

IOE CHEVRON CELIBETH
D-31

Drilling Authority No. 435
Date issued 30 January 1970

WELL NAME IOR Chevron Calibata D-31

FIELD
LOCATION Unit D Area Section 31 Grid 60-30-122-30
Latitude 60-20-05 Longitude 122-37-21
U.W.L.R. 60.23472 - 122.62250
U.W.I. 1005316030122300

Rig Release Date: 19-2-70
Status: D/A
Information Release Date:

CHANGE OF NAME:

DATE RECEIVED	INDEX
30-1-70	Application for a Drilling Authority. Well Completion Data. Well History Report.
	Application to Amend a Drilling Authority.
	Application to change a Well Name.
12/3/70	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.
12/12/70	Application to Commingle Production before Measurement.
	Data for Back Pressure Test on Natural Gas Wells - Manograph 7 Method.
	Data for Back Pressure Test on Natural Gas Wells - Vinter's Method.
	M.P.R. - Oil - Calculations.
	New Oil Well Report.
	New Gas Well Report.
	Well Inspection Report.
	Rig Inspection Report.
	Battery Inspection Report.
	Equipment Report.
	Well Card.
	New Service Well Report.
	Monthly Water Flood Operations Report
	Monthly Water Receipts and Disposal of Fluids Report Logs. Large scale..... Small scale.....



DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

WELL COMPLETION DATA

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

Well name and number IOE Chevron Celibeta D-51 60-30-122-30
 Permit No. 3750 Lease No.
 Chevron Standard Limited Exploratory Licence No. 1283
 (Permitter, Licensee, Lessee)
 Imperial Oil Enterprises Ltd. Exploratory Licence No. 1266
 (Operator)

Location: Unit D Section 31 Grid 60° 30' 122° 30'
 Latitude 60° 20' 05" North Longitude 122° 37' 21" West
 From Established Reference Marker Seismic Control from Autotape Fix
 Universal Well Location Reference Lat: 60° 33' 47.2" N Long: 122° 52' 25.0" W

	DATE	DEPTH	Pool(s)
Spudded	Feb 8/70		Interval(s) open to production
Suspended			
Resumed Operations			
Finished Drilling	Feb 16/70	2200	
Deepened			Elevation: Gr. 1455 K.B. 1440
Complete (gas/oil)			Rig No. 5
Abandoned	Feb 19/70	2200	Drilling Contractor S & T
Rig released	Feb 19/70	2200	Contractor's Business Licence No. 564

CASING RECORD

Casing Size (Inches)	Grade	Weight	Amount	Set at	Base of Cement and Addition
1. 8 5/8	KS	24 lbs.	451.65	464.85	325 + 2% CaCl ₂
2.					
3.					
4.					
5.					
6.					

GEOLOGICAL TOPS

ELEVATION

	Depth	Sub-Sec
Scatter	1195	+ 254
Rundie	1600	- 151

CORE RECORD

From	To	Rec.	From	To	Rec.
No Cores Cut					

LOG RECORD

Run No.	Type of Log	From	To
1	IES	465	2198
1	BHCS	465	2198
1	FDC	465	2198
1	SNP	465	2198



SERVING RECORD (Acid, etc.)

Date	From	To	Remarks
Feb 19	1800	1550	130 sax + 2% CaCl ₂ felt at 1490
Feb 19	525	425	80 sax + 2% CaCl ₂ felt at 370
Feb 19	surface	10 sax	house hole 5 sax rathole
	5 sax		below ground level and welded on steel plate

PERFORATING RECORD (Bullet, Jet)

Date	From	To	Remarks

CEMENTING RECORD (Plug, Squeeze, etc.)

Date	From	To	Remarks
Feb 19	1800	1550	130 sax + 2% CaCl ₂ felt at 1490
Feb 19	525	425	80 sax + 2% CaCl ₂ felt at 370
Feb 19	surface	10 sax	house hole 5 sax rathole
	5 sax		below ground level and welded on steel plate

DRILL STEM TESTS

No.	Date	Formation	From	To	V.O. Mins.	I.S.I. Mins.	F.S.I. Mins.	I.S.I.R.P.	F.S.I.R.P.	L.F.R.P.	F.F.R.P.	I.H.P.	F.H.P.	REMARKS
1	Feb 18	Mias	1600	1750	60	90	60	61	49	25	25	796	772	Misrun Rec 5' Mud (field pressure)
2	Feb 18	Mias	1600	1750	60	60	60							

ANALYSIS

Lab. No.	Sample	From	To	Source	Remarks

PRESENT STATUS OF WELLS

Oil	Gas	Dr	Susp
		X	

Company Imperial Oil Limited

Signed by *[Signature]*
Well Records Supervisor

Date March 15, 1920

Form to be prepared in duplicate and forwarded to the Oil Conservation Engineers, Calgary, Alberta.



File No. 415
Drilling Authority No.

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT

OIL AND MINERAL DIVISION

Application to Abandon a Well

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

Name and number of well **SEE CHART CALGARY 1-11-60-30-122-10**
Location: Unit **8** Section **11** Grid **60° 30' 122° 30'**
Latitude **49° 30' 05"** Longitude **122° 37' 22"**
From Established Reference Marker **SEISMIC CONTROL WITH AUTOMATIC FIX**
Universal Well Location Reference **49° 30' 05" 122° 37' 22"**
Permit No. **5780** Lease No. **SEE CHART**

CHRYSTAL STANDARD LIMITED
(Production, Lethbridge, Alberta)

Date of commencement of proposed program **FEBRUARY 18, 1970**

OIL, GAS, AND WATER ENCOUNTERED
(Depths)

Oil at **None encountered**
Gas at **None encountered**
Water at **None encountered**
Total Depth **2100'** Date of last operations **Feb. 19, 1970**
Present condition of well **Abandoned according to regulations.**

CASING RECORD

Casing Size O. D. Inches	Weight	Amount	Set At	Seals of Cement and Additives	Amount Poured
1. 8 5/8"	24.0	451.65	423.25	125 sacks + 2% CaCl ₂	None
2.					
3.					
4.					
5.					

PROPOSED ABANDONMENT PROGRAM

No.	Plug Position	Geological Formation	Number of Sacks of Cement	Remarks
1	1300'-1550'	Mississippian - Scatter PK	120 sacks + 2% CaCl ₂	Test for plug in 8 hrs.
2	325'-425'	Surface Casing Run	60 sacks + 2% CaCl ₂	Test for plug in 8 hrs.
3	SURFACE	Run 5 sack plug at surface. Cut casing 3 feet below grade and weld on plate. Install 4' riser with well head.		

The following logs have been run **IES, IEC, IWC, IWP, ITC**
Other operations proposed **None**

Operations to be carried out by **Imperial Oil Enterprises** Contractor Licence No. **564**
Address **10025 Jasper Avenue** Address
Responsible Agent in field **E. L. Yessley**
Dated at **Calgary** this **12th** Day of **March** 19 **70**
Signed by **[Signature]** Company **Imperial Oil Enterprises Ltd.**
Title **Production Development Manager** Operator's Exploratory Licence No. **1266**

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

(For RESOURCE MANAGEMENT DIVISION use only)

APPROVAL

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

Confirming oral approval given by Mr. B.L.J. Thoms
on the 10th February 1970.

Dated **12th March** 19 **70** **[Signature]**
Oil Conservation Engineer

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

Drilling Authority No. 423

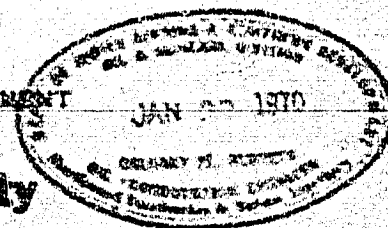
Project No.

File No.



DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
 MINERAL DEVELOPMENT DIVISION
 OIL AND MINERAL

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: **IDE Chevron Cellibets D-31-60-30-172-30**
 Location: Unit **D** Section **31** Grid **60° 30' 127° 20'**
 Latitude **62° 20' 05"** Longitude **122° 37' 21"**
 From Established Reference Marker: **Seismic control from Antelope fix,**
 Universal Well Location Reference: **Lat: 60° 33' 47.2" N Long: 122° 33' 28.0" W**
 Elevation: Ground **K.B.** feet above sea-level.
 Well is expected to produce from **Cretaceous & Mississippian** formation at a depth
 of about **1900 & 2000** feet. Expected total final depth **2525**
 Area assigned to well (for Oil Conservation Engineer's use only)

Permit No. **3760** Lease No. **31,608**
 Permittee, licensee, or leasee: **Chevron Standard Limited**
 Exploratory Licence No. **1283**
 Surface owned by Crown or **Crown**
 (If allocated subject name and address of owner and assignee.)
 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 (Inch)	Weight (Lb./Ft.)	Grade	New or Used	Estimated Depth	Depth of Cement
1. 8-5/8	24.0	J-55	New	350'	To Surface
2.					
3.					
4.					
5.					

Expected water, gas, and oil horizons and type of control equipment:
Hydrill-double gate Shaffer

Well will be drilled with Rotary Rig No. **5** by **SST Drilling Co. Ltd.**
 (Drilling Contractor or company)

Responsible agent of applicant:— Contractor's Business Licence No. **568**
 At well **E. L. Kennedy** At registered office **G. H. McPherson**
 Address **11650 - 142 St. Edmonton** Address **10625 - Jasper Ave, Edmonton**
 It is understood that if changes become necessary, notice of the change of plan will be submitted.
 Dated at **Edmonton** this **29** day of **January** 19 **70**
 Signed by **A. J. Ginn** Company **Imperial Oil Enterprises Ltd.**
 Title **Development Manager** Operator's Licence No. **1286**

(For Resource Management Division use only)

APPROVED

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

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

Dated **30th January** 19 **70**

Please see over page
 Oil Conservation Engineer

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

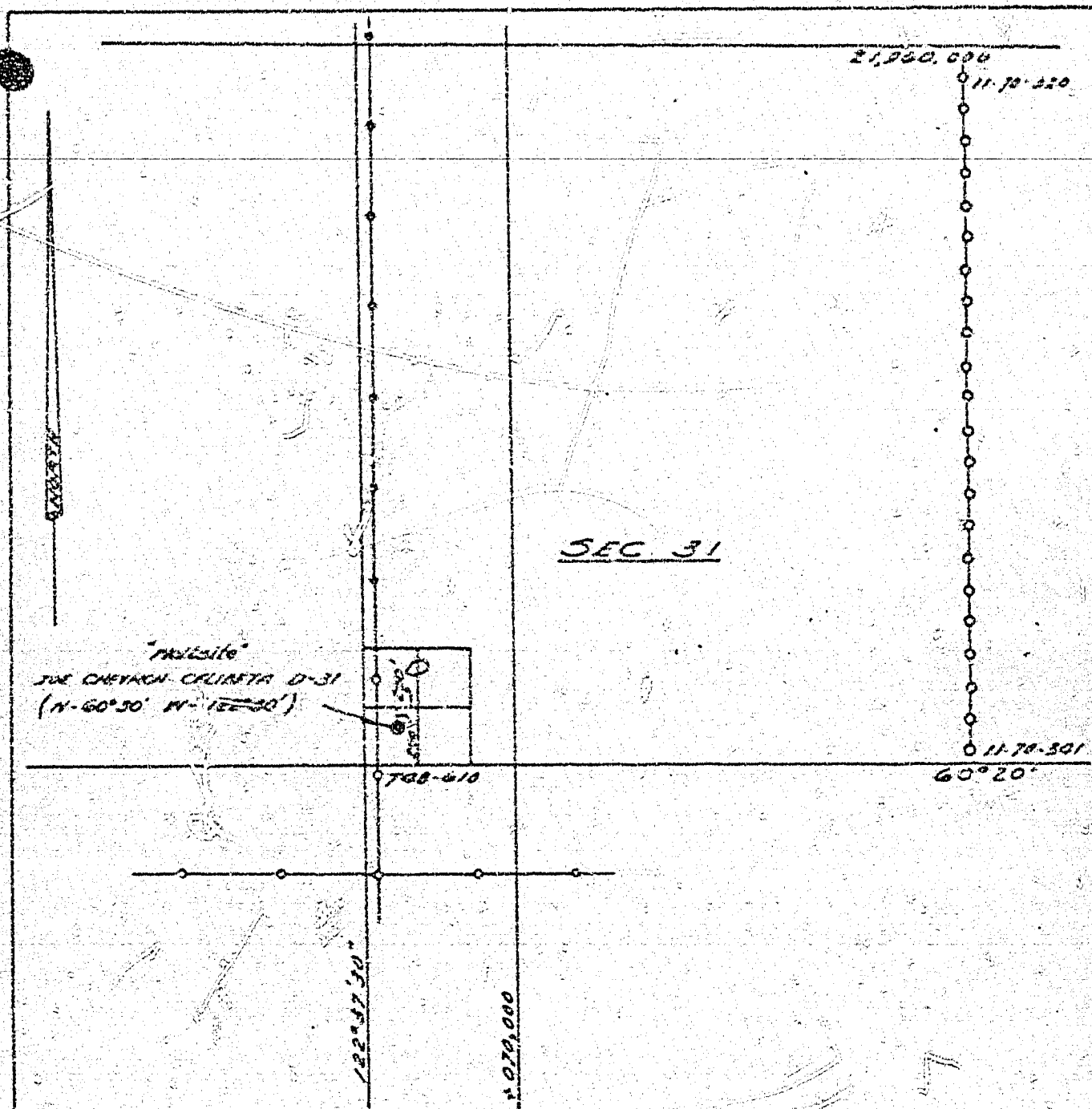
LAND 52-90-1 (3-67)

STRONG WELL IDENTIFIER - 30071603122300

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

3. We draw your attention to Sections 95 and 96 of the Canada Oil and Gas Land Regulations.
4. Intermediate and production string off casing are to receive the approval of the Oil Conservation Engineer.

B. J. Thomas
B. J. Thomas, Oil Conservation Engineer



IMPERIAL OIL ENTERPRISES LTD.

LOCATION SKETCH

IOE CHEYRON CELIBETA D-31

LAT. 60°30' LONG. 122°30'

FROM AUTO TAPE FIX.

AND GEOPHYSICAL SURVEY

LOCATION STAKED 620' N - 265' E

FROM SHOT POINT T48-610

JAN. 29, 1970.

7-11-4-85

IOE Chevron Celibeta D-31

60° 30' 122° 30'

7-11-4-85

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Page 15	Completion Summary	Cementation Record

COMPANY:

IMPERIAL OIL LIMITED

SIGNED BY:

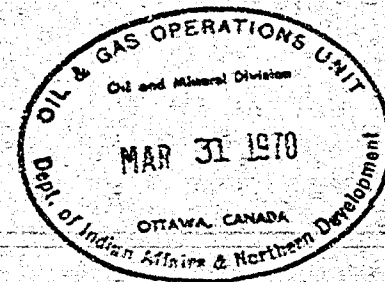
K. A. Bell

TITLE:

WELL RECORDS SUPERVISOR

DATE:

MARCH 13, 1970



SECTION I SUMMARY OF WELL DATA

- (a) Name - IOE Chevron Celsiba D-31-60-30-122-30
- (b) Permittee - Chevron Standards Ltd.
- (c) Operator - Imperial Oil Enterprises Ltd.
10025 Jasper Avenue, Edmonton, Alberta
- (d) Location - D-31-60-30-122-30
Latitude: 60°20'05"North, Longitude: 122°37'21"West.
Universal Well Location Reference: Lat: 60.33472°N
Long: 122.62250°W.
Unique Well Identifier: 300D316030122300
- (e) Co-ordinates
- (f) Permit - #3780
- (g) Drilling Contractor - S&T #5 Rotary
- (h) Drilling Authority - #415 issued January 30, 1970
- (i) Classification - NFW
- (j) Elevations - Cr 1435 KB 1449
- (k) Spud - February 8, 1970
- (l) Completed Drilling - February 16, 1970
- (m) FTD - 2200

(c) Status - Dry & Abandoned

(d) Elg Release - February 19, 1970

(e) Hole Size - 9-475 12-1/4
475-2100 7-7/8

(f) Casing - 8-5/8 x 465 x C325 + 2% CaCl₂

SECTION 11

GEOLOGICAL SUMMARY

(a) Formation Tops

<u>Formation</u>	<u>Mechanical Log Top</u>	<u>Sample Top</u>
Lower Cretaceous		55'
Scatter Formation	1195'	1205'
Mississippian	1600'	1598'
Bundle Group	1600'	1598'
FTD	2200'	

(b) Cored Intervals - No Cores cut(c) Core Description - Nil

(a) Sample Description

0 - 55'	Unconsolidated gravel, light buff Base drift @ 55'
55 - 70'	Shale, black dull lustre, well consolidated trace fossils.
70 - 310'	Shale as above, with minor limey fragments
310 - 370'	Shale as above, with 30% siltstone, dark grey slightly calcareous and argillaceous, well indurated.
370 - 500'	20% shale as above, 80% siltstone, light grey mica cemented, fairly well indurated.
500 - 540'	Shale - medium to dark grey - arenaceous interbedded with white glauconitic siltstone
540 - 680'	Samples missing - no sample returns in drilling fluid.
680 - 760'	Shale, dark grey interbedded with minor light grey siltstone.
760 - 900'	Shale, medium dark grey interbedded with light grey siltstone. Trace medium grained sandstone throughout. Siltstone grade to very fine grained sandstone. Trace pyrite over entire interval.
900 - 1080'	50% shale - dark grey, trace ironstone concretions, pyrite, 50% very fine grained sandstone, glauconitic pyritic trace oil staining at 960 and 990'
1080 - 1205'	Shale, medium grey, very arenaceous, minor siltstone, pyritic in part.
1205 - 1260	Sandstone, very fine grained to silt-sized, glauconitic, good oil staining, poor intergranular porosity increasing silt and shale content from 1240'
1260 - 1350	Shale - medium to dark grey, 30-50% siltstone interbeds with patchy oil staining. Shale increasing at base of interval.
1350 - 1430	Shale - dark grey with interbeds of glauconitic, oil stained siltstone - trace pyrite throughout. Trace chert from 1400, trace ironstone concretions 1420 - 1430'
1430 - 1570	Shale - dark grey with minor chert. Trace light brown dolomitic shale, 1445-1480 - trace very fine grained, quartz sandstone with good porosity at 1480' - good oil stain in sandstone. 30% medium brown dolomitic shale, 1535-1550'

1570 - 1598

Shale - medium grey - interbedded with light brown siltstone which is glauconitic and slightly oil stained. Minor coal interbeds.

1598 - 1625

Limestone - micritic, light brown to buff, some chalky porosity, no staining. Minor chert interbeds at top.

1625 - 1645

Limestone as above, shaley with ostracods and crinoids.

1645 - 1670

Limestone - lithoclastic-white micritic to chalky matrix.

1670 - 1715

Limestone - skeletal micritic, light to medium brown, trace chalky porosity, some intraclastic. Trace light green fossiliferous and pyritic shale, 1690 - 1695.

1715 - 1730

Shale - medium grey - calcareous, trace ostracods.

1730 - 1830

Limestone - micritic skeletal - white to medium brown - 40-50% green pyritic shale - becomes cherty from 1775'. Chert in block with white grains. Crinoids - ostracods present in limestone.

1830 - 1855

Limestone - micritic skeletal - with crinoids and ostracods - white to dark brown.

1855 - 1865

Shale - dark brown, limy and pyritic

1865 - 2000

Limestone, light to dark brown, micritic skeletal shaley, cherty crinoids and ostracod fragments throughout. Trace dolomitic 1930-1935. Trace pyritic throughout.

2000 - 2100

Limestone, skeletal - crinoids and ostracods. Trace shaley. Cherty. Trace bitumin (?) 2060'

2100 - 2120

Shale, medium grey, limy, pyritic, occasional micritic skeletal limestone interbed.

2120 - 2150

Limestone, chalky porosity, trace oil staining and bitumen plugging. Trace clean vitreous chert.

2150 - 2180

Limestone, skeletal micritic interbedded with dark grey fossiliferous shale. Trace chalky porosity.

2180 - 2185

Sample missing.

2185 - 2200

Limestone - white to medium brown chalky porosity. Interbedded with dark grey pyritic shale. Limestone is skeletal in part.

(c)

Palaeontological Determinations

SECTION III ENGINEERING SUMMARY

(a) Drill Stem Tests

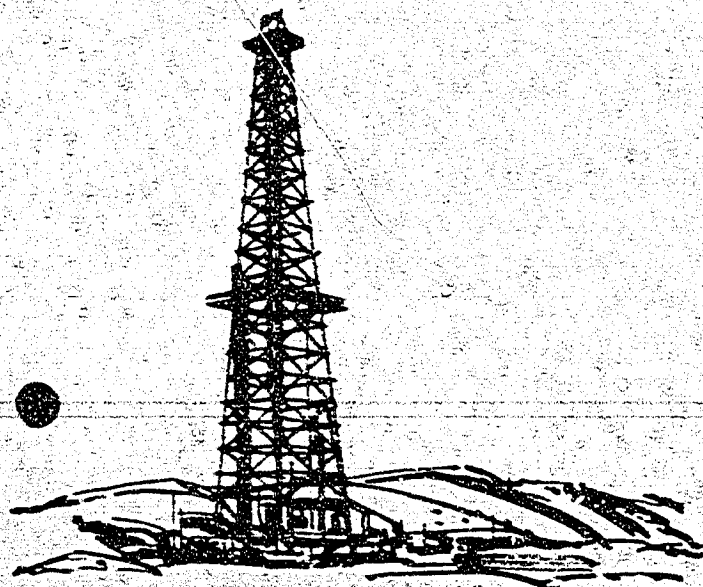
Feb 18/70 DST #1 - 1600-1750 VO 60 SI 90/60
Mississippian Mistrun.

Feb 18/70 DST #2 - 1600-1750 VO 60 SI 60/60
Mississippian Recovered 5' drilling mud.
HP 794-794 VP 20-26 SIP 83-85

LYNES

BRIGHT NAME IN THE OIL PATCH

Variable and Conventional Packer Tools



DRILL STEM TEST
TECHNICAL SERVICE REPORT

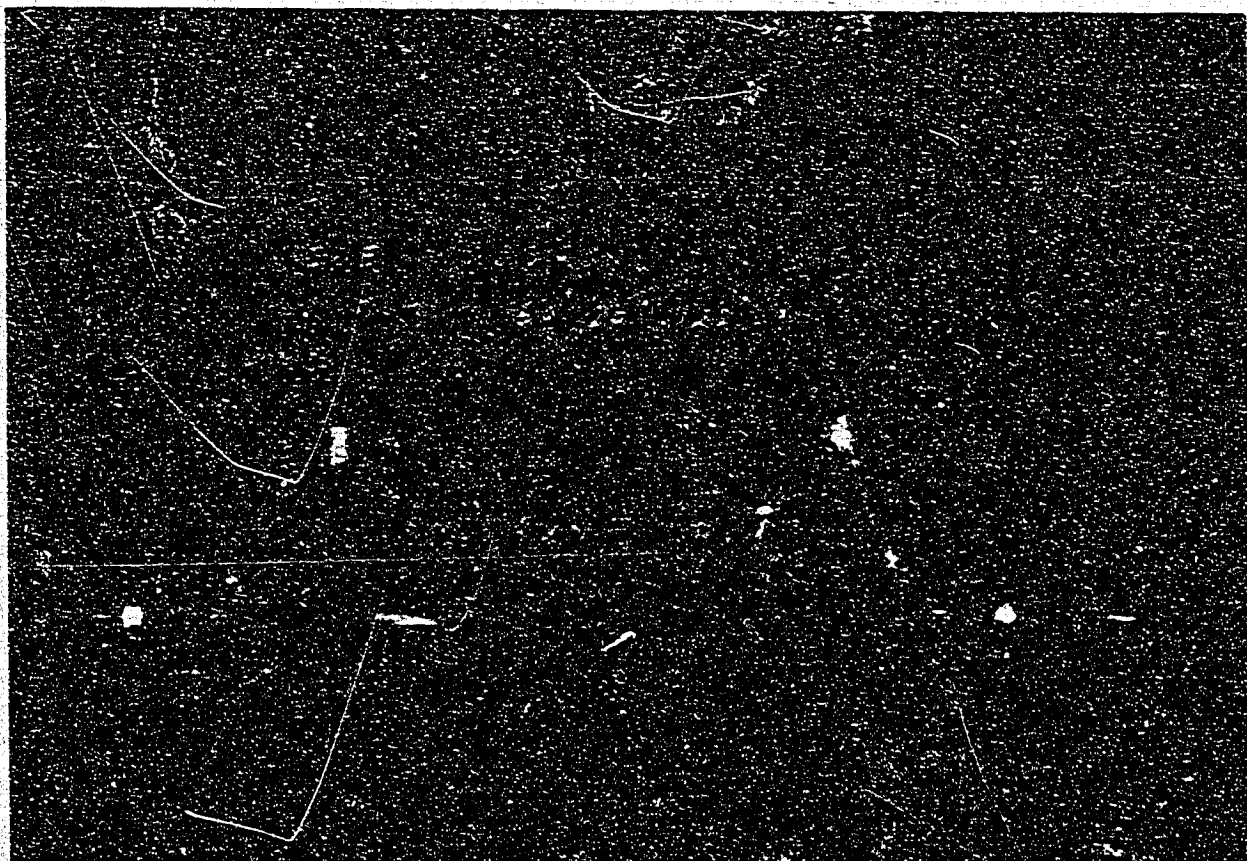
Imperial Oil Ltd.

10E Chevron Calibeth 0-31 60° 20' 122° 37'

Well Name and Description

Test No.

1 February 18, 1970



IOE CHEVRON CELIBETA

D-31 60° 20' 122° 37'

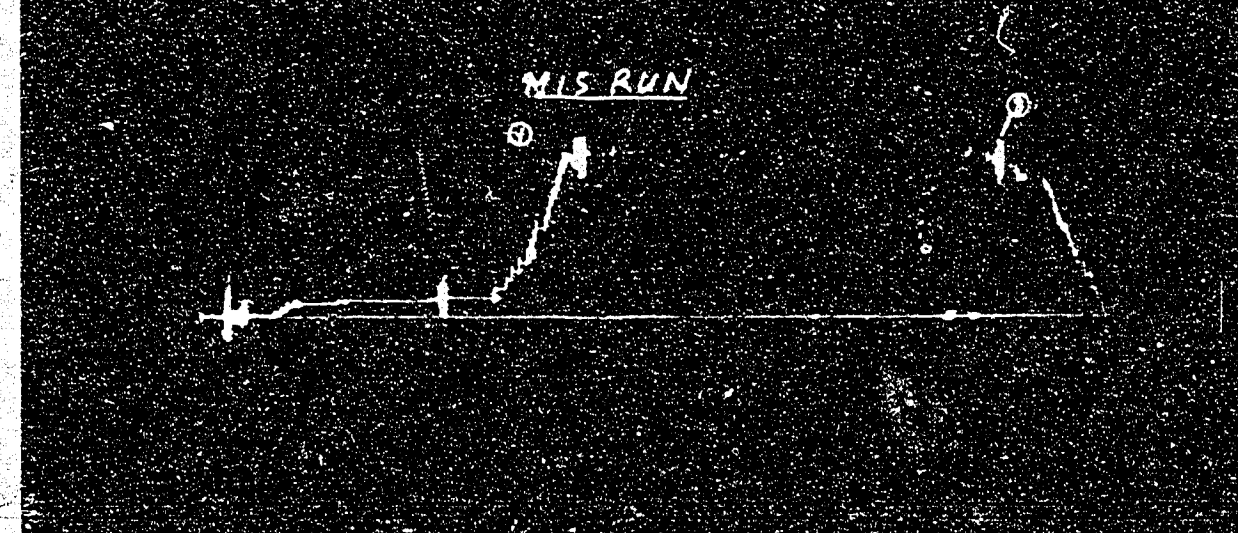
MIS RUN



IOE CHEVRON CELIBETA

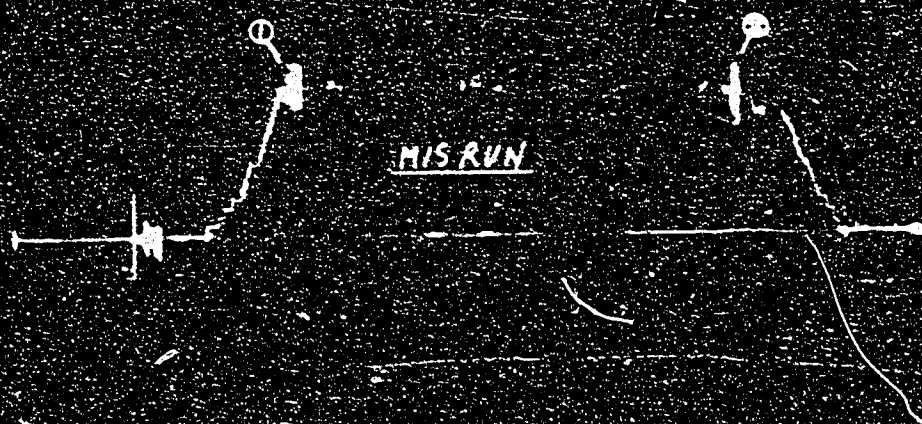
D-31 60° 20' 122° 37'

MIS RUN



IOE CHEVRON CELIBETA

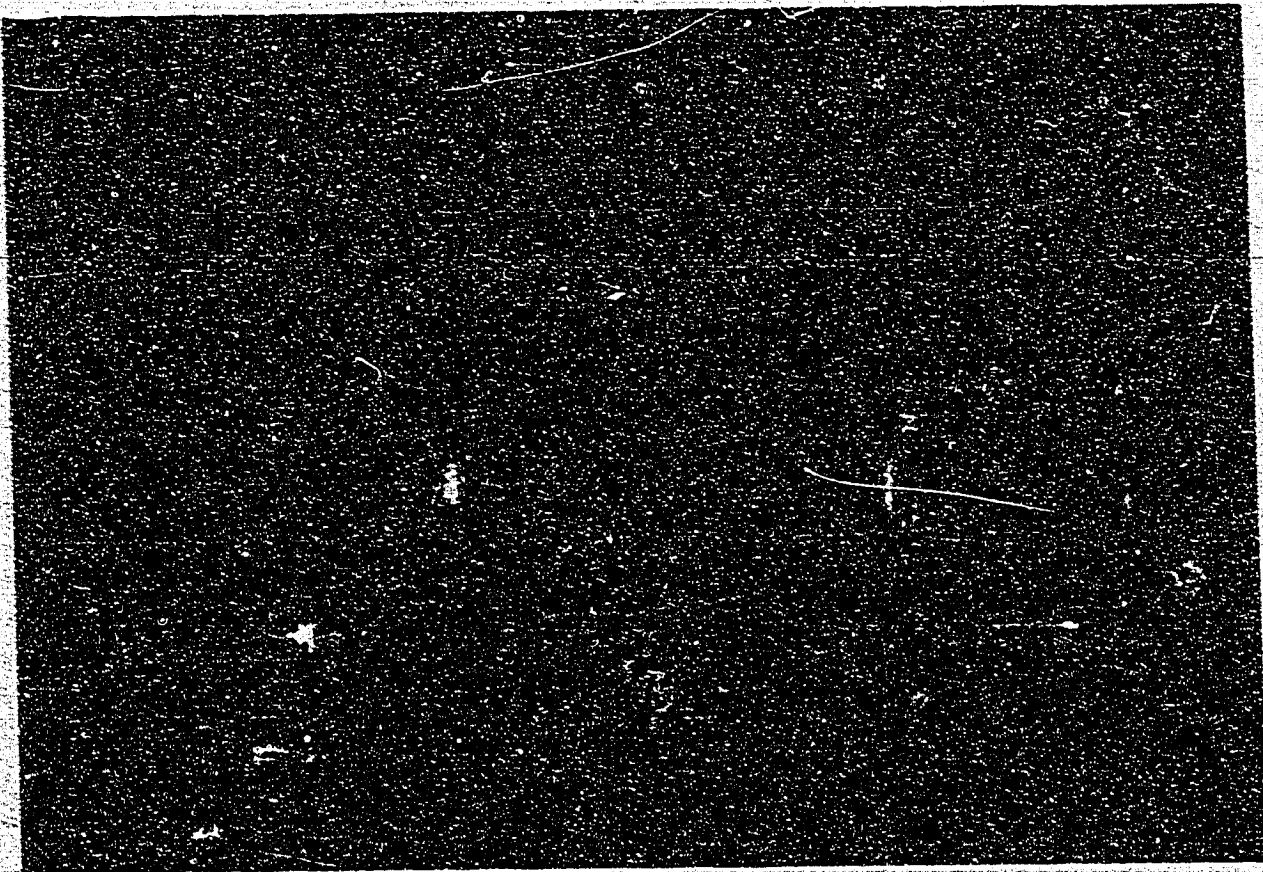
D-31-60° 20' 122° 37'



IOE CHEVRON CELIBETA

D-31-60° 20' 122° 37'

TEMP 1



Imperial Oil Ltd.
Company

Well Name and Description	10E Chevron Cellbeta D-31 60° 20'	122° 37'

Test No.	Date of Test
1	10/10/10
2	10/10/10
3	10/10/10
4	10/10/10
5	10/10/10
6	10/10/10
7	10/10/10
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1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 26

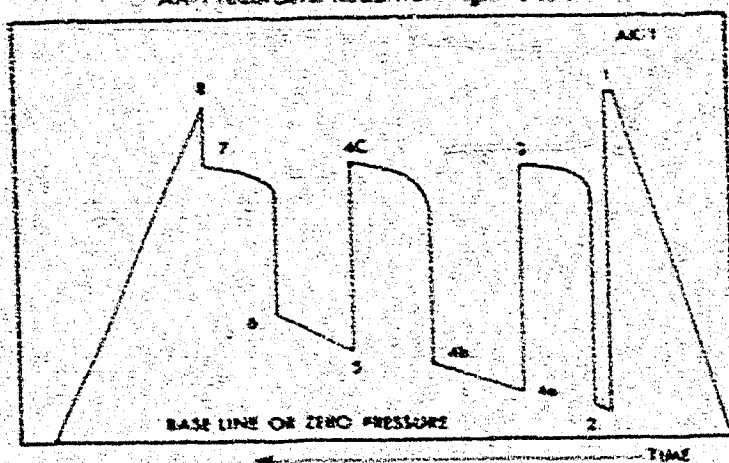
PRESSURE READINGS		Inside	Outside	X	Inside	Outside	X	Inside	Outside	X	Inside	Outside	X																																																		
Recorder No.	906	Recorder No.	909		Recorder No.	4647		Recorder No.	4379		Recorder No.	4379																																																			
Capacity	3050	Capacity	4000		Capacity	3000		Capacity	3000		Capacity	3000																																																			
Depth	1615	Depth	1610C		Depth	1640		Depth	1751		Depth	1751																																																			
NUMBER KEY: <table border="0"> <tr> <td>1 - INITIAL HYDROSTATIC</td> <td>795</td> <td>798</td> <td>779</td> <td>882</td> </tr> <tr> <td>2 - PRE-FLOW</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3 - INITIAL SHUT-IN</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>4 - 2nd INITIAL FLOW</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5 - 2nd FINAL FLOW</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>6 - 2nd SHUT-IN</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>7 - 3rd INITIAL FLOW</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>8 - FINAL FLOW</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>9 - FINAL SHUT-IN</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>0 - FINAL HYDROSTATIC</td> <td>795</td> <td>798</td> <td>779</td> <td>882</td> </tr> </table>														1 - INITIAL HYDROSTATIC	795	798	779	882	2 - PRE-FLOW					3 - INITIAL SHUT-IN					4 - 2nd INITIAL FLOW					5 - 2nd FINAL FLOW					6 - 2nd SHUT-IN					7 - 3rd INITIAL FLOW					8 - FINAL FLOW					9 - FINAL SHUT-IN					0 - FINAL HYDROSTATIC	795	798	779	882
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PRESSURE CHARTS

LYNES

GUIDE TO INTERPRETATION AND IDENTIFICATION OF LYNES DRILL STEM TEST PRESSURE CHARTS

AK-1 recorders. Read from right to left.

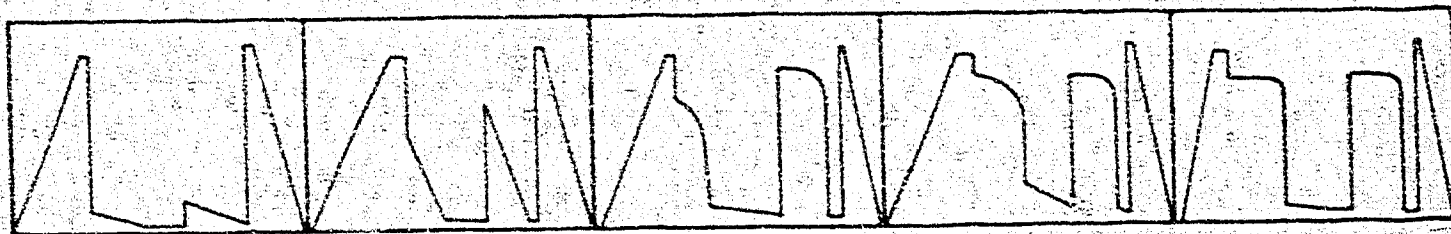


- 1. INITIAL HYDROSTATIC MUD PRESSURE
- 2. PRE-FLOW
- 3. INITIAL SHUT-IN
- 4a. 2nd INITIAL FLOW
- 4b. 2nd FINAL FLOW
- 4c. 2nd SHUT-IN
- 5. 3rd INITIAL FLOW
- 6. FINAL FLOW
- 7. FINAL SHUT-IN
- 8. FINAL HYDROSTATIC MUD PRESSURE

K-3 recorders. Read from left to right.

N.B. When only two shut-in and flow periods are run, 4a, 4b and 4c are omitted.

Typical charts for visual field analysis ranging from very low to high permeability.

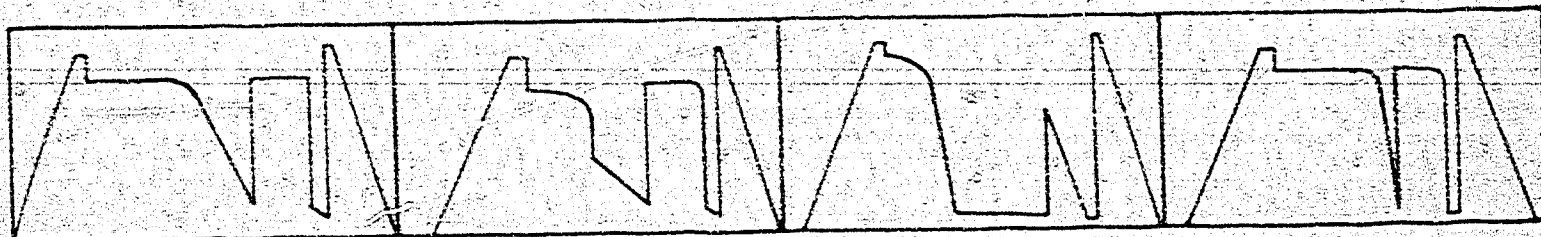


Very low permeability. Usually only mud recovered from interval tested. Virtually no permeability.

Slightly higher permeability. Again mud recovered.

Slightly higher permeability. Small recovery, less than 200' ftl.

Average permeability. Final Average permeability. Strong and initial shut-ins differ by 50 psi. High shut-in pressure, low flow pressure.



Excellent permeability where final flow final shut-in pressure.

High permeability where ISIP and FSIP are within 10 psi.

Deep well bore invasion or damage. Final shut-in higher than the initial shut-in.

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

Logan, L. L. & L. M.
Company

101 Chavira, California D-31 608 201 1320 371

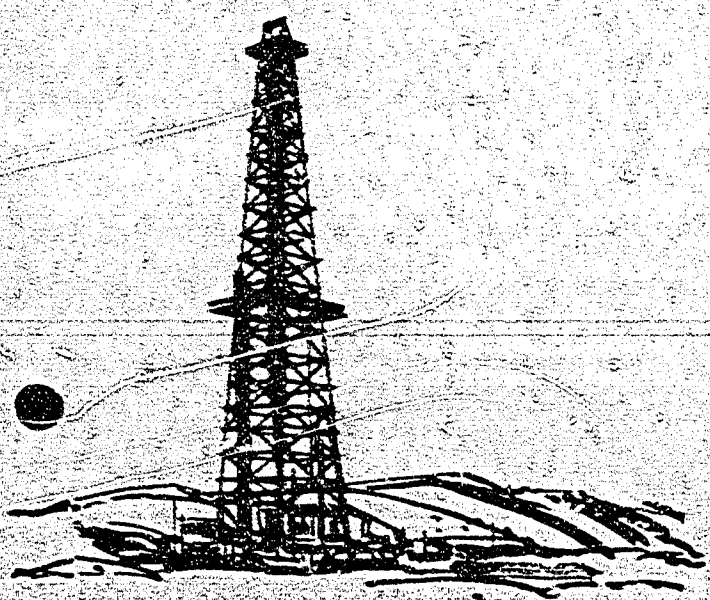
Feb 1970
Date of 1st

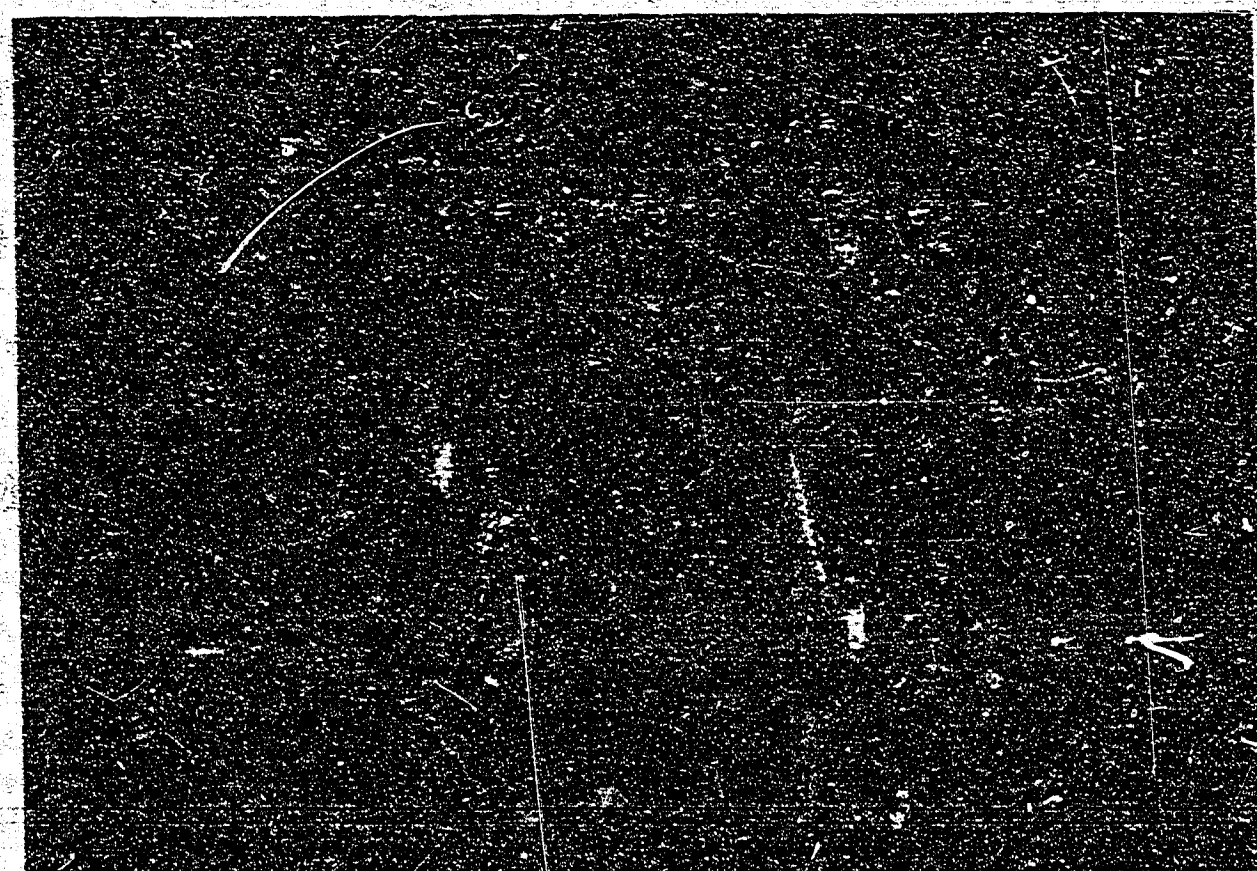
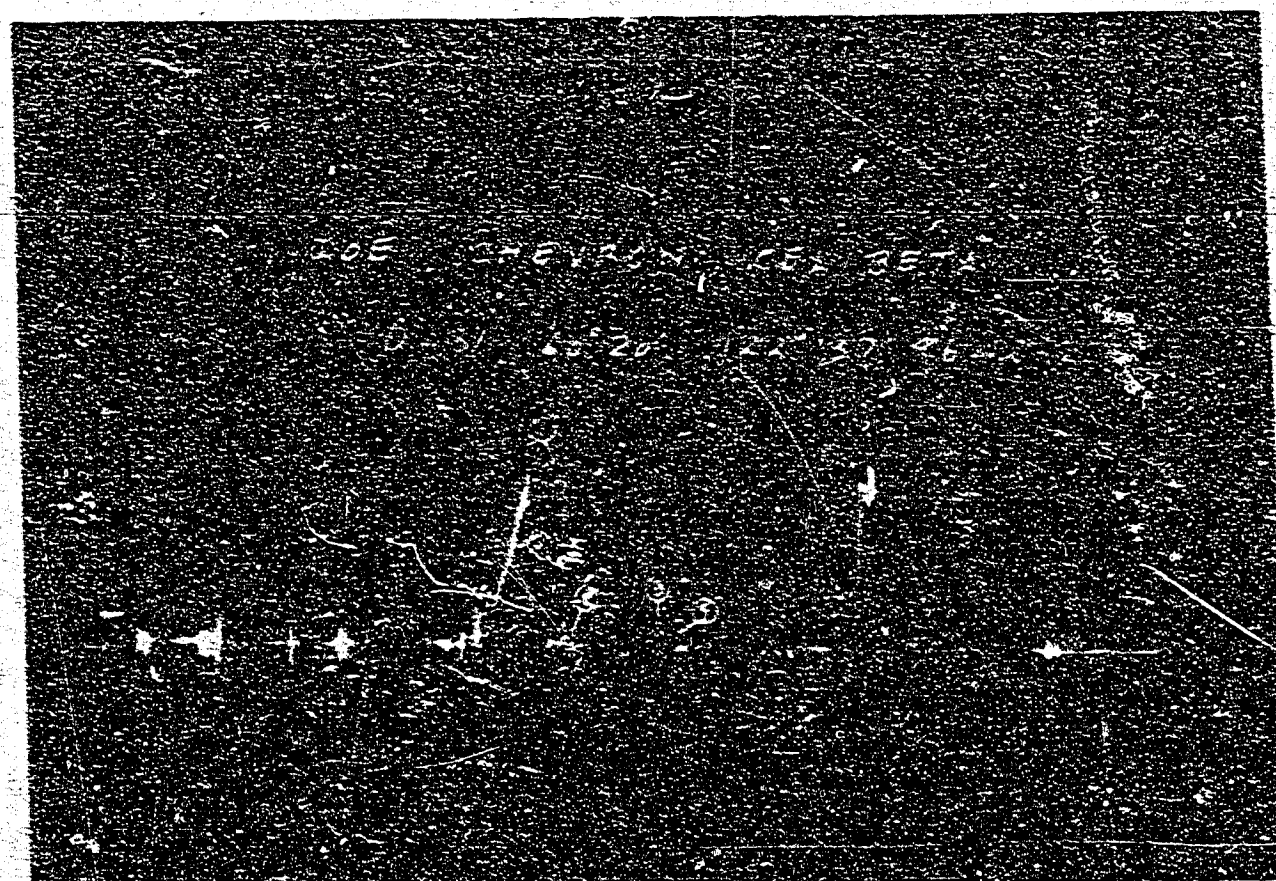
LYNES

BRIGHT NAME IN THE OIL PATCH

Shut-in and Conventions Packer Tool

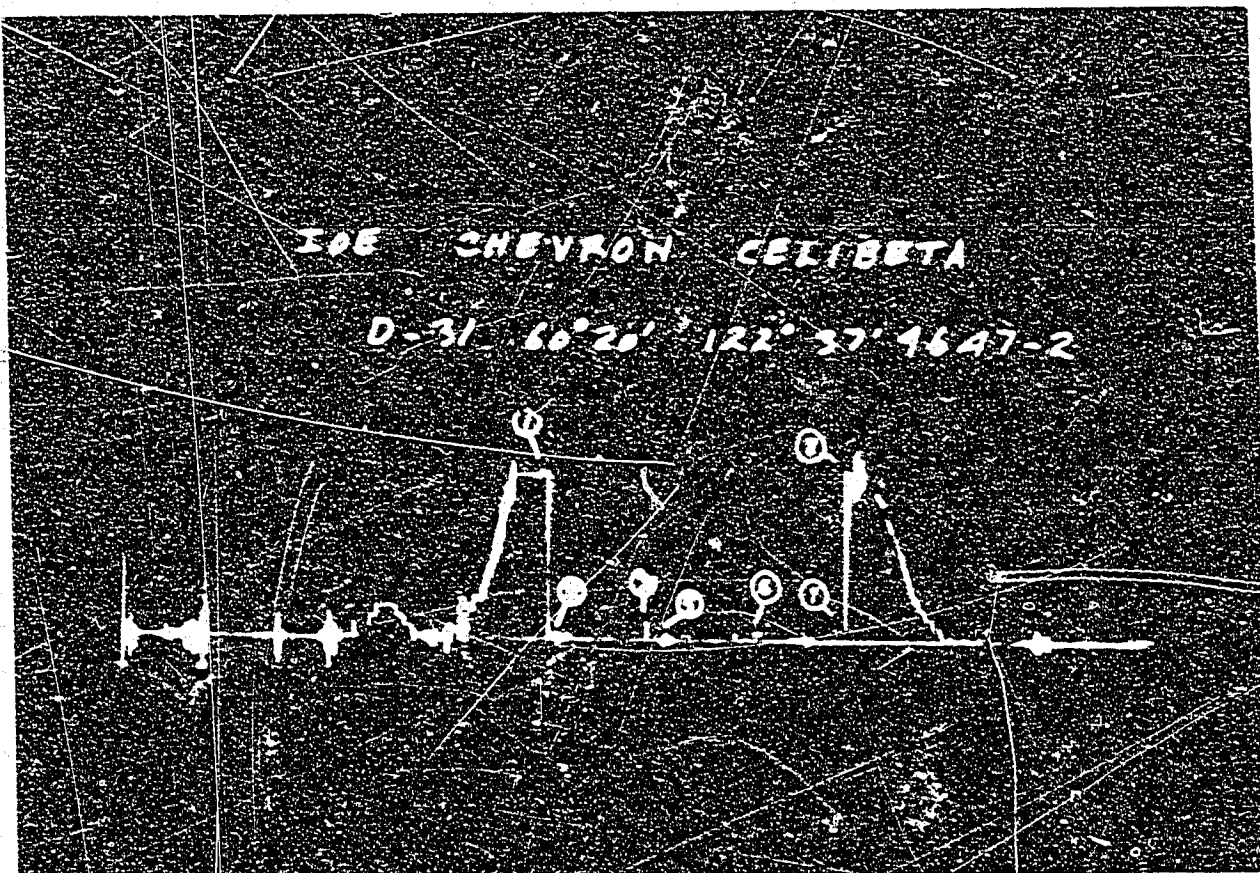
DRILL STEM TEST
TECHNICAL SERVICE REPORT





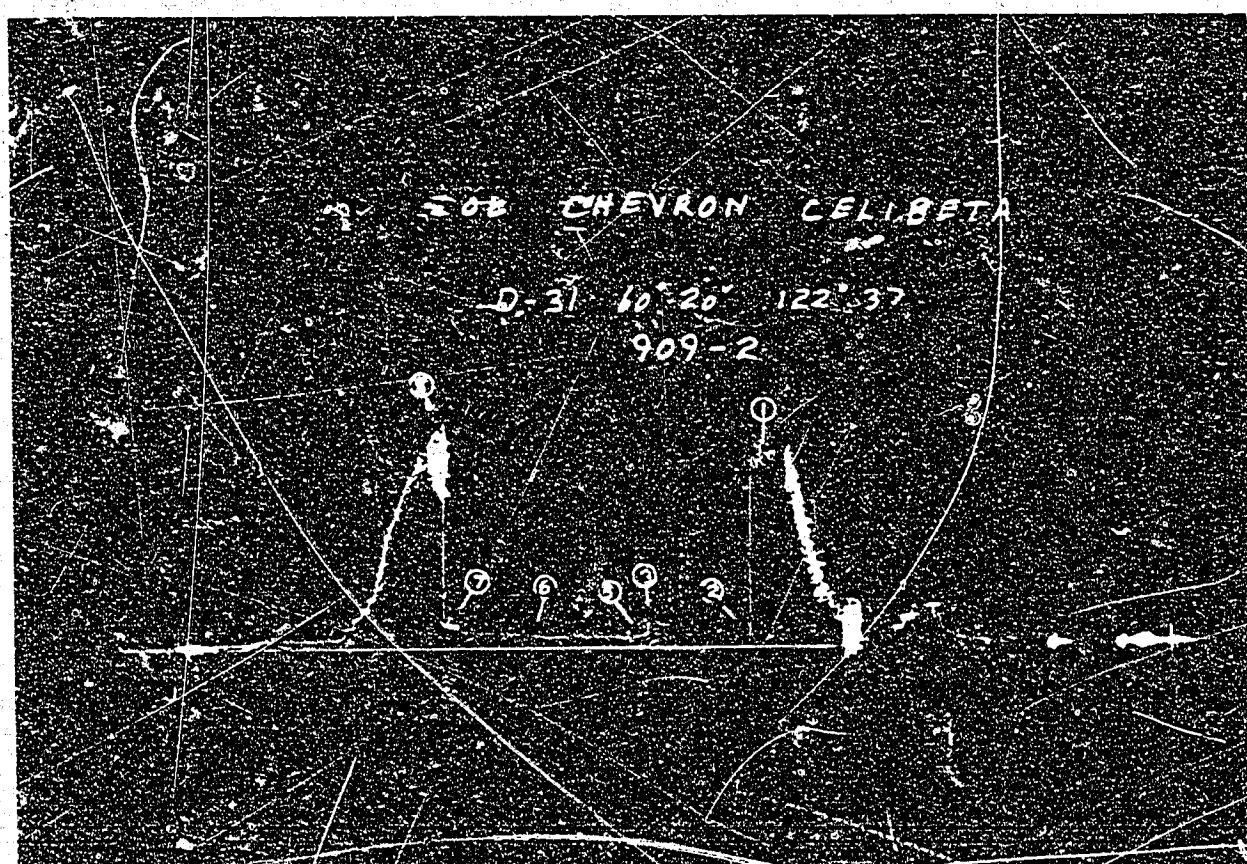
IOE CHEVRON CELIBETA

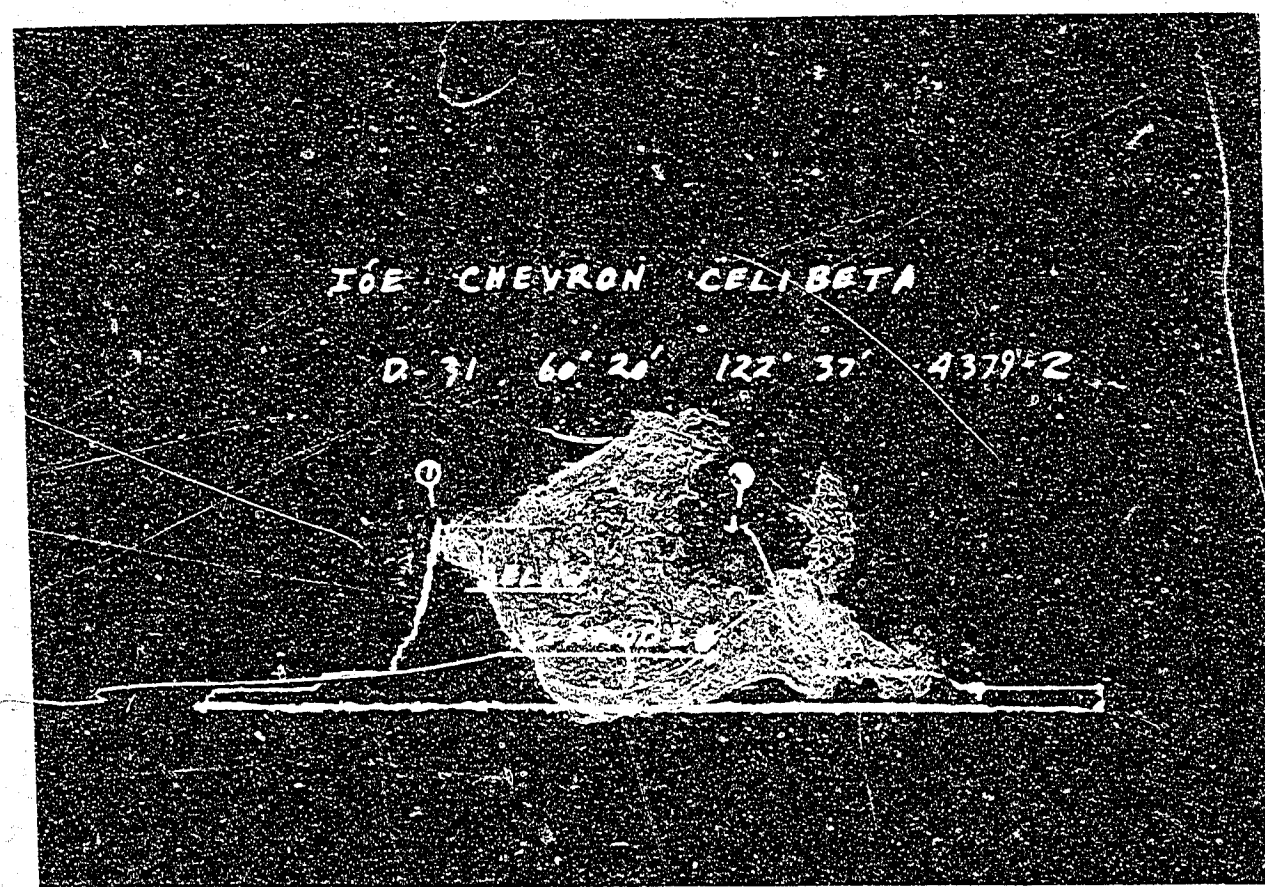
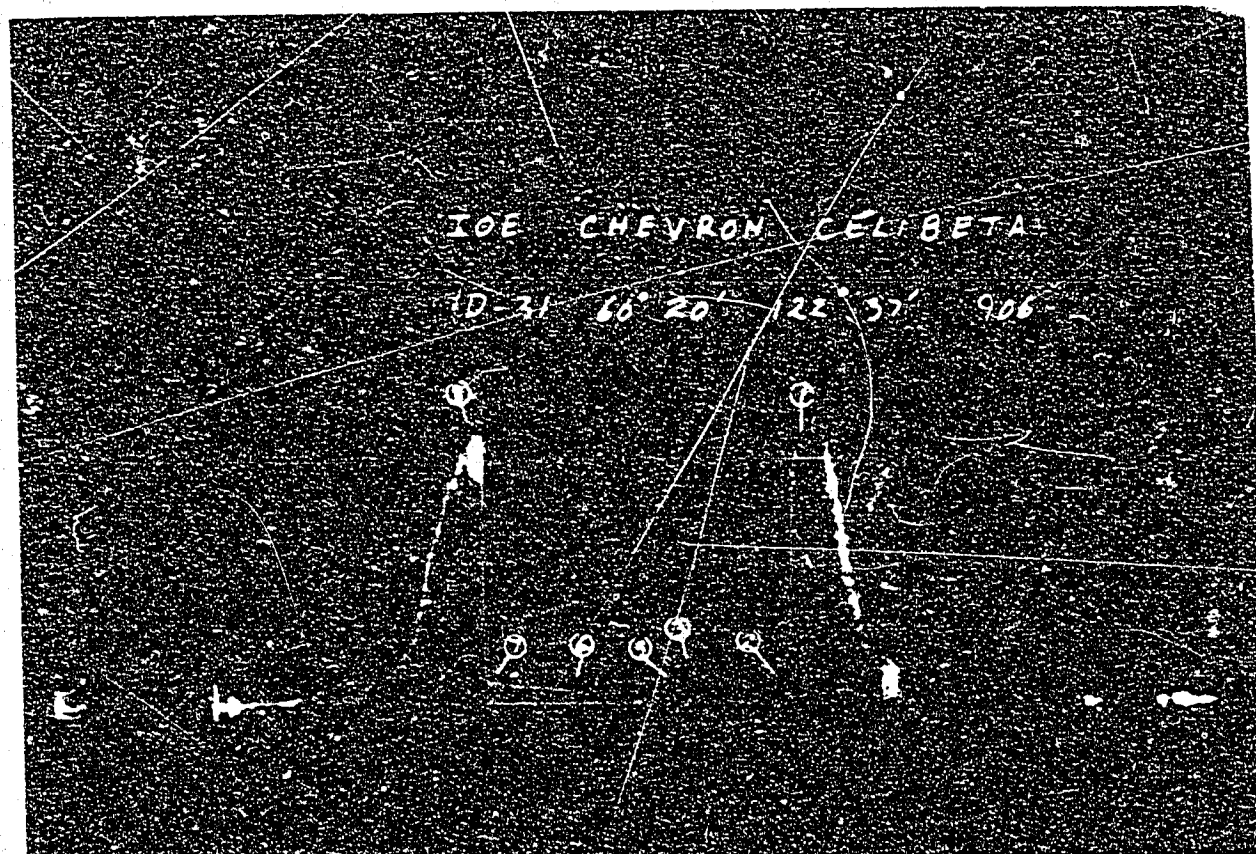
D-31 60°20' 122°37' 4647-2

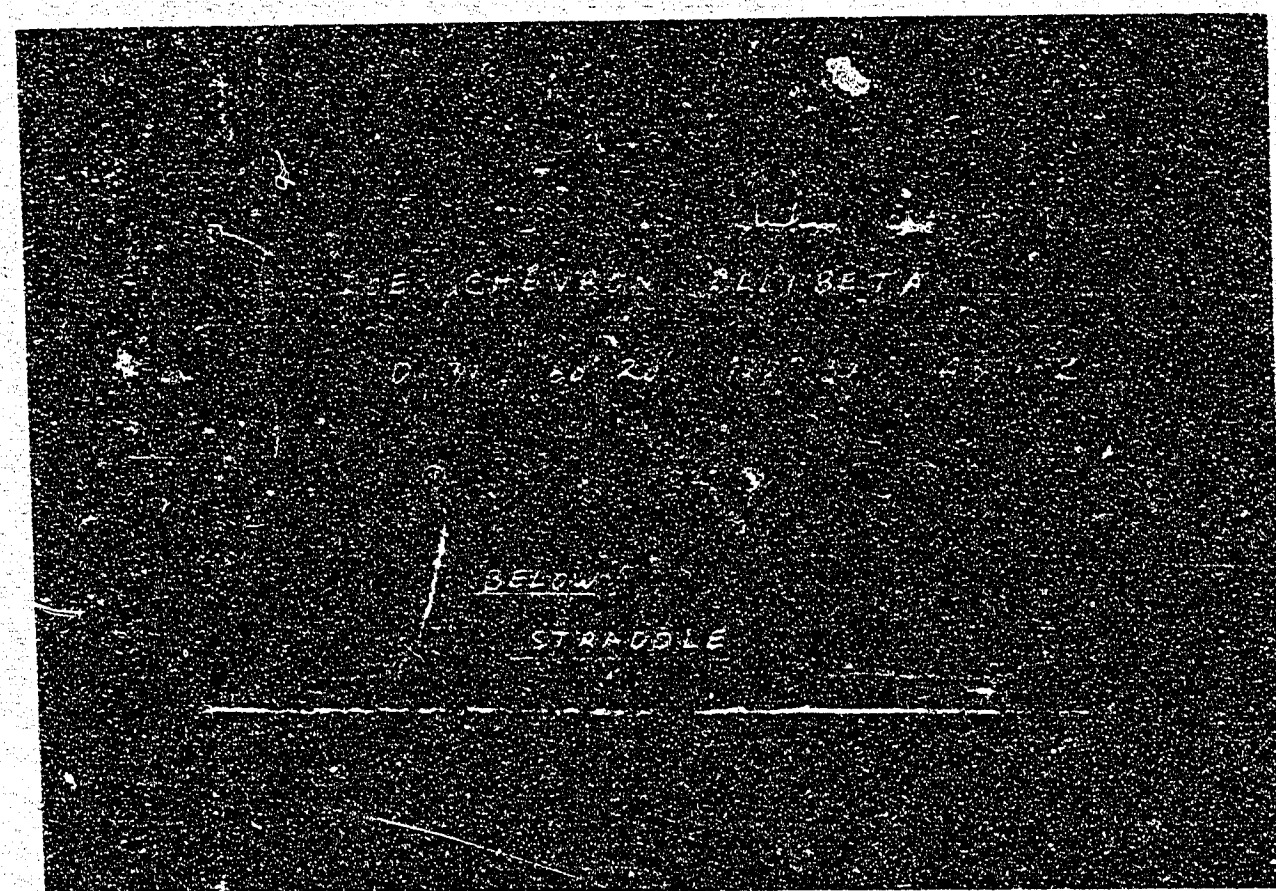
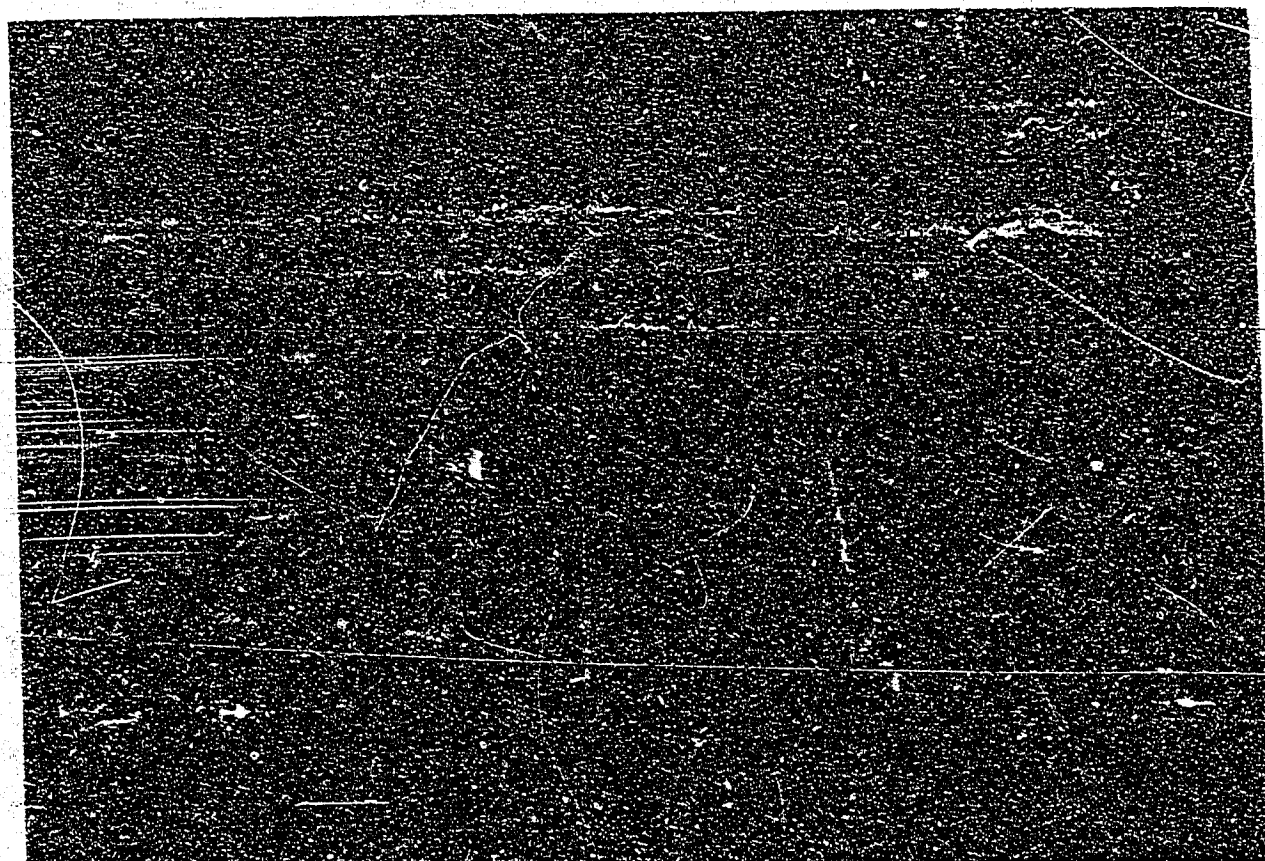


IOE CHEVRON CELIBETA

D-31 60°20' 122°37'
909-2







LYNES UNITED SERVICES LTD.

TEST DATA				GENERAL INFORMATION			
Test No.	2			Company	Imperial Oil Ltd.		
Location	1600			Address	10075 Jasper Avenue		
Point of Test	150			City	Edmonton 15, Alberta		
Type of Test	Dual Straddle 87-Press			Well Name	105 Chevron Calibata		
Cushion	Amount			Well Number	7-21-60-201-125-301		
Started to flow at	3:15	Min	Tool Open at	KB Elevation	1449.2		
Pre-flow	5	mins	Initial Shut-in	Area	Wildcat		
2nd Flow	5	mins	Second Shut-in	Company Rep	Ernie Kennedy		
Final Flow	50	mins	Final Shut-in	Tester	Dwight Morrison		
Remarks:				Contractor	S-1		
				Ticket No.	2456	Date	February 18, 1970
				Service Reports To			
Show: Weak initial puff. Very weak air blow on final flow. Holding same throughout the test.				9 - above address			
GAS FLOW MEASUREMENTS				MUD AND HOLE DATA			
Measured with				Mud Type	Gel		
				Weight	9.5	Viscosity	64
				Filter Cake	3/32"		
				Bottom Hole Temperature			
Time	Surface Choke	Reading Inches	Cubic Feet/Day	Drill Pipe Size	4 1/2" FH		
				Drill Collars	4 1/2" FH 10 2 7/8" Foot Run		
				Mud Hole or Casing Size	7 7/8"		
				Borehole or Liner Size	No. of Feet		
				Bottom Hole Choke Size	1 1/2"		
				Surface Choke Size	adjustable		
				Packer Rubber Size	7"		
				REMARKS	Shut-in pressures suggest virtually no permeability within the interval tested.		
RECOVERY							
TOTAL FLUID RECOVERED 5 Ft. Consisting of							
5 Ft. of Drilling mud							
Ft. of							
Ft. of							
Ft. of							
Ft. of							
Test was/was not Reverse Circulated							
Oil Recovery A.P.I.				Water Specific Gravity			
Salinity							
PRESSURE READINGS							
Inside	Outside	X	Inside	Outside	X	Inside	Outside
Recorder No.	909		Recorder No.	906		Recorder No.	4647
Capacity	4000		Capacity	3050		Capacity	3000
Depth	1610		Depth	1615		Depth	1640
Inside	Outside	X	Inside	Outside	X	Inside	Outside
Recorder No.	4379		Recorder No.	4379		Recorder No.	4379
Capacity	3000		Capacity	3000		Capacity	3000
Depth	1751		Depth	1751		Depth	1751
NUMBER KEY:							
1 - INITIAL HYDROSTATIC	795		800			794	883
2 - PRE-FLOW	39		38			27	
3 - INITIAL SHUT-IN	95		91			83	
4a - 2nd INITIAL FLOW							
4b - 2nd FINAL FLOW							
4c - 2nd SHUT-IN							
5 - 3rd INITIAL FLOW	38		36			20	
6 - FINAL FLOW	44		40			26	
7 - FINAL SHUT-IN	69		64			55	
8 - FINAL HYDROSTATIC	795		800			794	883

Imperial Oil Ltd.

105 Chevron Calibata Dr-31 600 201 1220 371

Well Name and Description

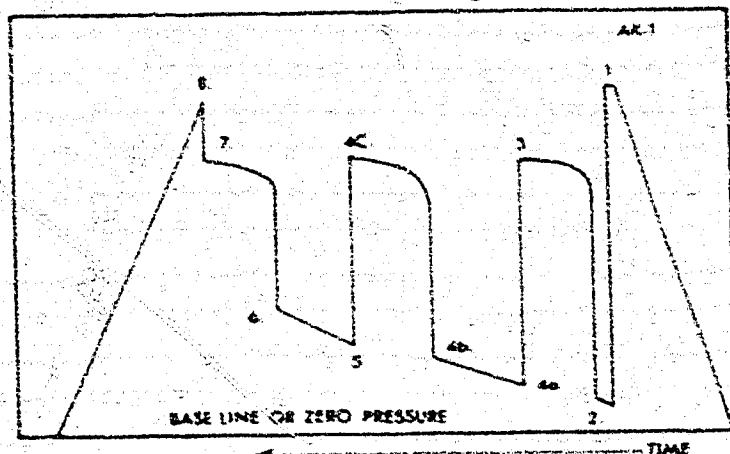
Test No.

February 18, 1970

Date of Test

GUIDE TO INTERPRETATION AND IDENTIFICATION OF LYNES DRILL STEM TEST PRESSURE CHARTS

AK-1 recorders. Read from right to left.

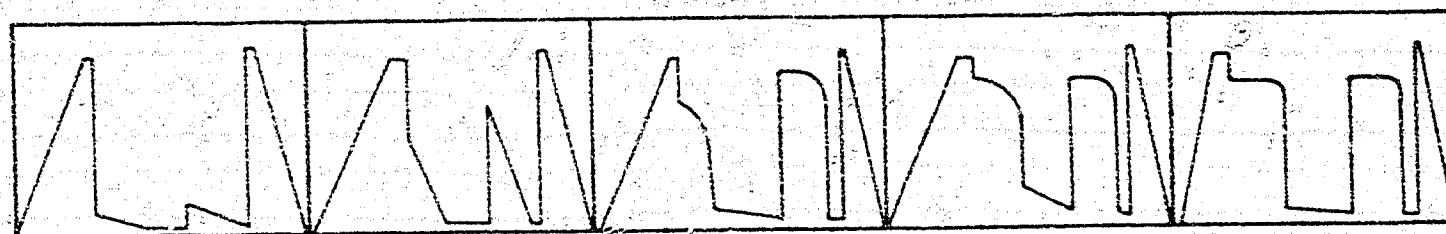


1. INITIAL HYDROSTATIC MUD PRESSURE
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8. FINAL HYDROSTATIC MUD PRESSURE

N.B. When only two shut-in and flow periods are run, 4a, 4b and 4c are omitted.

K-3 recorders. Read from left to right.

Typical charts for visual field analysis ranging from very low to high permeability.



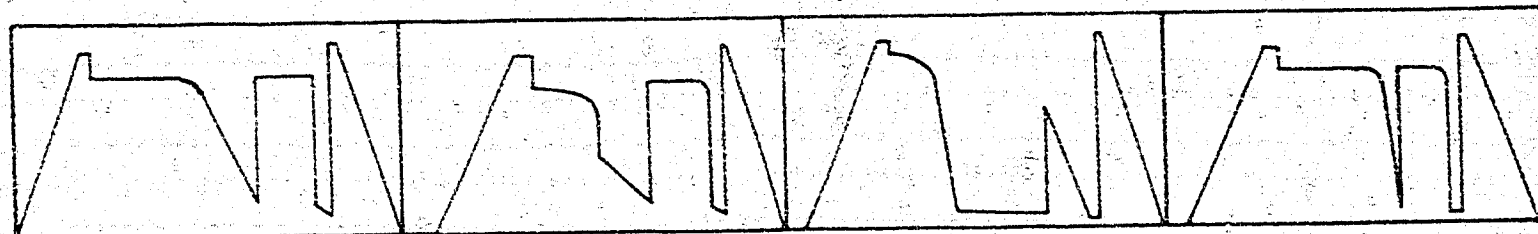
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Slightly higher permeability. Again mud recovered.

Slightly higher permeability. Small recovery, less than 200' ft.

Average permeability. Final and initial shut-ins differ by 50 psi.

Average permeability. Strong damage effect. High shut-in pressure, low flow pressure.



Excellent permeability where final flow final shut-in pressure.

High permeability where ISIP and FSIP are within 10 psi.

Deep well bore invasion or damage. Final shut-in higher than the initial shut-in.

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

(b) Casing Record

(c) Bit Record

#	Type	Size	Depth		Footage Drilled	Hrs	Remarks
			In	Out			
LA	YT3	12-1/4	0	475	475	19-3/4	
1	STIAC	7-7/8	475	1185	410	23-1/2	
2	XIC	7-7/8	1185	1617	432	15	
3	ODV	7-7/8	1617	1813	196	18	
4	XSSR	7-7/8	1813	2200	387	45-1/4	FTD

(d) Mud Report - Water Bentonite

<u>Date</u>	<u>Gel</u>	<u>Caustic</u>	<u>Lime</u>	<u>Soda</u>	<u>CMC</u>	<u>Peltex</u>
Feb 8/70	3000	100				
Feb 9/70	1800		50			
Feb 11/70	2200			300		
Feb 12/70	6100	100			100	100
Feb 13/70	1900	100			100	50
Feb 14/70	2400				50	
Feb 15/70	3200	50			50	
Feb 16/70					50	
Feb 17/70	<u>600</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u>Total</u>	<u>19200#</u>	<u>350#</u>	<u>50#</u>	<u>300#</u>	<u>350#</u>	<u>150#</u>

(c) Deviation Record

<u>Survey</u>	<u>Degrees Off</u>
78	3/4
140	3/4
201	1
232	3/4
750	1-1/2
844	1-1/2
926	1-1/4
1061	1-1/4
1371	1-1/4
1496	1-1/4
1622	1
1813	1
2200	1

(f) Drilling Fluid

<u>#</u>	<u>Interval</u>	<u>Contents</u>	<u>Feet</u>
1	1800 - 1550	130 sax + 2% CaCl_2	1490
2	525 - 425	80 sax + 2% CaCl_2	370
3	Surface	10 sax	
	Househole	5 sax	
	Rathole	5 sax	

Cut off casing 3' below ground level and welded on steel plate.

(g) Lost Circulation - Nil

(h) Blowouts - Nil

SECTION 17

LONG

<u>Date</u>	<u>Type</u>	<u>Interval</u>
Feb. 16/70	BHCS	465 - 2198
Feb. 16/70	SST	465 - 2198
Feb. 16/70	IES	465 - 2198
Feb. 17/70	FDC	465 - 2198

SECTION 2

ANALYSIS

(b) Coal - Nil

(c) Water - Nil

(d) Gas - Nil

(e) Oil - Nil

SECTION VI COMPLETION SUMMARY

(a) Tubing - Nil

(b) Perforation - Nil

(c) Cementation Record

<u>Date</u>	<u>No.</u>	<u>Interval</u>	<u>Cement</u>	<u>Ft</u>	<u>Zone</u>
Feb. 18/70	1	1800-1550	130	1490	Rundle
Feb. 19/70	2	524-425	80	370	1. Cretaceous
Feb. 19/70	3	Surface	10		

(d) Acid and Fracture - Nil

(e) Back Pressure and Production Tests - Nil

IOE CHEVRON CELIBETHA

D-31-60-30-122-30

ICE CHEVRON CELIBETA D-31-60-30-122-30

D.A. 415

- Tour Reports

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT No. 11

WELL NAME IOE CHEVRON PELIBETA D Lsd. 31 Sec. 60 Twn. 90 Rge. 122 W. 30 Contractor S.T. DRUGMETER Month. FEB Day. 19 1970

1st Tour From: 12:00 Midnight To: 8:00 a.m.															2nd Tour From: 8:00 a.m. To: 4:00 p.m.															3rd Tour From: 4:00 p.m. To: 12:00 p.m.														
DEPTH		From	To	Hole Made	Bit Size	Formation		From		To	Hole Made	Bit Size	Formation		From		To	Hole Made	Bit Size	Formation																								
DRILLING STRING	Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.		Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.		Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.																								
	DRILL	Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL		DRILL	Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL		DRILL	Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL																								
	COLLAR						DRILLING STRING	DRILL COLLARS	COLLAR						DRILLING STRING	DRILL COLLARS	COLLAR						DRILLING STRING	DRILL COLLARS																				
	DATA								DATA								DATA																											
BIT RECORD	No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage Drilled	Reamed	No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage Drilled	Reamed	No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage Drilled	Reamed																	
	Bit Serial No. Jet ☐ Conventional ☐														Bit Serial No. Jet ☐ Conventional ☐														Bit Serial No. Jet ☐ Conventional ☐															
	Nozzle Size Bit Wear: T <u> </u> B <u> </u> G <u> </u>														Nozzle Size Bit Wear: T <u> </u> B <u> </u> G <u> </u>														Nozzle Size Bit Wear: T <u> </u> B <u> </u> G <u> </u>															
	Depth Deviation														Depth Deviation														Depth Deviation															
SURVEYS	HOURS		Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size	HOURS		Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size	HOURS		Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size	HOURS		Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size																				
	On Line	Circulating					On Line	Circulating					On Line	Circulating					On Line	Circulating																								
MUD RECORD	Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS		Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS		Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS																								
	Plan Plug #1 1800 to 1550 with 130 sac cement + 290 Ca Cl ₂ Plug down @ 3 AM E.H.K.														Feed for Plug #1 @ 10 AM. top @ 1490. Plug #2 525-425 w 80 sac + 290 Ca Cl ₂ Plug down @ 11 AM E.H.K.														Feed for Plug #2 @ 5 PM. top @ 1370. Rig released @ 8 PM E.H.K.															
CORING	Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery	Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery	Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery																										
	LAY DOWN 12 DRILL COLLARS 5:30 7:00 1 1/2																																											
	TEAR OUT FLARE LINE + WORK ON #2 PUMP 7:00 8:00 1																																											
DETAIL OF OPERATIONS AND REMARKS	From		To	Hrs.	From		To	Hrs.	From		To	Hrs.																																
	Rig SERV		12:30	12:45	1/4	WOC		8:00	9:30	1 1/2	TEAR OUT BOPS 515																																	
	LOAD OUT TEST TOOLS		12:15	1:00	3/4	Run in TAG Plug #1 @ 1490		9:30	10:00	1/2	AND PUT OF CASING CEMENT W/ 10 SAX																																	
	Run in OPEN END		1:00	2:00	1	Hoist out + Run into 525' WOC		10:00	10:30	1/2	CEMENT																																	
Rig To + RUN CEMENT Plug #1 @ 1800 To 1550		2:00	3:00	1	Rig + CEMENT Plug #2		10:30	11:00	1/2	5" HOSE HOLE 5" HAT HOLE		800																																
PULL OUT OFF HOLE		3:00	4:20	1 1/4	Run in TAG Plug #2		11:00	5:00	6																																			
Run DRILL COLLARS in HOLE		4:30	5:15	3/4																																								
SET BRACKES up + CLEAN FLOOR		4:55	5:30	1/4																																								
Driller: <u>Don Doyle</u>								Driller: <u>Quone D. Duff</u>								Driller: <u> </u>																												

HEADING UP & DRG. OUT:
DRILLING:
REAMING:

CLASSES OF TIME BREAKDOWN

FOOTCO:
FISHING:
CIRCULATING:CONDITIONING MUD:
TRIPPING:
CORING:CASING:
W.O.C.
D.S. TESTING:LOGGING:
W.O. ORDERS:
RIG REPAIRS:RIG MAINTENANCE:
MISCELLANEOUS:
CONDITION HOLE:REAMING CLEANING:
WORKING PIPE:
LOST CIRC:DID YOU CHECK BLOWOUT
PREVENTER EQUIPMENT TODAY

YES NO

Total Contract Timehrs.

Total Company Timehrs.

Toolpusher

Geo. E. Williams

Approved by

E.H.K.

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT No. 10

WELL NAME IOE. CHEVRON CELIBETA D Lsd. 21 Sec. 60 Twn. 30 Rge. 122 W. 30 Contractor S.T. DRILLING WESTERN Month FEB Day 18 1970

DEPTH	1st Tour From: 12:00 Midnight To: 8:00 a.m.						2nd Tour From: 8:00 a.m. To: 4:00 p.m.						3rd Tour From: 4:00 p.m. To: 12:00 p.m.																																									
	From	To	Hole Made	Bit Size	Formation		From	To	Hole Made	Bit Size	Formation		From	To	Hole Made	Bit Size	Formation																																					
DRILLING STRING	Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.	Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.	Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.																																				
	DRILL	Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL	DRILL	Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL	DRILL	Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL																																				
	COLLAR					DRILLING STRING	DRILL COLLARS	COLLAR					DRILLING STRING	DRILL COLLARS	COLLAR				DRILLING STRING	DRILL COLLARS																																		
BIT RECORD	No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage Drilled	Reamed	No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage Drilled	Reamed																																				
	Bit Serial No.						Jet ☐ Conventional ☐						Bit Serial No.						Jet ☐ Conventional ☐																																			
	Nozzle Size						Bit Wear: T _____ B _____ G _____						Nozzle Size						Bit Wear: T _____ B _____ G _____																																			
SURVEYS	Depth						Deviation						Depth						Deviation																																			
	HOURS						Pump Press						Length of Pump Stroke						Strokes Per Min.						Liner Size																													
	On Line						Circulating						Pump Press						Length of Pump Stroke						Strokes Per Min.						Liner Size																							
MUD RECORD	Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS						Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS						Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS																										
	CAN																																																					
CORING	Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery	Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery	Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery																																				
DETAIL OF OPERATIONS AND REMARKS	From To Hrs.						From To Hrs.						From To Hrs.																																									
	Rig Serv. 12:00 12:45 3/4						Testing 8:00 10:00 2						FINISH RUNNING IN W/ PACKER 4:00 4:45 3/4																																									
	Pick up + MAKE UP TEST 12:45						Pull PACKER FREE + 40' cut 10:00 1 1/2						Hook up + HICKS AND'S 4:45 5:00 1/4																																									
Tools + 4 STANDS DRILL PIPE 3:45 3 1/2						6 STAND PIPE CAME DAY						TESTING 5:00 5:20 2 1/4																																										
Run in w/ D.S.T. #1 3:45 5:00 1 1/4						Mud leaked out of sampler 11:30						Hoist D.S.T. #2 8:30 10:00 1 1/2																																										
Head up to test 5:00 5:30 2						CHECK tool cut and change 11:30 3:00 3 1/2						BREAK DOWN TEST TOOLS 10:00 12:00 2																																										
Testing 5:30 8:00 2 1/2						RECORD CHARTS																																																
FEB 18/70 6:00 A.M.						MAKE UP TOOL 3:00 3:30 1/2																																																
HELD TALK ON BLOW OUT						Run in w/ Packer 3:30 4:00 1/2																																																
PREVENTION AND DRILL																																																						
Driller <u>Don Doyle</u>						Driller <u>Duane Doyle</u>						Driller <u>Duane Doyle</u> <u>D. Doyle</u>																																										

HEADING UP & DRLG. OUT:
DRILLING:
REAMING:

CLASSES OF TIME BREAKDOWN

TOTCO:
FISHING:
CIRCULATING:CONDITIONING MUD:
TRIPPING:
CORING:CASING:
W.O.C.
D.S. TESTING:LOGGING:
W.O. ORDERS:
RIG REPAIRS:RIG MAINTENANCE:
MISCELLANEOUS:
CONDITION HOLE:REAMING CLEANING:
WORKING PIPE:
LOST CIRC.:DID YOU CHECK BLOWOUT
PREVENTER EQUIPMENT TODAYYES ☒ NO ☐

Total Contract Time _____ hrs.

Total Company Time _____ hrs.

Toolpusher _____

Approved by E. J. [Signature]

Total Contract Time _____ hrs. Total Company Time _____ hrs. Toolpusher Chris B. Williams Approved by [Signature]

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT No. 7WELL NAME I.O.E. CHEVRON GELIBETA D-1 Lsd. 31 Sec. 60 Twn. 30 Rge. 122 W. 90 Contractor S.T. DRY (WESTER) Month. FEB Day. 16 1970

1st Tour From: 12:00 Midnight To: 8:00 a.m.																	2nd Tour From: 8:00 a.m. To: 4:00 p.m.																	3rd Tour From: 4:00 p.m. To: 12:00 p.m.																								
DEPTH		From	To	Hole Made	Bit Size	Formation											DEPTH		From	To	Hole Made	Bit Size	Formation											DEPTH		From	To	Hole Made	Bit Size	Formation																		
2155		2200	45	7 1/2																																																						
Size-D.P.		Strands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.											Size-D.P.		Strands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.											Size-D.P.		Strands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.																		
4 1/2		1585.01		28.09	582.90	SUB 4.00											4 1/2		1585.01		28.09	582.90	SUB 4.00											4 1/2		1585.01		28.09	582.90	SUB 4.00																		
DRILLING STRING		DRILL	Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL											DRILL		Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL											DRILL		Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL																	
COLLAR		19	6 1/4	2 3/8	582.90	DRILLING STRING											COLLAR		19	6 1/4	2 3/8	582.90	DRILLING STRING											COLLAR		19	6 1/4	2 3/8	582.90	DRILLING STRING																		
DATA		78 M															DATA		78 M															DATA		78 M																						
BIT RECORD		No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage											No.		Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage											No.		Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage											
4		X55A	409	387	38	40	2200	387																																																		
SURVEYS		Bit Serial No. 20135 Jet ☒ Conventional ☐																Bit Serial No.		Jet ☐ Conventional ☐																Bit Serial No.		Jet ☐ Conventional ☐																				
NOZZLE SIZE		3-12																NOZZLE SIZE																		NOZZLE SIZE																						
DEPTH		2200																DEPTH																		DEPTH																						
HOURS																		HOURS																		HOURS																						
On Line																		On Line																		On Line																						
Circulating																		Circulating																		Circulating																						
Pump Press		1075																Pump Press																		Pump Press																						
Length of Pump Stroke		13"																Length of Pump Stroke																		Length of Pump Stroke																						
Strokes Per Min.		57																Strokes Per Min.																		Strokes Per Min.																						
Liner Size		5 1/2"																Liner Size																		Liner Size																						
MUD RECORD		Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS											Time		Visc.	Wt.	W L	pH	ADDITIVES — POUNDS											Time		Visc.	Wt.	W L	pH	ADDITIVES — POUNDS																	
12:30		67	9.5	5.2	10.5	GMC Rg 50#											10:30		65																																							
9:00		68	9.5	5.2	10.5																																																					
6:00		68	9.6	5.2	10.5																																																					
CORING		Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery											Core No.		Depth In	Footage	Hours Run	Depth Out	Recovery											Core No.		Depth In	Footage	Hours Run	Depth Out	Recovery																	
DETAIL OF OPERATIONS AND REMARKS																		DETAIL OF OPERATIONS AND REMARKS																		DETAIL OF OPERATIONS AND REMARKS																						
Rig SERV.		12:00 12:15 1/4																Rig SERV.		8:00 8:15 1/4																Log w/ SCHLUMBERGER		4:00 12:00 8																				
DRILL 7 1/2" HOLE		12:15 4:30 4 1/4																Log w/ SCHLUMBERGER		8:15 4:00 3 3/4																																						
WORK ON PUMP		4:30 4:45 1/4																																																								
DRILL 7 1/2" HOLE		4:45 6:00 1 1/4																																																								
GIVE F.T.D. SAMPLE		6:00 6:30 1/2																																																								
SURVEY		6:30 6:45 1/4																																																								
HOIST BIT & STRAP		6:45																																																								
OUT TO LOG		8:00 1 1/4																																																								
Driller		D. Doyle																Driller		D. Doyle																Driller		D. Doyle																				

HEADING UP & DRG. OUT:
DRILLING:
REAMING:CLASSES OF TIME BREAKDOWN
TOTCO:
FISHING:
CIRCULATING:CONDITIONING MUD:
TRIPPING:
CORING:CASING:
W.O.C.
D.S. TESTING:LOGGING:
W.O. ORDERS:
RIG REPAIRS:RIG MAINTENANCE:
MISCELLANEOUS:
CONDITION HOLE:REAMING CLEANING:
WORKING PIPE:
LOST CIRC:DID YOU CHECK BLOWOUT
PREVENTER EQUIPMENT TODAY
YES ☒ NO ☐

Total Contract Time _____ hrs.

Total Company Time _____ hrs.

Toolpusher

D. Doyle

Approved by

HEADING UP & DRLG. OUT:		CLASSES OF TIME BREAKDOWN		CASING:		LOGGING:		RIG MAINTENANCE:		REAMING CLEANING:		DID YOU CHECK BLOWOUT PREVENTER EQUIPMENT TODAY	
DRILLING:		TOTCO:		W.O.C.		W.O. ORDERS:		MISCELLANEOUS:		WORKING PIPE:		YES ☒ NO ☐	
REAMING:		CIRCULATING:		D.S. TESTING:		RIG REPAIRS:		CONDITION HOLE:		LOST CIRC:			
Total Contract Time		hrs.		Total Company Time		hrs.		Toolpusher <i>Res. El. Walker</i>		Approved by			

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT No. 6

WELL NAME IOE CHEVRON PELIBETA D Lsd. 21 Sec. 60 Twn. 50 Rge. 122 W. 20 Contractor S.T. DRLG. (WESTERN) Month FEB Day 14 19 70

1st Tour From: 12:00 Midnight To: 8:00 a.m.															2nd Tour From: 8:00 a.m. To: 4:00 p.m.															3rd Tour From: 4:00 p.m. To: 12:00 p.m.																	
DEPTH		From	To	Hole Made	Bit Size	Formation									DEPTH		From	To	Hole Made	Bit Size	Formation									DEPTH		From	To	Hole Made	Bit Size	Formation											
		1728	1808	80	7 7/8												1808	1850	42	7 7/8												1850	1928	78	7 7/8												
DRILLING STRING		Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.								Size-D.P.		Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.								Size-D.P.		Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.												
		4 1/2	1118.05	62.40	47.50	582.90	4:00								4 1/2		1211.10	31.40	27.56	52.70									4 1/2		1304.39		36.72	527.90													
DRILL		Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL										DRILL		Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL										DRILL		Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL									
COLLAR		19	6 1/4	2 1/4	582.90	DRILLING STRING										COLLAR		19	6 1/4	2 1/4	582.90	DRILLING STRING										COLLAR		19	6 1/4	2 1/4	582.90	DRILLING STRING									
DATA		71.11													DATA		72.17													DATA		74.11															
BIT RECORD		No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage							No.		Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage							No.		Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage								
		3	DDV	16.5	186	35	60		186							3		DDV	18	191	35	60	1813	191								4		X55R	12	105	35	42	105								
		Bit Serial No. 16400 Jet ☒ Conventional ☐														Bit Serial No. 16480 / 25125 Jet ☒ Conventional ☐														Bit Serial No. 20135 Jet ☒ Conventional ☐																	
		Nozzle Size 2-12 H1 Bit Wear: T. B. G.														Nozzle Size 2-12 1-11 Bit Wear: T. B. G.														Nozzle Size 3-12 Bit Wear: T. B. G.																	
SHAFTS		Depth 1813 Deviation 1°														Depth 1813 Deviation 1°														Depth 1813 Deviation 1°																	
SLUSH PUMP RECORD No. 1 No. 2		HOURS On Line Circulating Pump Press Length of Pump Stroke Strokes Per Min. Liner Size														HOURS On Line Circulating Pump Press Length of Pump Stroke Strokes Per Min. Liner Size														HOURS On Line Circulating Pump Press Length of Pump Stroke Strokes Per Min. Liner Size																	
		11.50 15" 58 5 1/2														1000														1000 15" 52 5 1/2																	
MUD RECORD		Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS									Time		Visc.	Wt.	W L	pH	ADDITIVES — POUNDS									Time		Visc.	Wt.	W L	pH	ADDITIVES — POUNDS										
		1:00	7.2	9.5	6.0	11.0	GEL - 1500									9:00		6.4	9.5	5.8	10.5		GEL 900									5:00		7.3	9.5	5.2	10.5										
		2:00	6.2	9.5	6.0	11.0	G.M.C. 50									1:00		6.2	9.5	5.8	10.5											8:00		9.0	9.5	5.2	10.0										
		6:00	6.8	9.6	5.8	10.5										2:30		6.2	9.5	5.8	10.5											10:00		7.8	9.5	5.4	10.0										
CORING		Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery									Core No.		Depth In	Footage	Hours Run	Depth Out	Recovery									Core No.		Depth In	Footage	Hours Run	Depth Out	Recovery										
		BOARD TALLY 1840.26														BOARD TALLY 1839.53																															
DETAIL OF OPERATIONS AND REMARKS		From To Hrs.														From To Hrs.														From To Hrs.																	
		DRLG. 7 7/8" HOLE 12:00 1:00 1														Rig SER ✓ - B. DP 8:00 8:15 1/4														DRLG 7 7/8" HOLE 4:00 6:00 2																	
		Rig SERV. 1:00 1:15 1/4														WORK ON PUMP 8:15 8:30 1/4														Rig SER 6:00 6:15 1/4																	
		DRLG. 7 7/8" HOLE 1:15 8:00 6 3/4														DRLG. 7 7/8" HOLE 8:30 9:45 1 1/4														DRLG 7 7/8" HOLE 6:15 12:00 5 3/4																	
		SURVEY 9:45 10:00 1/4																																													
		TRIP FOR NEW BIT STRAP OUT 10:00 10:45 3/4																																													
		RUN IN HOLE 10:45 11:45 1																																													
		DRIG 7 7/8" HOLE 11:45 1:00 1/4																																													
Driller		Don Doyle														Dean Doyle														D. Doyle																	

HEADING UP & DRLG. OUT: TOTCO: CONDITIONING MUD: CASING: LOGGING: RIG MAINTENANCE: REAMING CLEANING: DID YOU CHECK BLOWOUT PREVENTER EQUIPMENT TODAY? YES ☒ NO ☐

DRILLING: FISHING: TRIPPING: W.O.C. W.O. ORDERS: MISCELLANEOUS: WORKING PIPE: NO

REAMING: CIRCULATING: CORING: D.S. TESTING: RIG REPAIRS: CONDITION HOLE: LOST CIRC.: NO

Total Contract Timehrs.

Total Company Timehrs.

Toolpusher

Approved by

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT No. 5

WELL NAME IOE CHEVRON CELIBETA D Lsd. 51 Sec. 60 Twn. 20 Rge. 122 W. 20 Contractor S. I. DRLG. WESTERN Month FEB Day 19 1970

1st Tour From: 12:00 Midnight To: 8:00 a.m.															2nd Tour From: 8:00 a.m. To: 4:00 p.m.															3rd Tour From: 4:00 p.m. To: 12:00 p.m.														
DEPTH		From	To	Hole Made	Bit Size	Formation				From		To	Hole Made	Bit Size	Formation				From		To	Hole Made	Bit Size	Formation																				
		1465	1617	152	7 3/8							1617	1635	18	7 7/8							1635	1728	93'	7 3/8																			
DRILLING STRING		Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.				Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.				Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.																			
		4 1/2	920.29	31.94	36.32	112.45					4 1/2	1070.0		12.43	582.90					4 1/2	1118.05		23.05	582.90	SUB 4' 00																			
		DRILL	Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL				DRILL	Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL				DRILL	Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL																			
		COLLAR	20	6 1/4	2 3/8	112.03	DRILLING STRING				COLLAR	19	6 1/4		582.90	DRILLING STRING				COLLAR	19	6 1/4	2 3/8	582.90	DRILLING STRING																			
		DATA					68 M				DATA					68 M				DATA					68 M																			
BIT RECORD		No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage		No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage		No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage																	
		2	X1G	15	432	30	65		432		3	ODV	1	18	30	65					3	ODV	8 3/4	124	35 M	60		124																
		Bit Serial No. 18714 Jet ☒ Conventional ☐										Bit Serial No. 16400 Jet ☒ Conventional ☐										Bit Serial No. 16400 Jet ☒ Conventional ☐																						
		Nozzle Size 2-12 1-11 Bit Wear: T B G										Nozzle Size 2-12 1-11 Bit Wear: T B G										Nozzle Size 2-12 1-11 Bit Wear: T B G																						
SURVEYS		Depth 1496' Deviation 1 1/4"										Depth Deviation										Depth 1622 Deviation 1"																						
SLUSH PUMP RECORD		HOURS		Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size		HOURS		Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size		HOURS		Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size																							
		On Line	Circulating						On Line	Circulating						On Line	Circulating																											
				1152	15"	58	5 1/2"				1152	15"	54	5 1/2"				1150	15"	58	5 1/2"																							
MUD RECORD		Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS		Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS		Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS																							
		12:00	70	9.3	4.9	10.0	G. M. C. 100# Re6		3:00	53	9.2	5.8	10.2	CAUSTIC 100 LBS		6:00	72	9.2	5.8	10.5	PLTEx 50 #																							
		7:00	57	9.3	5.8	10.0										8:30	59	9.3	5.6	11.0	GEL 1900 #																							
		1:30	58	9.3	5.4	10.0										10:30	65	9.3	5.4	10.5																								
CORING		Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery		Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery		Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery																							
DETAIL OF OPERATIONS AND REMARKS		From To Hrs.										From To Hrs.										From To Hrs.																						
		DRLG. 7 3/8" HOLE 12:00 12:45 3/4										DRLG 7 7/8 HOLE 8:00 8:30 1/2										Rig Ser. 4:00 4:15 1/4																						
		Rig SERV. 12:45 1:00 1/4										Repair valve on 8" up hole 8:30 8:45 1/4										DRLG 7 3/8 HOLE 4:15 12:00 7 3/8																						
		SURVEY 1:00 1:15 1/4										Circ sample 8:45 9:00 1/4																																
		CIRC. SAMPLES 1:15 2:00 3/4										Survey 8:45 9:00 1/4																																
		DRLG. 7 3/8" HOLE 2:00 8:00 6										TRIP STAB. out 9:00 9:45 3/4																																
												CHECK COLLAR Box + pin bay 9:45 1:45 1/4																																
												DOWN 2 cables Pick up Two 1:45 2:00 1/4																																
												Rig Ser. V BOP 2:00 2:30 1/2																																
												Ship 23 feet line 2:30 3:00 1/2																																
												Run in Hole 3:00 3:00 1/2																																
		Driller <u>Don Doyle</u>										Driller <u>Don Doyle</u>										Driller <u>Don Doyle</u>																						

HEADING UP & DRLG. OUT:
DRILLING:
REAMING:CLASSES OF TIME BREAKDOWN
TOTCO:
FISHING:
CIRCULATING:CONDITIONING MUD:
TRIPPING:
CORING:CASING:
W.O.C.
D.S. TESTING:LOGGING:
W.O. ORDERS:
RIG REPAIRS:RIG MAINTENANCE:
MISCELLANEOUS:
CONDITION HOLE:REAMING CLEANING:
WORKING PIPE:
LOST CIRC.:DID YOU CHECK BLOWOUT
PREVENTER EQUIPMENT TODAY
YES ☒ NO ☐

Total Contract Time hrs.

Total Company Time hrs.

Toolpusher Steve Williams Approved by

Total Contract Time _____ hrs. Total Company Time _____ hrs. Toolpusher Greg Chapman Approved by [Signature]

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT No. 2WELL NAME JOE CHERON PELIBETA D. Lsd. 31 Sec. 30 Twn. 40 Rge. 122 W. 20 Contractor S.T. Dalg. WESTERN Month. FEB Day. 9 1970

1st Tour From: 12:00 Midnight To: 8:00 a.m.															2nd Tour From: 8:00 a.m. To: 4:00 p.m.															3rd Tour From: 4:00 p.m. To: 12:00 p.m.															
DEPTH		From	To	Hole Made	Bit Size	Formation									DEPTH		From	To	Hole Made	Bit Size	Formation									DEPTH		From	To	Hole Made	Bit Size	Formation									
		109	300	191	12 1/4"												300			12 1/4"																									
DRILLING STRING		Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.								Size-D.P.		Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.								Size-D.P.		Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.										
					1857	274.28																																							
DRILL		Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL									DRILL		Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL									DRILL		Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL									
COLLAR		9	6 1/2	2 3/4	274.28	DRILLING STRING DRILL COLLARS									COLLAR						DRILLING STRING DRILL COLLARS									COLLAR						DRILLING STRING DRILL COLLARS									
DATA		36.16													DATA															DATA															
BIT RECORD		No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage						No.		Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage						No.		Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage								
		1A	YT3	13 1/4	300	10	85		300						1		YT3																												
		Bit Serial No. 57546 Jet ☒ Conventional ☐														Bit Serial No. 57546 Jet ☒ Conventional ☐														Bit Serial No. Jet ☐ Conventional ☐															
		Nozzle Size 3-20 Bit Wear: T B G														Nozzle Size 320 Bit Wear: T B G														Nozzle Size Bit Wear: T B G															
SURVEYS		Depth 140' 201' 232' Deviation 3/4" 1" 3/4"														Depth Deviation														Depth Deviation															
SLUSH PUMP RECORD No. 1 No. 2		TOURS														HOURS														HOURS															
		On Line	Circulating	Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size					On Line		Circulating	Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size					On Line		Circulating	Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size																
				500	15"	60	7 1/2"										15"	60	7 1/2"																										
MUD RECORD		Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS									Time		Visc.	Wt.	W L	pH	ADDITIVES — POUNDS									Time		Visc.	Wt.	W L	pH	ADDITIVES — POUNDS								
		1:00	86	9.5			GEL - 1800#																								Time		Visc.	Wt.	W L	pH	ADDITIVES — POUNDS								
		3:00	88	9.6			Line - 50#																								Time		Visc.	Wt.	W L	pH	ADDITIVES — POUNDS								
		6:00	90	9.6			Sandst 15 lbs																								Time		Visc.	Wt.	W L	pH	ADDITIVES — POUNDS								
CORING		Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery									Core No.		Depth In	Footage	Hours Run	Depth Out	Recovery									Core No.		Depth In	Footage	Hours Run	Depth Out	Recovery								
		DRLG. 7:45-8:00 1/4																																											
DETAIL OF OPERATIONS AND REMARKS		From To Hrs.														From To Hrs.														From To Hrs.															
		Rig SERV. 12:00 12:15 1/4														Rig SERV. 8:00 8:30 1/2														DRIG 12 1/4 HOLE 1:00 5:00 1															
		DRLG 12 1/4 HOLE 12:15 1:30 1 1/4														DRLG 12 1/4 8:30 9:45 1 1/4														CIR 5:00 5:30 1/2															
		SURVEY 1:30 1:45 1/4														SURVEY 9:45 10:00 1/4														TRIP 5:30 6:00 1/2															
		DRLG 12 1/4 HOLE 1:45 4:00 2 1/4														DRLG 12 1/4 10:00 12:00 2														RUN IN 6:00 6:30 1/2															
		SURVEY 4:00 4:15 1/4														CIR 12:00 12:00 1/4														CIR TO RUN CASING 6:30 7:00 1/2															
		DRLG 12 1/4 HOLE 4:15 5:30 1 1/4														SURVEY 12:00 12:30 1/4														TRIP 7:00 7:30 1/2															
		SURVEY 5:30 5:45 1/4														TRIP + STRAP out 12:30 1:00 1/2														Rig TO RUN CASING 7:30 8:15 3/4															
		DRLG 12 1/4 HOLE 5:45 7:20 1 3/4														RUN IN Pick up Kelly, Ream 3000 1:00 2:45 1 3/4														RUN IN HOLE w/ 12 1/4 BIT 8:15 9:00 3/4															
		SURVEY 7:20 9:45 2 1/4														DRIG 12 1/4 2:45 4:00 1 3/4														Pick up Kelly + Circ. 9:00 9:15 1/4															
		Driller: <u>Dan Doyle</u>														Driller: <u>Duane D. Ford</u>														Driller: <u>D. D. Doyle</u>															

HEADING UP & DRLG. OUT: TOTCO: FISHING: CIRCULATING: CLASSES OF TIME BREAKDOWN: TRIPPING: CORING: CONDITIONING MUD: CASING: W.O.C. D.S. TESTING: LOGGING: W.O. ORDERS: RIG REPAIRS: RIG MAINTENANCE: MISCELLANEOUS: CONDITION HOLE: REAMING CLEANING: WORKING PIPE: LOST CIRC. DID YOU CHECK BLOWOUT PREVENTER EQUIPMENT TODAY? YES NO

Total Contract Time _____ hrs. Total Company Time _____ hrs. Toolpusher W. J. Thompson Approved by E. J. R. R. R. R.

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT No. 4

WELL NAME JOE CHEVROLET GELIBETA D - Lsd. 21 Sec. 60 Twn. 50 Rge. 122 W 30 Contractor S.T. DRLG. WESTERN Month. FEB Day. 12 1970.

1st Tour From: 12:00 Midnight To: 8:00 a.m.										2nd Tour From: 8:00 a.m. To: 4:00 p.m.										3rd Tour From: 4:00 p.m. To: 12:00 p.m.																							
DEPTH		From	To	Hole Made	Bit Size	Formation				DEPTH		From	To	Hole Made	Bit Size	Formation				DEPTH		From	To	Hole Made	Bit Size	Formation																	
		912	1145	233	7 3/8							1145	1218	73	7 3/8							1218	1465	247	7 7/8																		
		Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.					Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.					Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.																
		4 1/2	552.49		32.66	530.85	548.40.00					4 1/2					Sub 4 10					4 1/2	807.71	62.39	41.50	612.05																	
DRILLING STRING	DRILL	Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL						DRILL	Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL						DRILL	Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL															
	COLLAR	18	6 1/4	2 1/4	530.85	DRILLING STRING				DRILL COLLARS						COLLAR	18	6 1/4	2 1/4	530.85	DRILLING STRING				DRILL COLLARS						COLLAR	20	6 1/4	2 1/4	612.05	DRILLING STRING				DRILL COLLARS			
	DATA	58 M.																				DATA										67 M.											
BIT RECORD	No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage				No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage				No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage													
	1	STAG	20 1/2	1145	30	85-70		1145				1	STAG	23 1/2	710	30	70-80	1185						2	XIG	8 1/2	280	30	65		280												
	2	XIG										2	XIG																														
Bit Serial No. 575386 Jet ☒ Conventional ☐										Bit Serial No. 575386 18714 Jet ☒ Conventional ☐										Bit Serial No. 18714 Jet ☒ Conventional ☐																							
Nozzle Size 2-12 1-11 Bit Wear: T B G										Nozzle Size 2-12 1-11 Bit Wear: T B G										Nozzle Size 2-12 1-11 Bit Wear: T B G																							
SURVEYS	Depth 936' 1061' Deviation 1 1/4° 1 1/4°										Depth Deviation										Depth 1371' Deviation 1 1/4°																						
	HOURS On Line Circulating Pump Press Length of Pump Stroke Strokes Per Min. Liner Size										HOURS On Line Circulating Pump Press Length of Pump Stroke Strokes Per Min. Liner Size										HOURS On Line Circulating Pump Press Length of Pump Stroke Strokes Per Min. Liner Size																						
SLUSH PUMP RECORD No. 1 No. 2	On Line Circulating Pump Press Length of Pump Stroke Strokes Per Min. Liner Size										On Line Circulating Pump Press Length of Pump Stroke Strokes Per Min. Liner Size										On Line Circulating Pump Press Length of Pump Stroke Strokes Per Min. Liner Size																						
	1025 15" 5.9 5 1/2"										1025 15" 5.9 5 1/2"										1050 15" 5.9 5 1/2"																						
MUD RECORD	Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS						Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS						Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS															
	12:00	39	9.4		11.0	GEL - 2900						8:00	38	9.2	10.0	9.0	GEL 1000						8:00	43	9.2		9.0	GEL - 2200															
	3:30	34	9.1		9.5							9:00	36	9.2	10.0	9.0	SANDUST 245						8:00	42	9.2		9.0	G.M.C. - 100 REG.															
	7:00	37	9.1		9.0																		10:30	48	9.2		9.0	CAUSTIC - 100															
CORING	Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery						Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery						Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery															
DETAIL OF OPERATIONS AND REMARKS	From To Hrs.										From To Hrs.										From To Hrs.																						
	Rig SERV. 12:00 12:15 1/4										Rig SERV. 8:00 8:15 1/4										Rig SERV. 4:00 4:15 1/4																						
	SURVEY 12:15 12:30 1/4										DRLG 7 3/8 HOLE 8:15 10:00 1 3/4										DRLG 7 3/8 HOLE 4:15 5:15 1																						
	DRLG 7 3/8 HOLE 12:30 5:00 4 1/2										CIR TO TRIP 10:00 10:15 1/4										SURVEY 5:15 5:30 1/4																						
	SURVEY 5:00 5:15 1/4										SURVEY 10:15 10:30 1/4										DRLG 7 3/8 HOLE 5:30 9:00 3 1/2																						
	DRLG 5:15 8:00 2 3/4										TRIP 800 NEW DOT 10:30 11:15 7/4										SURVEY 9:00 9:15 1/4																						
											PICK UP TWO COLLARS 11:15 12:00 3/4										DRLG 7 3/8 HOLE 9:15 12:00 2 3/4																						
											RAN IN 12:00 12:45 3/4																																
											TRIP & RUN BACK IN FOR UPSIDE FLOAT 12:45 3:00 2 1/4																																
											DRLG 7 3/8 HOLE 3:00 4:00 1																																
Driller: <u>Don Doyle</u>										Driller: <u>Duane Dyer</u>										Driller: <u>D. Doyle</u>																							

HEADING UP & DRLG. OUT:
DRILLING:
REAMING:CLASSES OF TIME BREAKDOWN
TOTCO:
FISHING:
CIRCULATING:
CONDITIONING MUD:
TRIPPING:
CORING:CASING:
W.O.C.
D.S. TESTING:LOGGING:
W.O. ORDERS:
RIG REPAIRS:RIG MAINTENANCE:
MISCELLANEOUS:
CONDITION HOLE:REAMING CLEANING:
WORKING PIPE:
LOST CIRC.:DID YOU CHECK BLOWOUT
PREVENTER EQUIPMENT TODAY
YES ☒ NO ☐

Total Contract Time hrs

Total Company Time hrs

Toolpusher Gene E. Whitman Approved by

Total Contract Timehrs. Total Company Timehrs. Toolpusher Geo. E. Williams Approved by _____

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT No. 3WELL NAME ICE CHEVRON - CELIBETA Lsd. 21 Sec. 60 Twn. 30 Rge. 122 W. 30 Contractor S.T. DRILLING WESTERN Month. FEB Day. 11 19. 76

1st Tour From: 12:00 Midnight To: 8:00 a.m.															2nd Tour From: 8:00 a.m. To: 4:00 p.m.															3rd Tour From: 4:00 p.m. To: 12:00 p.m.																	
DEPTH		From	To	Hole Made	Bit Size	Formation									DEPTH		From	To	Hole Made	Bit Size	Formation									DEPTH		From	To	Hole Made	Bit Size	Formation											
		475	485	10'	7 7/8"												495	5701	185'	7 7/8"												5701	912	271'	7 7/8"												
		Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.											Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.											Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.								
					22.04													4 1/2	9190	3131	2350													4 1/2	27899	6065	17.50	550.85	548 4.00								
DRILLING STRING	DRILL	Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL									DRILL	Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL									DRILL	Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL													
	COLLAR	15	6 1/4	2 3/8	450.95	DRILLING STRING									COLLAR	18	6 1/4	2 3/8	550.85	DRILLING STRING									COLLAR	18	6 1/4	2 3/8	550.85	DRILLING STRING													
	DATA					47.4									DATA					55									DATA					57.4													
BIT RECORD	No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage							No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage							No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage											
								Drilled Reamed															Drilled Reamed													Drilled Reamed											
	1	STIAL	4	10	12	15		10							1	STIAL	7													1	STIAL	4 1/2	437	20-30	85		437										
Bit Serial No. <u>575386</u> Jet ☒ Conventional ☐															Bit Serial No. <u>575386</u> Jet ☒ Conventional ☐															Bit Serial No. <u>575386</u> Jet ☒ Conventional ☐																	
Nozzle Size <u>2-12 1-11</u> Bit Wear: T <u> </u> B <u> </u> G <u> </u>															Nozzle Size <u>2-12 1-11</u> Bit Wear: T <u> </u> B <u> </u> G <u> </u>															Nozzle Size <u>2-12 1-11</u> Bit Wear: T <u> </u> B <u> </u> G <u> </u>																	
SLUSH PUMP RECORD	Depth		Deviation												Depth		Deviation												Depth		Deviation																
	HOURS		Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size	HOURS		Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size	HOURS		Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size																													
	On Line	Circulating					On Line	Circulating					On Line	Circulating																																	
				825	15"		5 1/2					825	15"		5 1/2					825	15"		5 1/2																								
MUD RECORD	Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS									Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS									Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS													
Pressure tested H-1/2" rammer															Pressure tested H-1/2" rammer															Pressure tested H-1/2" rammer																	
10:00 P.S. 1. Held back to 125 PS															10:00 P.S. 1. Held back to 125 PS															10:00 P.S. 1. Held back to 125 PS																	
Pressure tested formation to 1000 P.S. 1. Held back to 125 PS															Pressure tested formation to 1000 P.S. 1. Held back to 125 PS															Pressure tested formation to 1000 P.S. 1. Held back to 125 PS																	
CORING	Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery									Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery									Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery													
DRILL 7 7/8" HOLE															DRILL 7 7/8" HOLE															DRILL 7 7/8" HOLE																	
PRESSURE FORMATION															PRESSURE FORMATION															PRESSURE FORMATION																	
CLEAN MUD TANK															CLEAN MUD TANK															CLEAN MUD TANK																	
DETAIL OF OPERATIONS AND REMARKS	RIG SERV.															RIG SERV.															RIG SERV.																
	RIG TO DRILL MOUSEHOLE															RIG TO DRILL MOUSEHOLE															RIG TO DRILL MOUSEHOLE																
	DRILL-MOUSEHOLE CHANGE SPARKER															DRILL-MOUSEHOLE CHANGE SPARKER															DRILL-MOUSEHOLE CHANGE SPARKER																
	RUN IN HOLE W/BIT #1															RUN IN HOLE W/BIT #1															RUN IN HOLE W/BIT #1																
	PICK-UP KELLY & CIRC															PICK-UP KELLY & CIRC															PICK-UP KELLY & CIRC																
	PRESSURE UP 4 1/2" PIPE RAMS +															PRESSURE UP 4 1/2" PIPE RAMS +															PRESSURE UP 4 1/2" PIPE RAMS +																
	HYDRIL TO 1000 P.S. 1. HELD O.K.															HYDRIL TO 1000 P.S. 1. HELD O.K.															HYDRIL TO 1000 P.S. 1. HELD O.K.																
	STEAMER OUT ALL LINES															STEAMER OUT ALL LINES															STEAMER OUT ALL LINES																
	DRILL OUT CEMENT, FLAT & SHOE															DRILL OUT CEMENT, FLAT & SHOE															DRILL OUT CEMENT, FLAT & SHOE																
	Driller <u>Don Doyle</u>															Driller <u>Don Doyle</u>															Driller <u>Don Doyle</u>																

HEADING UP & DRLG. OUT: TOTCO: CONDITIONING MUD: CASING: LOGGING: RIG MAINTENANCE: REAMING CLEANING: DID YOU CHECK BLOWOUT PREVENTER EQUIPMENT TODAY? YES ☒ NO ☐

Total Contract Timehrs. Total Company Timehrs. Toolpusher Don Doyle Approved by Don Doyle