 80 81 32
630	8 ⁰⁰	Pulling Out			2160 2161 20 2167 2168 29 74 75 17 81 82 29
					2161 2162 24 2168 2169 24 75 76 29 82 83 28
					2162 2163 25 2169 2170 26 76 77 24
					2163 2164 28 2170 2171 28 77 78 28

DAYWORK: HOURS 12 RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
		10 ⁰⁰ AM	9.5	52	3/3	2/32	PF336	6 1/4	DIAMOND CORE
		DEVIATION INSTRUMENT		DEPTH	DEGREES OFF				
							DRILLER'S SIGNATURE <u>J. J. J.</u>		

THIRD TOUR FROM _____ M. TO _____ M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
800	845				PULL OUT
845	915				REC CORE #1 100% REC
915	945				SEE CORE DR.
945	1130				RUN IN.
1130	8200		2157	2175	REACT 6 1/4 - 6 1/4

DAYWORK: HOURS 8 RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
							7	6 1/4	OSC
		DEVIATION INSTRUMENT		DEPTH	DEGREES OFF				
							DRILLER'S SIGNATURE <u>W.D. HANCOCK</u>		

APPROVED

K.R. Sobren
PAN AMERICAN REPRESENTATIVE

APPROVED

W.D. Hancock
CONTRACTOR'S REPRESENTATIVE

PAN AMERICAN PETROLEUM CORPORATION

DAILY DRILLING REPORT

RIG NUMBER 17 CONTRACTOR'S NAME BIG INDIAN DRILLING CO 24 HOUR PERIOD ENDING AT MIDNIGHT APRIL 9/64 19
 LEASE NAME PAU AM SHEL 40152 WELL NO. 2-19 FIELD WILDECAT

FIRST TOUR FROM 12 P.M. TO 8 A.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
12 W	8:00		1995	2075	DRILLING SHALE

DAYWORK: HOURS 8 RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	PH.	BIT NO.	SIZE	KIND
100#	CAUSTIC SODA.	12:00	9.6	55	4.5	3/32	11.5	4	6 1/4	OSC-3
50#	SPERSENE	6:00	9.6	52						
		DEVIATION INSTRUMENT			DEPTH		DEGREES OFF			
									DRILLER'S SIGNATURE <i>W.D. Hawke</i>	

SECOND TOUR FROM 8 A.M. TO 8 P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8:00	10:00	DRILLING	2075	2100	shale.
10:00	10:20				CIRCULATE SAMPLE
10:20	12:30				Pull out
12:30	4:30				RUN IN NEW BIT TIGHT, HOLE WASH OUT WITH KELLY
4:30	8:00	DRILLING	2100	2140	SHALE.

DAYWORK: HOURS 12 RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	PH.	BIT NO.	SIZE	KIND
2	CAUSTIC	8 AM	9.8	50				4	6 1/4	OSC 3
2	MYLO CEL	6 PM	10.3	70				5	6 1/4	OSC 3.
2	TANNATHIN	DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
2	SUPERSENE -									
								DRILLER'S SIGNATURE 		

THIRD TOUR FROM 8 P.M. TO 12 P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8:00	11:00		2140	2156	DRILLING
11:00	12:00				CIRC. SAMPLE @ 2156' - CIRC TO CORE

DAYWORK: HOURS 4 RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CARE	PH.	BIT NO.	SIZE	KIND
		8:00	10	50				5	6 1/4	osc-3
		10:00	9.9	65						
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
								DRILLER'S SIGNATURE		
	W.D. Hawke									

APPROVED

K. R. Coburn
 PAN AMERICAN REPRESENTATIVE

APPROVED

[Signature]
 CONTRACTOR'S REPRESENTATIVE

PAN AMERICAN PETROLEUM CORPORATION

DAILY DRILLING REPORT

RIG NUMBER 17 CONTRACTOR'S NAME BIG INDIAN DRILLING CO 24 HOUR PERIOD ENDING AT MIDNIGHT APRIL 8/64 1964
 LEASE NAME PAN AM SHELL KANSAS WELL NO. L-19 FIELD WILDCAT

FIRST TOUR FROM 12 P.M. TO 8 P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
12 ⁰⁰	8 ⁰⁰				CIRC. WAIT SWIVEL PARTS.

DAYWORK: HOURS 0 RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
							4	6 3/4	OSC-3
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF			
						DRILLER'S SIGNATURE		W.D. Hawk.	

SECOND TOUR FROM 8 A.M. TO 8 P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8 ⁰⁰	10 ⁰⁰				Fix SWIVEL
10 ⁰⁰	1 ⁰⁰				CONVNT. GET TO BOTTOM. MIX GEL + REAM TO BOTTOM
1 ⁰⁰	8 ⁰⁰		1800	1920	DRILLING SHALE.

DAYWORK: HOURS 10 RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
2	MYLO GEL	12 ⁰⁰	9.4	51			4	6 3/4	OSC-3
5	CAUSTIC	4	9.5	52					
4	TANNATHIN	DEVIATION INSTRUMENT		DEPTH	DEGREES OFF				
6	SUPER SENE								
18	MAGCO GEL						DRILLER'S SIGNATURE <u>J. S. S.</u>		

THIRD TOUR FROM 8 P.M. TO 12 P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8 ⁰⁰	12 ⁰⁰		1920	1995	DRILLING SHALE

DAYWORK: HOURS 4 RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
		800	9.6	63			4	6 3/4	OSC-3
		1200	9.6	55					
		DEVIATION INSTRUMENT			DEPTH		DEGREES OFF		
							DRILLER'S SIGNATURE <i>W.D. Hawk</i>		

APPROVED _____

PAN AMERICAN REPRESENTATIVE

APPROVED _____

CONTRACTOR'S REPRESENTATIVE

FIRST TOUR FROM 12 P.M. TO 8 A.M.

FIRST TOUR FROM 12 P M. TO 8 P M.

LAYED DOWN 1-15 J.T.D.-D.P., WASHED OUT

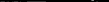
DAYWORK: HOURS 8 RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

DRILLER'S SIGNATURE *W. J. Hawk*

SECOND TOUR FROM 8 A.M. TO 8 P.M.

DUMP MUD TANK HAVE WATER
CONDITION MUD & CIRCULATE

DAYWORK: HOURS 12 RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

DRILLER'S SIGNATURE 

THIRD TOUR FROM 8 P. M. TO 12 P. M.

Wait - Survey Parts. C. 25

DAYWORK: HOURS _____ RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

DRILLER'S SIGNATURE *W.D. Galt*

APPROVED A. R. Powell
PAN AMERICAN REPRESENTATIVE

APPROVED _____
CONTRACTOR'S REPRESENTATIVE

PAN AMERICAN PETROLEUM CORPORATION
DAILY DRILLING REPORT

RIG NUMBER 17 CONTRACTOR'S NAME BIG INDIAN DRILLING 24 HOUR PERIOD ENDING AT MIDNIGHT APRIL 6/64 1964
LEASE NAME PAN AM SHELL KANSAS WELL NO L-19 FIELD WILDCAT

FIRST TOUR FROM 12P M. TO 8P M.

[illegible]

DAYWORK: HOURS 8 RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
		WATER					3	6 1/4	SMITH. D.T.
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF			
								DRILLER'S SIGNATURE	W.D. Hawk

SECOND TOUR FROM 8 A M. TO 8 P M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8.	1230		1390	1520	DRILLING. SHALE.
1230	2.30				DUMP MUD TANK HAUL WATER + MIX MUD.
2.30	2.30		1530	1550	DRILLING + MIX MUD.
3.30			1550	1620	DRILLING.

DAYWORK: HOURS 12 RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
26	MAGG GEL		9.35				3	6 1/4	SMITH DT
8	SUPERSENE								
4	TANWATHIN	DEVIATION INSTRUMENT		DEPTH	DEGREES OFF				
6	MY LO GEL								
3	CHEMISTIC SODA						DRILLER'S SIGNATURE		

THIRD TOUR FROM 8 P.M. TO 12 P.M.

[illegible]

DAYWORK: HOURS 4 RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

[illegible]

APPROVED A. A. [Signature]
PAN AMERICAN REPRESENTATIVE

APPROVED _____
CONTRACTOR'S R _____

PAN AMERICAN PETROLEUM CORPORATION
DAILY DRILLING REPORT

RIG NUMBER 17 CONTRACTOR'S NAME BIG INDIAN PRIG. 24 HOUR PERIOD ENDING AT MIDNIGHT APRIL 5 1964
LEASE NAME PAN AM STELL KAKISKA. WELL NO. 619 FIELD WILD-CAT.

FIRST TOUR FROM 12^P M. TO 7A M.

[illegible]

DAYWORK: HOURS 4 RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BR. NO.	SIZE	KIND
		DEVIATION INSTRUMENT			DEPTH	DEGREES OFF			
								DRILLER'S SIGNATURE	

SECOND TOUR FROM 6 A.M. TO 8 P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8.	9.				CIRCULATE ABOVE FISH.
9.	1.30				PULL BIT + RUN IN AGAIN. + change
1.30	2.00				PULL OUT + MAKE UP FISHING TOOL
2.	2.30				RUN IN TO FISH.
2.30	4.				PULL OUT + CHANGE SLIPS IN OVERSHOT.
4.	5.				RUN IN + CATCH FISH.
5.	8.				PULL OUT + change tool + START BACK IN.

DAYWORK: HOURS 12 RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

[illegible]

THIRD TOUR FROM 8³⁰ M. TO 12³⁰ P.M.

[illegible]

DAYWORK: HOURS 8 RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

[illegible]

APPROVED

H.R. Lohman
PAN AMERICAN REPRESENTATIVE

APPROVED

DRILLER'S SIGNATURE *red Thorne*

R. Thorne

CONTRACTOR'S REPRESENTATIVE

PAN AMERICAN PETROLEUM CORPORATION
DAILY DRILLING REPORT

RIG NUMBER 17 CONTRACTOR'S NAME BIG INDIAN DRILLING 24 HOUR PERIOD ENDING AT MIDNIGHT APRIL 4 1964
LEASE NAME PAN AM SHEL MARINA WELL NO L-19 FIELD WILDCAT

FIRST TOUR FROM 12³⁰ M. TO 8 A.M.

[illegible]

DAYWORK: HOURS 8 RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE		BIT NO.	SIZE	KIND
		WATER.						2	1 1/4	SOUTH PT.
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
								DRILLER'S SIGNATURE W.H.O. [Signature]		

SECOND TOUR FROM 8 A.M. TO 8 P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8.	11:30	DRILLING.			LIMESTONE.
11:30	12:00				PULL OUT, TWISTED OFF.
12:00	2.				STANDBY + CIRCULATE.
2.	2:20				RUN IN HOLE WITH BIT, TO TOP OF FISH.
2:30	2:30				CIRCULATE.
7:30	4:00				PULL OUT.
4.	8.				CLEAN OUT MUD TANK + HAUL WATER + CIRCULATE.

DAYWORK: HOURS 14 RATE 1 HOURS 1 RATE 1 HOURS W/D PIPE 1

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
							2	6 1/4	DT Jet.
							3	6 1/4	DT.
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF			
								DRILLER'S SIGNATURE <i>D. L. ...</i>	

THIRD TOUR FROM 9:05 M. TO 12 P. M.

[illegible]

DAYWORK: HOURS 4 RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE		BIT NO.	SIZE	KIND
		DEVIATION INSTRUMENT			DEPTH	DEGREES OFF				
								DRILLER'S SIGNATURE <i>W. D. [Signature]</i>		

APPROVED

PAN AMERICAN REPRESENTATIVE

APPROVED

CONTRACTOR'S REPRESENTATIVE

PAN AMERICAN PETROLEUM CORPORATION
DAILY DRILLING REPORT

RIG NUMBER 17 CONTRACTOR'S NAME BIG INDIAN DRILLING CO. 24 HOUR PERIOD ENDING AT MIDNIGHT APRIL 3/64 1964
LEASE NAME _____ WELL NO. _____ FIELD _____

FIRST TOUR FROM 12 P.M. TO 7 A.M.

FIRST TOUR FROM 12 P M. TO 7 A M.

[illegible]

DAYWORK: HOURS 8 RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE		BIT NO.	SIZE	KIND
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
								DRILLER'S SIGNATURE	<i>W.D. Hawke</i>	

SECOND TOUR FROM 8 A.M. TO 8 P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8.	12:30				SET MUD TANK & HAUL WATER.
12:30	2:40				PRESSURE UP ON BHP. & TIGHTEN CASING ROW.
2.	4.				DRILL OUT PLUG & SHOG.
4.	8.		205	385	DRILLING shale.

DAYWORK: HOURS 12 RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

[illegible]

THIRD TOUR FROM 5 P M. TO 12 P M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8:00	11:00		385	500	DRILLING
11:00	12:00				CLEAN MUD TANK
					21 Sgs SANDTEST FOR RIO MAT.

DAYWORK: HOURS 4 RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

[illegible]

APPROVED

PAN AMERICAN REPRESENTATIVE

APPROVED

CONTRACTOR'S REPRESENTATIVE

PAN AMERICAN PETROLEUM CORPORATION

PIPE TALLY AND CEMENTING RECORD

LEASE PAN AM SHELL KAKISA WELL No. L19 DATE APRIL 2 1964

PIPE RUN. SIZE 7 WEIGHT 20 GRADE J55 TYPE JOINT T&C MAKE USED NO. FT. 190.6

PIPE RUN. SIZE _____ WEIGHT _____ GRADE _____ TYPE JOINT _____ MAKE _____ NO. FT. _____

NO.	LENGTH OF JOINT		NO.	LENGTH OF JOINT		NO.	LENGTH OF JOINT		NO.	LENGTH OF JOINT		NO.	LENGTH OF JOINT		TALLY OF JOINTS NOT RUN		
	FEET	IN.		FEET	IN.		FEET	IN.		FEET	IN.		FEET	IN.	NO.	LENGTH OF JOINT	
																FEET	IN.
SHOES 1	30		51			101			151			201					
2	29	50	52			102			152			202			1		
3	39	13	53			103			153			203			2		
4	40	43	54			104			154			204			3		
5	43	26	55			105			155			205			4		
6	38	28	56			106			156			206			5		
7			57			107			157			207			6		
TOTAL	191.90		58			108			158			208			7		
9			59			109			159			209			8		
10			60			110			160			210			9		
11			61			111			161			211			10		
12			62			112			162			212			11		
13			63			113			163			213			12		
14			64			114			164			214			13		
15			65			115			165			215			14		
16			66			116			166			216			15		
17			67			117			167			217			16		
18			68			118			168			218			17		
19			69			119			169			219			18		
20			70			120			170			220			19		
21			71			121			171			221			20		
22			72			122			172			222			21		
23			73			123			173			223			22		
24			74			124			174			224			23		
25			75			125			175			225			24		
26			76			126			176								
27			77			127			177								
28			78			128			178								
29			79			129			179								
30			80			130			180								
31			81			131			181								
32			82			132			182								
33			83			133			183								
34			84			134			184								
35			85			135			185								
36			86			136			186								
37			87			137			187								
38			88			138			188								
39			89			139			189								
40			90			140			190								
41			91			141			191								
42			92			142			192								
43			93			143			193								
44			94			144			194								
45			95			145			195								
46			96			146			196								
47			97			147			197								
48			98			148			198								
49			99			149			199								
50			100			150			200								

NO. JOINTS DELIVERED	5
NO. JOINTS RUN	5
TOTAL RUN - OVERALL	191.90
OFF FOR THREADS	0
TOTAL - THREADS OFF	0
TOP PIPE BELOW:	
☒ ROTARY DRIVE BUSHING	10.00
☐ DERRICK FLOOR	7.20
DEPTH LANDED	193
CEMENT - MAKE	CANADA
KIND USED	PORTLAND NORMAL
NO. SACKS	90 - 2 SACKS C/C
METHOD	CIRCULATION
REMARKS:	
PAN 25 BOLS WATER AHEAD	
GOOD RETURNS	

APPROVED _____

PAN AMERICAN REPRESENTATIVE _____

PAN AMERICAN PETROLEUM CORPORATION

DAILY DRILLING REPORT

RIG NUMBER _____ CONTRACTOR'S NAME IG INDIAN DRILL. 24 HOUR PERIOD ENDING AT MIDNIGHT APRIL 2 1964
 LEASE NAME PAN AM SHELL HAKISA WELL NO. 119 FIELD WILDCAT

FIRST TOUR FROM 6:00 M. TO 12:00 M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
12 ⁰⁰	5 ³⁰		170	205	DRILLING
5 ³⁰	6 ⁰⁰				PULL OUT
6 ⁰⁰	7 ³⁰				RIG TO RUN CASING, RUN SAME
7 ³⁰	8 ⁰⁰				CIRC. WORKING CASING, CASING WOULD NOT GO.

DAYWORK: HOURS 8 RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
		4.00	8.2	46			1	9"	OSC.
		DEVIATION INSTRUMENT		DEPTH	DEGREES OFF				
							DRILLER'S SIGNATURE <u>W.D. Hawk</u>		

SECOND TOUR FROM 8:00 A.M. TO 8:00 P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8 ⁰⁰	9 ⁰⁰	CIRC.			
9 ⁰⁰	10 ⁰⁰	RUN CASING			RUN 25 BBLs WATER AHEAD
10 ⁰⁰	10 ³⁰	RUN IN HOLE			RUN 90 SACS PORTLAND
10 ³⁰	1 ⁰⁰	REAM TO BOTTOM MIX MUD & CIRCULATE			NORMAL CEMENT WITH
1 ⁰⁰	4 ⁰⁰	PULL OUT OF HOLE & RUN CASING			2% CALCIUM CHLORIDE
4 ⁰⁰	7 ⁰⁰	RIG UP TO CEMENT, HAIL WATER & CEMENT			CEMENT DOWN @ 7:00 P.M.
7 ⁰⁰	8 ⁰⁰	CLEAN UP PUMPS, TANKS & DRAIN DOWN			GOOD RETURNS

DAYWORK: HOURS 12 RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
900 ⁰⁰	GEL	12.00	8.5	200					
4 SACS	FIBRE SEAL								
200 ⁰⁰	CABLE								
							DRILLER'S SIGNATURE <u>BEN GRAY</u>		

THIRD TOUR FROM 8 P M. TO 12 M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8 ⁰⁰	12 ⁰⁰		205		WOC

DAYWORK: HOURS 4 RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
		DEVIATION INSTRUMENT		DEPTH	DEGREES OFF				
							DRILLER'S SIGNATURE <u>W.D. Hawk</u>		

APPROVED _____

K.R. Loburn
 PAN AMERICAN REPRESENTATIVE

APPROVED _____

W.D. Hawk
 CONTRACTOR'S REPRESENTATIVE

PAN AMERICAN PETROLEUM CORPORATION
DAILY DRILLING REPORTRIG NUMBER 17 CONTRACTOR'S NAME BIG INDIAN 24 HOUR PERIOD ENDING AT MIDNIGHT APRIL 1 1960
LEASE NAME PAN AM SHELL KALISA WELL NO. 419 FIELD WILDCAT

FIRST TOUR FROM _____ M. TO _____ M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	

No SHIFT.

DAYWORK: HOURS _____ RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE		BIT NO.	SIZE	KIND

SECOND TOUR FROM 8:00 M. TO 8:00 P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
<u>8:23:30</u>					<u>RIGGING UP & HALL WATER</u>
<u>2:30</u>	<u>8:00</u>	<u>DRILL</u>	<u>0</u>	<u>160</u>	<u>GRAVEL & CLAY</u>

DAYWORK: HOURS 12 RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE		BIT NO.	SIZE	KIND
									<u>9"</u>	<u>OSC.</u>

THIRD TOUR FROM 8 P M. TO 12 P M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
<u>8:00</u>	<u>12:00</u>		<u>160</u>	<u>1800</u>	<u>DRILLING GRAVEL LIMESTONE</u>

DAYWORK: HOURS 4 RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE		BIT NO.	SIZE	KIND
<u>500</u>	<u>GEL.</u>		<u>54</u>	<u>38</u>				<u>1</u>	<u>9"</u>	<u>OSC.</u>

APPROVED _____

PAN AMERICAN REPRESENTATIVE

APPROVED _____

CONTRACTOR'S REPRESENTATIVE