

IMPERIAL WINDFLOWER

G-77

Drilling Authority No.

Date Issued

WELL NAME Imperial Windflower G-77

FIELD Wildcat

Area: Willow Lake

LOCATION: Unit

Section

Grid

Latitude 62°56'23" N.

Longitude 118°59'00" W.

From Established Reference Marker

Rig Release Date: 19-2-60

Status D & A

Information Release Date 19-2-62

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. Approval to Commingle Production before Measurement. Application to Amend Approval No. to Commingle Production before Measurement. Application for M.P.R.—Oil. New Oil Well Report. New Gas Well Report. Well Inspection Report. Rig Inspection Report. Battery Inspection Report. Field Abandonment Programme and Approval. Well Card. Well Visit. Daily Drilling Reports.



CANADA

Drilling Authority No.

Date Issued

DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
RESOURCES 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 **IMP WINDFLOWER 6-77**
Permit No. **P & NG 2809** Lease No.
Imperial Oil Limited Exploratory Licence No. **Not available**
(Permitter, Licensee, Lessee)
Imperial Oil Limited Exploratory Licence No. **Not available**
(Operator)
Location: Unit **G** Section **77** Grid **63°00' 118°45'**
Latitude **62°56'26" N** Longitude **118°59'02" W.**
From Established Reference Marker **S. 21738' E. 2692' of NW Boundary of Permit 2809**

	DATE	DEPTH	Pool (S)
			Interval(s) open to production
Spudded	Jan. 17/60		
Suspended			
Resumed			
Finished Drilling			
Deepened			Elevation: Gr. 892.6
Complete (gas, oil)			K.B. 903
Abandoned	Feb. 19/60	1644	Drilling Contractor & Rig No. I.O.I.
Rig released	Feb. 19/60	1644	Contractor's Licence No.

CASING RECORD

Casing Size (Inches)	Weight	Amount	Set at—	Bags of Cement	Method
1. PIPELINE 7			165	42	
2.					
3.					
4.					
5.					
6.					

GEOLOGICAL TOPS	ELEVATION		CORE RECORD					
	Depths	Sub-Sea	From	To	Rec.	From	To	Rec.
PLEISTOCENE			183	203				
Glacial Drift			1350	1370				
CRETACEOUS/DEVONIAN								
Shale	70	+ 833						
Devonian Carb.	179	+ 724						
Devonian Anhy.	463	+ 440						
PRECAMBRIAN	1620	- 717						

LOG RECORD

Run No.	Type of Log	From	To
1	Electric	164	1644
1	G.R.N.	10	1643
1	Induction	163	1639
1	Microlog	164	1642
1	Sonic	163	1636

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
Feb. 19/60	1644	1520	25 sacks cement								
	800	690	25 "								
	300	125	90 "								
	Surf face		5 "								

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.P.B.H.P.	F.P.B.H.P.	I.H.P.	F.H.P.	REMARKS
1			335	382	60	15	60	159		53	106	159	159	Good initial puff, weak air blow. Rec. 180' of fresh, watery mud.
2			764	807	60	15	30	344		159	318	397	384	Good initial puff, Fair air blow. Rec. 720' of fresh water.

Lab. No.	Sample	From	To	Source	Remarks	PRESENT STATUS OF WELL			
						Oil		(Interval)	
						Gas		(Interval)	
						Dry	Abandoned		
						Susp.			

Company: Imperial Oil Limited

Signed by: COPY (ORIGINAL) R. E. FINCH

Total: Well File Clerk

Date: November 20/1961.

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

DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES

69

NORTHERN ADMINISTRATION BRANCH

RESOURCES DIVISION

For the period from Jan. 23, 1960
to Feb. 19, 1960

REPORT of ~~CONFESSION~~
~~ABANDONMENT~~ of a Well
~~ABANDONMENT~~
ABANDONMENT

Permit No. 2809

Name of well Imp Windflower G-77 ✓ Lease No.
Registered owner Imperial Oil Limited Drilling Company Hardean Drilling
Location 62° 56' 26" N. Lat. 118° 59' 02" W. Long.
Survey description, if available
Elevation: Ground 892.6 Last previous depth 1644
Kelly bushing 902.7 Present depth
Spudded January 23rd, 1960 Finished drilling Feb 16/60 Rig Released
February 19, 1960
Deviations from vertical 0° to 2°

CASING RECORD

Date	Size O.D.	Weight lbs/ft	Grade	Set at feet	Sacks Cement	Top of Cement
1 Jan. 27/60	7	20	J-55	165	42	Surface
2						
3						
4						

TUBING RECORD

Size	Wt. lbs/foot	Grade	Amount	Landed Depth	Remarks
Wellhead		(Manufacturer)	(Size)	(Series)	

State of well on completion of drilling **Dry Hole**

Producing Zone and formation

Coord. Interval: Core #1. 183' - 190'

Core #2. 190° - 203°

1 2 3 4 5 6 7 8 9 10 11 12 13 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 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023 1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035 1036 1037 1038 1039 1040 1

Case No. 158-15701

Interval logged: E-log 161'-164' Other logs Induct. on 163'-1639'

R-log . . . 10'-1643" Series . . . 163"-1636"

M-log 161-1612

Velocity log 163°-1636°

The above logs ~~(are)~~ (will be) submitted in accordance with Section 65 of the Regulations.

DRILL STEM TESTS

[illegible]

(If space insufficient, attach further sheet)

(Strike out the non-applicable) (~~COMPACT~~) (~~RENTAL~~) (~~RECOMPENSATION~~)

Perforations Bullet.

Shootings

Hydraulic fracturing

Chemical treatment

Date initial production tests

Initial production data

Pumping or flowing
 Plug back
 Other

CEMENT PLUGS SET

Date	Plug set at	Sacks cement	Method	Top found at
Feb. 18/60	1644' - 1520'	25	Displacement	Not felt
Feb. 19/60	800' - 675'	25	Displacement	690
Feb. 19/60	300' - 100'	40	Displacement	125

Set 5 sack cement plug in top of casing welded steel plate and
 nameplate on top.

Washed well samples ~~submitted~~ sent to Geological Survey of Canada, Calgary
 will be

Cores will be stored at Dawson Creek, B.C.

Core analysis (was made) of the Intervals Not done
 (to be made)

Oil analysis (was made) of the Intervals None
 (to be made)

Gas analysis (was made) of the Intervals None
 (to be made)

Water analysis (~~submitted~~) of the Intervals 335' - 382'; 764' - 807'
 (to be made)

The above analyses (~~will be~~) submitted in accordance with Section 70(2) of
 the Regulations.

ADDITIONAL DETAILS AND COMMENTS

Signed. [Signature] Address Dawson Creek, B.C.

Date MAR 5 1960

(To be submitted in triplicate in accordance with Sections
 68, 69, 70 and 71, of the Territorial Oil and Gas Regulations
 to the Oil Conservation Engineer at Calgary, Alberta.)

Imp Windflower G-77

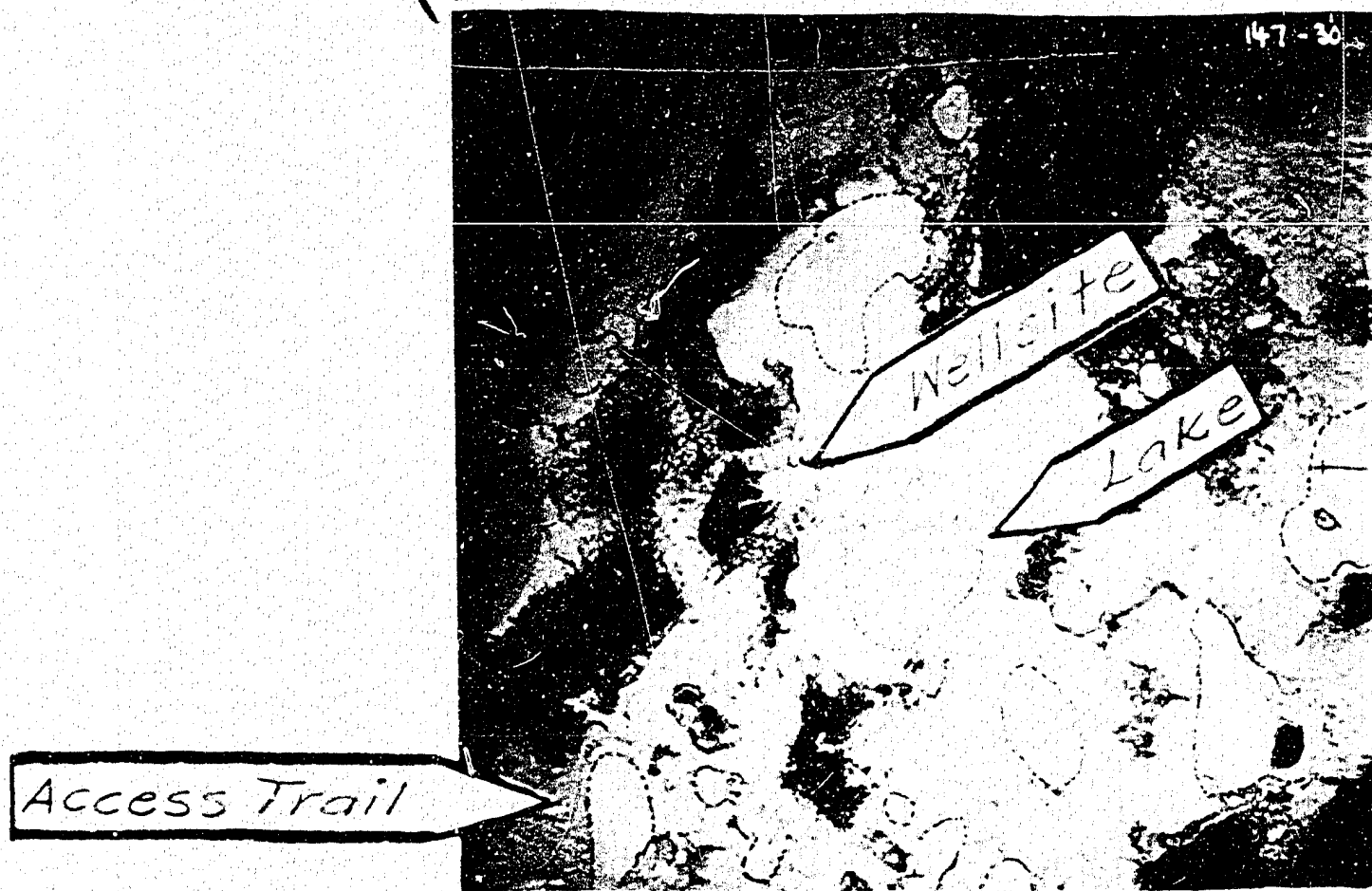


Imperial Oil Limited \ air photo
showing well location, access
trail and topography. Photo to
accompany location plan.
Scale: 1" = 1/3 mi. approx. Flown: April 1960.

Snow covered lakes are dotted in outline
for clarity

Compiled: T.G. Watmore.

Imp Windflower G-77



Imperial Oil Limited air photo
showing well location, access
trail and topography. Photo to
accompany location plan.
Scale: 1" = 1/3 mi. approx. Flown: April 1960.

Snow covered lakes are dotted in outline
for clarity

Compiled: T.G. Watmore.

FORM "C"

CANADA

DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES

NORTHERN ADMINISTRATION BRANCH

RESOURCES DIVISION

ABANDON

NOTICE OF INTENTION TO

~~ABANDON~~

a Well

~~Imperial Oil Limited~~

(Strike out operation which does not apply)

In accordance with Sections 48 & 49 of the Territorial Oil and Gas Regulations, notice is hereby given of our intention to

~~Abandon~~ the well named ~~Imperial Oil Limited~~ **Imperial Oil Limited** on Oil

and Gas Permit No. **2809**

Registered in the name of **Imperial Oil Limited**

Lease No.

Depth **1644** . . feet. Elevation above sea level: Ground surface **852.6** . . ft.

Kelly bushing **902.7** . . ft.

Location **62°46'23"** N. Lat. **111°59'02"** W. Long.

21738' . . . ~~Imperial Oil Limited~~ (Permit No. **2809**)
(S. of N. boundary) of (Lease No.)
2682' . . . ~~Imperial Oil Limited~~ (Permit No. **2809**)
(E. of W. boundary) (Lease No.)

Survey description, if available

CASING RECORD

Size O.D. inches	Weight lbs/ft	Grade	Amount feet	Set at feet	Sacks cement	Method	to be withdrawn
1 7 . . .	20.0	J35	165	174	42	Displacement	N11
2							
3							
4							

OIL, GAS AND WATER

Oil from **N11** . feet to feet From feet to feet with
. sacks cement

Oil from feet to feet From feet to feet with
. sacks cement

Gas from **131** feet to . . . feet From . . . feet to . . . feet with . . . sacks of cement.

Gas from . . . feet to . . . feet From . . . feet to . . . feet with . . . sacks of cement.

Water from **335** feet to **380** feet From . . . feet to . . . feet with . . . sacks cement.

Water from **764** feet to **807** feet From . . . feet to . . . feet with . . . sacks cement.

Surface and bottom plugs:

1. from **1644** feet to **1720** feet with **25** sacks cement.
2. from **800** feet to **675** feet with **25** sacks cement.
3. from **300** feet to **100** feet with **40** sacks cement.

5 inch plug in top of casing with steel plate welded on.

Date of last operation . . . **Feb. 19, 1960** . . . Total depth **1644**

Nature of liquid left in well . . . **and** . . . Level from surface **to surface** on suspension or abandonment

LOGS

The following logs have been run **E-log, Microlog,**

Induction log, sonic log, Gamma - Neutron log.

Produced from **N.A.** zone and on abandonment of a well which has been on production.

Present condition of well in addition to above **N.A.**

On abandonment or suspension of drilling we shall comply with Sections 68, 69 and 70 of the Regulations.

Program of operation not included above

Responsible agents of permittee or lessee in charge of operation:
 At well **A. J. McCaskill** . . . Postal address **Imperial Oil Limited, Dawson Creek, B. C.**
 At registered office **V. J. McCreary** . . . Postal address **Imperial Oil Limited 300-9th Ave. W. Calgary**

It is understood that if changes in this Notice of Intention become necessary we will promptly notify you.

Dated at **Dawson Creek, B.C.** **26th** day of **February** 19. **60.**

Signed by **COPY** **Original** **J. G. RILEY**

This program is approved subject to the following provisions

~~Confirming oral approval to
abandon from 17th February~~

29th February 1960

Date

B. J. Shons
Oil Conservation Engineer

(To be submitted in triplicate to the Oil Conservation
Engineer at Calgary, Alberta.)

IMPERIAL OIL LIMITED

PRODUCING DEPARTMENT

December 30, 1959

Files: N.W.T. 98	D.5.1
N.W.T. 170	D.5.5
N.W.T. 225	
N.W.T. 125	

Hon. Alvin Hamilton,
Minister,
Department of Northern Affairs &
National Resources,
OTTAWA, Ontario.

Dear Sir:

Re: Imp. Windflower G-77

Further to our letter of December 23rd, we wish to advise that upon examination of the ground conditions contained within the Unit J-67, they were found to be unsuitable for a drilling location and we now wish to advise that the location of the well Imp. Windflower J-67 has been relocated in Unit G of Section 77 of Grid Area 63° 00'N 118° 45'W. This well will be referred to as Imp. Windflower G-77.

The Notice of Intention to Drill the subject well has been submitted to the Oil Conservation Engineer in Calgary.

Yours very truly,

COPY (ORIGINAL) H. W. HEWITT
By _____
H. W. Hewitt

HEA/as

CANADA

NORTHERN ADMINISTRATION BRANCH

RESOURCES RESOURCES

NOTICE OF INTENTION TO BEGIN DRILLING OPERATIONS

or

TO CARRY OUT A STRUCTURE TEST PROGRAM

In accordance with Section 58 of the Territorial Oil and Gas Regulations, notice is hereby given of our intention to begin drilling a well on Oil and Gas Permit No. 1000 registered in the name of Lease No. 1000.

Imperial Oil Limited

TYPE OF WELL:

Wildcat Wildcat

Development

Expected total depth . . . **1600** feet, in the

formation of **Proterozoic** age.

The well will be located at 62° 56' 38" N. Lat. 118° 59' 02" W. Long.

21,738' . . . (~~N. of S. boundary~~) (Permit No. 2809)
 2,632' . . . (~~S. of N. boundary~~) of (~~Lease No.~~)
 . . . (~~N. of S. boundary~~) of (Permit No. 2809)
 . . . (~~E. of W. boundary~~) (~~Lease No.~~)

Survey description of Location, if known . . . to be forwarded

Approximate surface elevation of to be forwarded feet above sea level.

Name of well Imp Windflower G-77

Type of drilling rig **Failing 2500**

Expected date of commencement January 5, 1960

We propose to use the following strings of casing, cementing them as indicated below:

Size O.D. Inches	Weight lbs/ft	Grade	Brand	New or Used	Estimated Depth	Sacks of Cement
1. 7"	26.0	J-55		New	300*	Sufficient to cement to surface
2.						
3.						

Expected depth of water, gas and oil horizons and method of control:

Drilling conditions are not known at this time. Normal safe practices for control of unexpected drilling problems will be used. Surface casing will be set to sufficient depth to control surface waters.

An electric log will be run Other logs will be run
~~will not~~ ~~will not~~

STRUCTURE TEST PROGRAM

Proposed number of holes Maximum well depth
enclosed within an area bounded by

. N. Latitudes
. W. Longitudes

An electric log will be run Other logs will be run
will not will not

Name and address of drilling contractor . Imperial Oil Limited
100 - 9th Avenue South West
CALGARY, Alberta

Responsible agents of permittee or lessee in charge of operation:

At well A. J. McCaskill Postal address DAWSON CREEK, B. C.

At registered V. J. Moroney Postal address Imperial Oil Ltd.
office 100 - 9th Avenue South West,
CALGARY, Alberta

It is understood that if changes in this Notice of Intention become necessary we will promptly notify you.

Dated at Dawson Creek this 23rd day of December 1959

Signed by W. Keeling

This program is approved subject to the following provisions (if any):

28th December 1959
Date

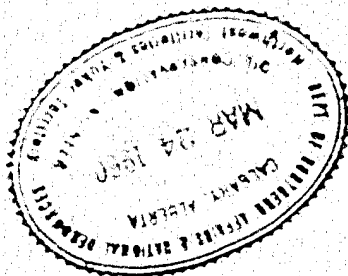
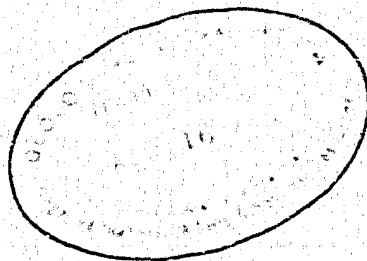
B. H. Shoms
Oil Conservation Engineer.

(To be submitted in triplicate to the Oil Conservation Engineer at least 15 days prior to the commencement of drilling)

CONFIDENTIAL

IMP WINDFLOWER G-77

G-77 63° 00'; 118° 45'



DP WINDFLOWER G-77

G-77 13° 00'; 113° 45'

SUMMARY OF WELL DATA

<u>Location</u>	: 62° 56' 26"W; 113° 59' 02"W. Co-ords 21,734'S. of N. Boundary; permit 2809 2,682'E. of W. Boundary; permit 2809																					
<u>Elevation</u>	: Ground: 892.6'; E.L. 902.7'																					
<u>Permit</u>	: M.I.T., P. & M.C. Permit 2809																					
<u>Contractor</u>	: Warden Drilling Co.																					
<u>Operator</u>	: Imperial Oil Limited																					
<u>Permitted</u>	: Imperial Oil Limited																					
<u>Classification</u>	: New Field Wildcat																					
<u>Spudded</u>	: January 17, 1960 - <i>Abandoned</i> " 23, 1960 - <i>12' from initial hole.</i>																					
<u>Completed Drilling</u>	: February 17, 1960																					
<u>Total Depth</u>	: 1644'																					
<u>Well Status</u>	: Abandoned with no shows																					
<u>Rig Released</u>	: February 19, 1960																					
<u>Hole Size</u>	: 9" 0' - 174'; 6 1/2" 174' - 1644'																					
<u>Casing</u>	: 7" x 165' C-12 + 2% CsCl ₂																					
<u>Geological</u>	: A. W. Walker 0' - 1644'																					
<u>Drilling</u>	: Warden																					
<u>Formation Tons</u>	: <table> <tbody> <tr> <td>PLEISTOCENE</td><td>70'</td><td>(+ 833')</td></tr> <tr> <td>MIDDLE DEVONIAN</td><td></td><td></td></tr> <tr> <td> Keg River Formation</td><td>179'</td><td>(+ 724')</td></tr> <tr> <td> Chinchaga Formation</td><td>463'</td><td>(+ 440')</td></tr> <tr> <td>PRE-DEVONIAN</td><td>720'</td><td>(+ 183')</td></tr> <tr> <td>PRECAMERIAN</td><td>1620'</td><td>(- 717')</td></tr> <tr> <td>Total Depth</td><td>1644'</td><td>(- 741')</td></tr> </tbody> </table>	PLEISTOCENE	70'	(+ 833')	MIDDLE DEVONIAN			Keg River Formation	179'	(+ 724')	Chinchaga Formation	463'	(+ 440')	PRE-DEVONIAN	720'	(+ 183')	PRECAMERIAN	1620'	(- 717')	Total Depth	1644'	(- 741')
PLEISTOCENE	70'	(+ 833')																				
MIDDLE DEVONIAN																						
Keg River Formation	179'	(+ 724')																				
Chinchaga Formation	463'	(+ 440')																				
PRE-DEVONIAN	720'	(+ 183')																				
PRECAMERIAN	1620'	(- 717')																				
Total Depth	1644'	(- 741')																				

D.P. WINDFLOWER G-77

-2-

Summary - cont'dCores

<u>Core No.</u>	<u>Interval</u>	<u>Formation</u>	<u>Recovered</u>
1	183' - 190'	Keg River	6'
2	190' - 203'	"	13'
3	1350' - 1370'	PRE-DEVONIAN	20'

Plugs

<u>No.</u>	<u>Interval</u>	<u>Sacks cement</u>
1	1644' - 1520'	C-25 sacks
2	800' - 690'	C-25 sacks
3	300' - 125'	C-90 sacks
4	Surface	5 sacks

Logs

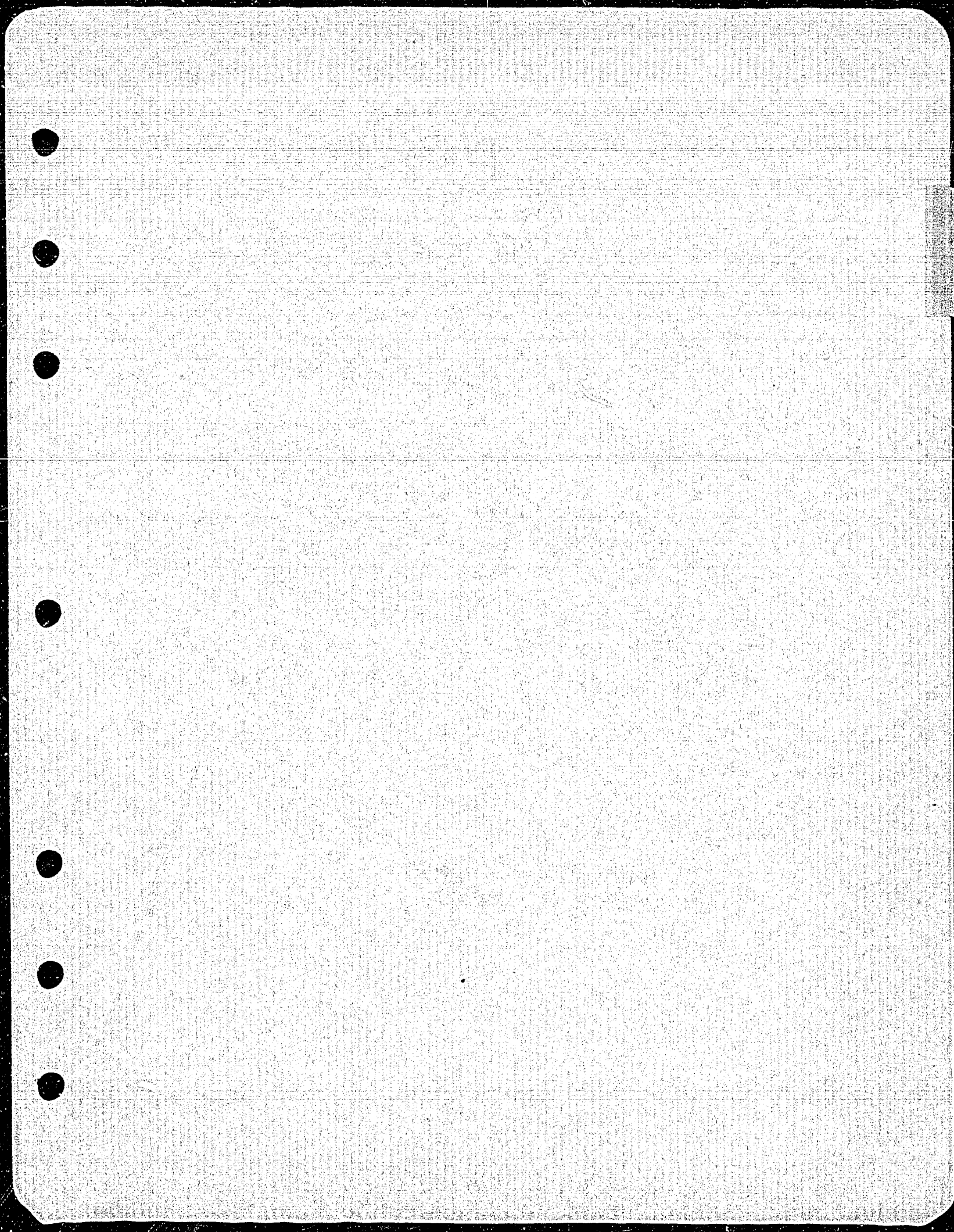
<u>Type</u>	<u>Run</u>	<u>Date</u>	<u>From</u>	<u>To</u>
E-log	1	Feb. 17/60	1644'	1644'
G.R.N.	1	Feb. 17/60	10'	1643'
Induction Log	1	Feb. 17/60	163'	1639'
Microlog	1	Feb. 18/60	164'	1642'
Sonic Log	1	Feb. 17/60	163'	1636'

D.S.T's

No.	Formation	From	To	VO.	ISI.	FSI.	Results	IHP.	SIP.	IFP.	FTP.	FHP.	BHTOP.
1	Keg River	335'	382'	60	15	60	GIP. WAB. 159 Rec. 180' fr. watery mud.	1st. 159 2nd. 159	1st. Mill 2nd. 53	1st. Mill 2nd. 106	159	48°	
2	Pre-Devonian	764'	807'	60	15	30	GIP. FAB. 397 Rec. 720' fr. water	1st. 344 2nd. 344	1st. Mill 2nd. 159	1st. Mill 2nd. 318	384	-	

F. S. Jeffries

FSJ:rf
Dawson Creek
Feb. 1960



HMP WINDFLOWER G-77

G-77 63° 00'; 118° 45'

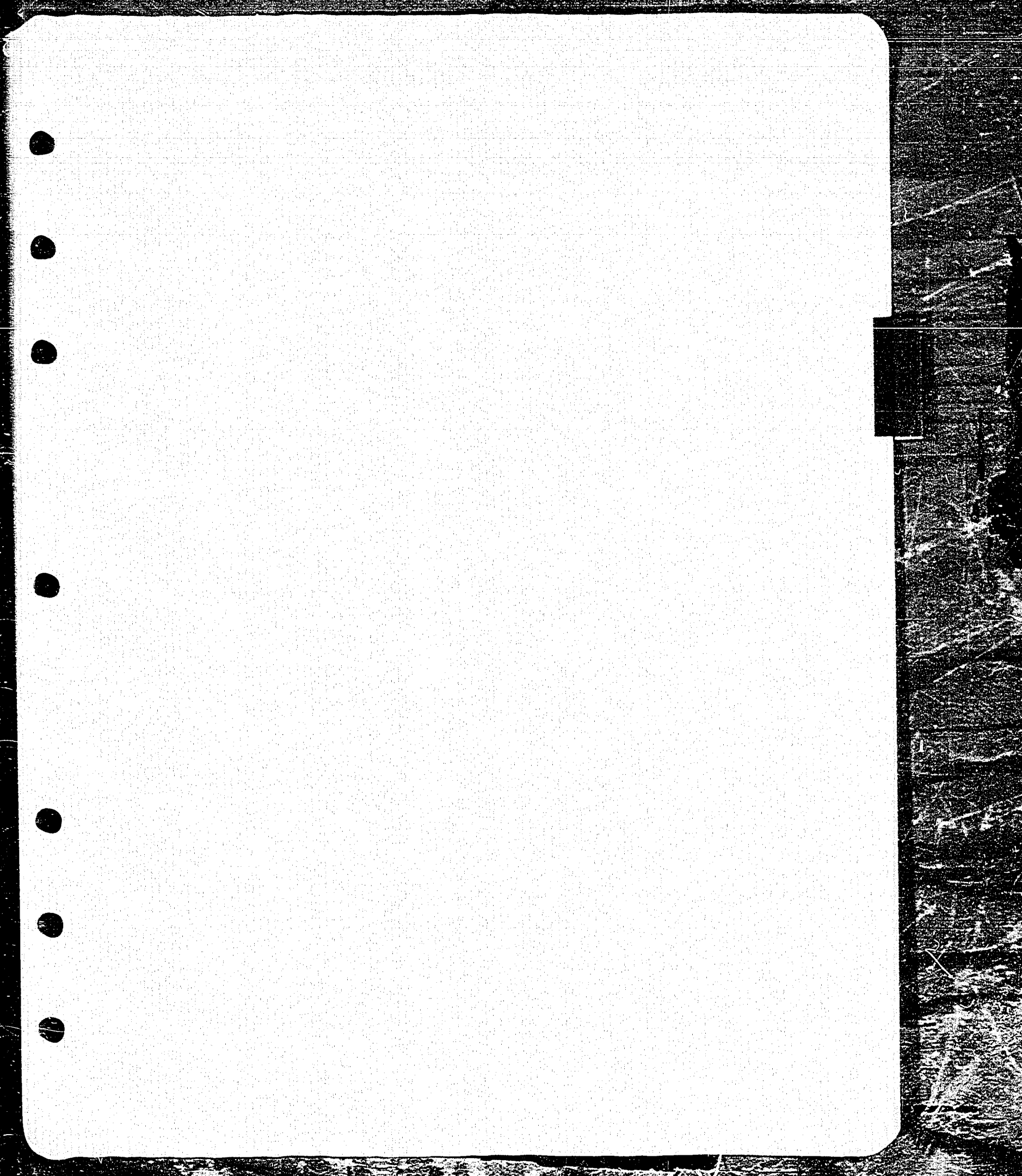
LITHOLOGICAL DESCRIPTION

E.B. 902.7'

- 0' - 70' PLEISTOCENE
Unconsolidated sands, gravel or boulders.
- 70' - 179' MIDDLE DEVONIAN - Dark Shale
Shale, dark grey brown, bituminous.
- 179' - 190' Kes River Formation
Limestone, buff, brown, micritic-skeletal, up to 30-40% brachs, crinoids and gastropods. Patches of well sorted cemented skeletal, very slightly argillaceous.
- 190' - 330' Limestone, cream, buff, predominantly a lithographic lime mud. Occasional traces of vague colonial fragments and very fine microcrained skeletal wash. Minor interbeds of pellet-micrites with traces of algal spheres. Traces of grey-green anhydrite. Trace of dolomitization to base, light.
- 330' - 463' Limestone, predominantly lime-muds, as a base, with traces of cemented-pellet. Interbeds of dolomite from 330'-385', grey, buff, finely microcrystalline with traces of earthy porosity, abundant relict textures locally. Below 420' dolomite, as above with suggestion of better porosity, mainly earthy however with abundant relict textures (skeletal).
- 463' - 720' Chinchasa Formation
Interbedded anhydrite and dolomite.
Anhydrite, buff, white, crystalline, occasionally sugrosic. Dense massive appearance.
Dolomite, grey, buff, very fine microcrystalline to cryptocrystalline, very slightly argillaceous. in part. Dense primary appearance.
- 720' - 764' PRE-DEVONIAN
Predominantly anhydrite white, buff cream with traces of red. Red tinge starts at 680'. Minor interbeds light grey dolomite-cryptocrystalline, dense. Traces of shale and clay partings, grey-green, red. Red colouration occurs as traces only.

- 762' - 860' Dolomite, brown, microcrystalline, slightly calcareous has a distinct crystalline-granular appearance. Traces of relict skeletal texture in part. Fair to good (microcrystalline and very fine) trusy porosity. Oil stained.
- 860' - 930' Dolomite, buff brown, light grey, micro to cryptocrystalline, dense, some anhydrite interbeds and patches in the dolomite. Vague skeletal outlines occasionally.
- 930' - 1020' Dolomite, buff, light grey, cryptocrystalline, dense, scattered pyrite cubes, minor anhydrite, very hard (primary).
- 1020' - 1155' Dolomite, buff, brown, fine microcrystalline with anhydrite patches, rare vague skeletal outlines.
- 1155' - 1430' Interbeds of sandstone, shale, dolomite and anhydrite.
Shale, grey-red, red. Sandstone, clear, pink, very fine to very coarse, rounded, frosted, mainly quartz. Dolomite, buff, light grey, microcrystalline with interbedded massive anhydrite.
- 1430' - 1530' Dolomite, light to medium grey buff, slightly anhydritic, fine to very fine interlocking anhedral rhombs, tight. Has a fairly distinct appearance.
- 1530' - 1620' Shale, green bentonitic.
- 1620' - 1644' PRECAMBRIAN
Granite, weathered at top.
- 1644' Bottom of Hole

AMW:rf
Dawson Creek
Feb. 1960



DP WINDFLOWER C-77

G-77 63° 30'; 118° 45'

K.S. 903

CORE #1.

183' - 190' Recovered 6'

Limestone, brown-tuff, micritic-skeletal to skeletal micritic, up to 60% brachiopod, gastropod and fusilined skeletal preserved as sparry calcite, slightly argillaceous, frequent stylolitic partings causing core to fracture and jam in barrel, tight.

NOTE: One large brachiopod 7" from base of core possibly identifiable.

Coring Times:

15, 14, 14, 13, 20, 14, 30.

NOTE: Drilling string does not weight enough to get optimum weight on core bit.

— A. W. Walker —

Geologist

AWW:rf
Dawson Creek
Feb. 1960

IMP WINDFLOWER C-77

C-77 63° 00'; 112° 45'

K.B. 903'

CORE #2.

190' - 203' Recovered 13'

190' - 195' 8"
5' 8"

Limestone, skeletal, brown-buff, medium to coarse subangular skeletal of clear calcite (brachiopods, gastropods, fusulids and occasional crinoids) in a matrix of very fine grained to finely microgranular (skeletal?) limestone, slightly argillaceous, tight. Both grains and matrix decrease in size towards base to fine grained and fine microgranular matrix.

195' 8" - 203'
7' 4"

Limestone, buff-brown, fine microgranular with 10% medium to fine skeletal grains, tight.

Logging Times:

9, 9, 12, 9, 8, 9, 12, 11, 11, 12, 11, 10, 16.

-- A. W. Walker --

Geologist

AW:rf
Dawson Creek
Feb. 1960

TWP WINDFLOWER C-77 G-77 63° 00'; 113° 45'

K.B. 903'

CORE #3

1350' - 1370' Recovered 20'

1350' - 1370'
(20')

Finely interbedded shale and anhydrite. Shale, green, occasionally red or maroon, waxy. Anhydrite, buff-brown, microcrystalline, dolomitic, shrinkage cracks infilled with shale and evidence of small salt collapse structures. Later movements caused slickensiding in shales and allowed gypsum to enter bedding planes and widen them up to 1/4" with columnar type crystals. Some gypsum veins at 45° to wall of core - none are vertical.

-- A. W. Walker --

Geologist

AWW=rf
Dawson Creek
Feb - 1960

Volume 10

IMPERIAL OIL LIMITED

WEEKLY CHRONOLOGICAL WELL REPORTWell IMP WINDFLOWER G-77Location G-7763°00';
118°45'.Elev. K.B. 900'District Peace RiverWeek Ending Jan. 19/60Report No. 1

Date	Total Depth	Progress	Days	REMARKS
Jan. 18	36'	36'	1	Spudded 6:30 p.m. January 17, 1960. Drilled 10' to 36' with bit #1, 9", OSC-3 @ 180 rpm. Hole caving badly. Spent 10 hrs reaming Kelly down.
Jan. 19	141'	105'	2	Drilled 36' to 124' with Bit #1. Tripped. Drilled 124' to 141' with bit #2 OSC, 180 rpm. Tripped to clean hole, circulating, mixing mud etc. prior to running casing. Hole has been improving since 80' reached. 10'-70' Loose sand, gravel and boulders. 70'-141' Shale, dark grey-brown, bituminous.

— A. W. Walker —

Geologist

WEEKLY CHRONOLOGICAL WELL REPORTWell IMP WINDFLOWER G-77Location G-77 63°00'N;
118° 45'WElev. K.B. 903'District Peace RiverWeek Ending Jan. 26/60Report No. 2

Date	Total Depth	Progress	Days	REMARKS
Jan. 20	141'	0	3	Conditioned hole and mud. Ran 7" casing to 20' off bottom. Circulated casing. Casing stuck when pump shut off to clean flow line - no mud returns when pumping resumed. Stuck 14 hrs. by 8 a.m.
Jan. 21	141'	0	4	Worked casing free by running 2" line down annulus and pumping out cavings. Pulled casing. Ran in with 9" bit to condition hole and mud.
Jan. 22	P.F.D. 0	-	5	Found iron in hole - $\frac{1}{2}$ of casing collar lost. Ran cement plug to surface. Skidded rig @ 8:00 a.m.
Jan. 23	0	0	6	Skidded rig 10' east. Rigged up. Drilled rathole - putting Kelly sock @ 8:00 a.m.
Jan. 24	156'	156	7	Drilled surface to 156' with bit #3 OSC 9" @ 180 rpm and 380 gpm. Lost circulation. Stuck drilling string,
Jan. 25	156'	0	8	Stuck in hole. Ran in 2" pipe to 80' - could not get any further - pumped little cavings. Hooked up winch truck to help drawworks, no good. Spotted diesel fuel - 5 barrels - 1 bbl @ each hour. Tripped to work string - no good.
Jan. 26	174'	18'	9	Unstuck pipe. Drilled 156'-174' with bit #3 after conditioning mud. Tripped to condition hole before running casing.

— A. W. Walker —

Geologist

IMPERIAL OIL LIMITED

WEEKLY CHRONOLOGICAL WELL REPORT

Well DMP WINDFLOWER G-77

Location G-77 63° 00';
118° 45'

Elev K.B. 903'

District Peace River

Week Ending Feb. 2/60

Report No. 3

Date	Total Depth	Progress	Days	REMARKS
Jan. 27	174'	0	10	Tried to run casing 4 attempts failed to pass 'dog leg' at 80'. Laid down 4 3/4" D/C's and picked up 7" D/C's to straighten hole. Reaming 634 at 8:00 a.m.
Jan. 28	174'	0	11	Reamed 34' to 174'. Conditioned mud. Circulated. Ran 5 jts. 7", 20 lb, J-55, R.2 Stewart & Lloyd casing to 165.18' K.B. Cemented with 42 sacks + 2% CaCl ₂ . P.D. @ 7:30 a.m. January 27. W.O.C.
Jan. 29	174'	0	12	Install B.O.P's, mud tank etc. Radiator burst on pump motor. W.O. repairs.
Jan. 30	174'	0	13	W.O. repairs.
Jan. 31	174'	0	14	W.O. repairs.
Feb. 1	190'	16'	15	Rigged up temporary device for cooling pump motor. Drilled out plug at noon with Bit #4 OSC-3 6 1/4". Drilled 174' to 183'. Pulled to core. Cut core #1 183'-190'. Jammed off, pulled and recovered. Loosing small amount of mud while coring. Worked on pump 4 hrs. 174'-180' Shale as above. 180'-183' Limestone as below. Core #1. 183'-190'; Recovered 6'. 6' Limestone, brown buff, micritic skeletal to skeletal micritic, up to 60% brach, gastropod and fusilined skelets replaced by clear crystalline calcite, stylolites common, causing jamming, <u>tight</u> .
Feb. 2	229'	39'	16	Cut core #2 190'-203' Reamed 183'-203' from 4 3/4" to 6 1/4" with bit #6 M4N @ 80 rpm and 270 gpm. Core #2. 190'-203'. Rec. 13'. 6' Limestone, skeletal buff brown, <u>tight</u> . 7' Limestone, micritic buff-brown, <u>tight</u> . 203'-220' Limestone micritic, occasionally skeletal, as above.

— A. W. Walker —

Geologist

IMPERIAL OIL LIMITED

WEEKLY CHRONOLOGICAL WELL REPORT

Well IMP WINDFLOWER G-77

Location G-77 63° 00'; Elev. K.B. 903'
118° 45'

District Peace River

Week Ending Feb. 9, 1960 Report No. 4

Date	Total Depth	Progress	Days	REMARKS
Feb. 3	275'	46'	17	Tripped for new bit. Drilled 229'-275' with bit #7 OSC @ 90 rpm, 4,000 lbs and 250 GPM. Limestone as above with some chalky, light grey-green anhydrite bands.
Feb. 4	291'	16'	18	Drilled 275'-291' with bit #7 16 hrs. down time mixing mud. W.O. pump. Lost circulation. Out of mud. Limestone, as above.
Feb. 5	373'	80'	19	Ran loss circulation cement plug #1. 291'-up. 20 sacks + 2% CaCl ₂ . P.D. 6:15 a.m. Mix mud, work on pump. Drilled 291'-373' with bit #7, W7, 6 $\frac{1}{4}$ ", with 8,000 wt, 150 rpm, 230 GPM. Dolomite, buff microcrystalline, <u>traces of porosity</u> .
Feb. 6	458'	85'	20	Drilled 373'-458' with bit #8, Tripped to test. Ran DST #1. Drilled 383'-458' with bit #9, M5, 6 $\frac{1}{4}$ ", 120 rpm, 8,000 lb., 270 GPM. DST #1. 335'-383'; GIP., WAB. Recovered 80' watery fresh mud. 370'-420' Partly dolomitized pelletal and skeletal limestones, <u>trace porosity, oil stained</u> . 430'-470' Dolomite, buff, brown, coarse microcrystalline, <u>fair to good porosity, oil stained</u> .
Feb. 7	676'	219'	21	Drilled 458'-568' with bit #9, Tripped. Drilled 568'-676' with bit #10, 6 $\frac{1}{4}$ ", M4N @ 200 RPM, 10M lbs., 250 GPM. 470'-670' Anhydrite, white-light brown, massive, crystalline with minor shaly dolomite, grey-green and rare green shale.
Feb. 8	807'	131'	22	Drilled 676'-807' with bit #10. Tripped to test. Ran DST #2. 670'-760' Anhydrite. 760'-800' Dolomite, <u>porous, oil stained</u> .

WEEKLY CHRONOLOGICAL WELL REPORTWell D.P. WINDFLOWER G-77Location G-77 63° 00'; Elev K.B. 903'
118° 45'District Peace RiverWeek Ending Feb. 9, 1960 Report No. 4

page-2-

Date	Total Depth	Progress	Days	REMARKS
Feb. 8 Cont'd				DST #2. 764'-807'; FF. 5; SI. 15; SP. 60; SI. 30; S.I.P. Fair air blow. Rec. 720' fresh water. H.P. 397-384; S.I.P. 344-344; 1st F.P. 311 - tool plugged. 2nd F.P. 159'-318.
Feb. 9	840'	33'	23	Drilled 807'-840' with bit #11, MAN, 6 1/4" @ 200 RPM., 107 lb & 250 GPM. Pump motor failed @ 2 p.m. W.O. Pump motor till 8 a.m. 800'-840' Dolomite, as above.

— A. W. Walker —

Geologist

WEEKLY CHRONOLOGICAL WELL REPORTWell DMP WINDFLOWER G-77Location G-77 63° 00'; Elev K.B. 903'
118° 45'District Peace RiverWeek Ending Feb. 16, 1960 Report No. 5

Date	Total Depth	Progress	Days	REMARKS
Feb. 10	895'	55'	20	Instal pump & motor. Drilled 840'-854' with bit #11. Lost circulation. Mix mud and sawdust. Regained circulation. Drilled ahead at reduced pump and RPM. 840'-60' Dolomite, as above. 860'-890' Dolomite, crypto to finely microcrystalline and minor anhydrite.
Feb. 11	980'	85'	21	Drilled 895'-945' with bit #11 @ 180 RPM, 8000 lb.wt and 230 GPM. Tripped. Drilled 945'-980' with bit #12 @ 180 RPM, 8000 lb. wt. and 230 GPM. Having trouble with pump. Dolomite as above and minor anhydrite.
Feb. 12	1036'	56'	22	Drilled 945'-1000' with bit #11. Tripped. Bit bald. Drilled 1000'-1036' with bit #12, W7, 6 1/2" @ 150 RPM, 10000 lb. and 230 GPM. Lost circulation @ 1030'. Dolomite as above, minor anhydrite.
Feb. 13	1112'	76'	23	Drilled 1036'-63' with bit #13. Tripped. Drilled 1063'-1112' with bit #14, OWS, 6 1/2" @ 150 RPM, 10,000 lb.wt. and 230 GPM. Dolomite, brown-grey, microcrystalline, trace anhydrite, <u>tight</u> .
Feb. 14	1205'	93'	24	Drilled 1112'-1119' with bit #14. Tripped. Drilled 1119'-1205' with bit #15, W7, 180 RPM, 230 GPM and 14M lb.wt. 1100'-75' Dolomite, as above. 1175'-1200' Interbedded sand, shale, anhydrite and dolomite. <u>Top of Pre-Devonian 1165' (- 262')</u>
Feb. 15	1350'	145'	25	Drilled 1205'-1350' with bit #16 W7R 6 1/2" @ 14M lb.wt., 100 RPM and 230 GPM. Shale and anhydrite, minor dolomite.

IMPERIAL OIL LIMITED

WEEKLY CHRONOLOGICAL WELL REPORT

Well IMP WINDFLOWER G-77

Location G-77 63° 00' E Elev. I.B. 903'

District Peace River

Week Ending Feb. 16, 1960 Report No. 5

page -2-

Date	Total Depth	Progress	Days	REMARKS
Feb. 16	1507'	157'	26	Cut core #3 1350'-70' with 4$\frac{1}{4}$" dia. bit @ 120 RPM, 8000 lb. wt. & 150 GPM. Measure out. Reamed with bit #17 and drilled 1370'-1507' with OWV 6$\frac{1}{4}$" @ 14,000 lb. wt., 100 RPM & 23 GPM. Core #3. 1350'-70'; Recovered 20'. 20' finely interbedded green & red shale and anhydrite. 1370'-1500' Shale and anhydrite, as above.

— A. W. Walker —
Geologist

WEEKLY CHRONOLOGICAL WELL REPORT

Well DEP WINDFLOWER C-77Location C-77 63° 00';
118° 45'Elev K.B. 903'District Peace RiverWeek Ending Feb. 23, 1960Report No. 6

Date	Total Depth	Progress	Days	REMARKS
Feb. 17	1644'	137'	27	Drilled 1507'-33' with bit #17. Tripped. Drilled 1533'-1644' with bit #18, MZN, 6 1/2" 6 100 RPM, 230 GPM and 14,000 lb.wt. Could not get samples. Shale to 1620'. 1620'-44' Granite.
Feb. 18	1644'	0	28	Ran E-log. bridle leaked, will run again later. Ran sonic 3' and 1' spacing, did not agree. Retan both - better agreement. Ran induction log. Ran Gamma-Ray Neutron - must rerun. Tried to run Velocity survey could not get below 750'. Ran in with drilling string to condition hole. Circulating at 2:00 a.m.
Feb. 19	P.E.D. 0	0	29	Rerun G.R.N. log & E-log. Ran micro log caliper and completed Velocity Survey. Ran plug #1 1644'-1520' C-25 sacks #2 800'-690' C-25 " #3 300'-125' C-90 " #4 Surface 5 sacks. <u>Rig Released 10 p.m. February 19, 1960.</u>

— A. W. Walker —

Geologist

MEMO'S

Ind Windflower G-77 G-77, 63° 00'; 113° 45'

Weekly Geological Well Report #1 for Week Ending January 19, 1960

Est. K.B. 900'

<u>Depth</u>	: 141' K.B. Conditioning hole before running casing.
<u>Drilled</u>	: 9" surface hole from 0'-141'
<u>Progress</u>	: 141 feet
<u>Logs</u>	: MIDDLE DEVONIAN - Dark Shale 70' (+ 233')
<u>Remarks</u>	: <u>Stratigraphy</u> 80 feet of loose sands, gravels and boulders were penetrated above the Middle Devonian Shale. Many of the pebbles and boulders were of dense, micro to cryptocrystalline dolomite. The Middle Devonian Shale is dark brown grey and bituminous.

— A. W. Walker —

Geologist

AWW:rf
Dawson Creek
Jan. 1960

HP WINDYFLOWER G-77

G-77 63/ 00'; 118° 45'

Weekly Geological Well Report #2 for Week Ending 8 a.m. January 26, 1960

K1. 903'

Depth

: 174' Preparing to run casing approximately
100' in Middle Devonian Shale.

: Skidded rig 10' from original location when
a half casing collar was dropped in hole.

Spudded new hole January 23, 1960.

Drilled

: Surface to 174' - 9" hole.

Progress

: 174'

— A. W. Walker —

Geologist

AMW:rf
Dawson Creek
Feb. 1960

DMP WINDYHOLE C-77

C-77 63° 00'; 118° 45'

Weekly Geological Well Report #3 for Week Ending 8 a.m. February 2nd, 1960

K.E. 903'

Depth : 229'

Drilled : 174' - 183' - 9'

Cored : 183' - 203' - 20'

Drilled : 203' - 229' - 26'

Total Footage for Week : 55'

Casing : Ran 5 jts., 7", 20#, J-55, R.2 Stewart & Lloyd surface casing to 165'. Cemented with 42 sacks + 2% CaCl_2 .

Markers : Middle Devonian Carbonate 180' (+ 723')

Remarks : Stratigraphy: 110' of dark grey brown bituminous Middle Devonian Shale was penetrated above the Middle Devonian limestone. The limestone varies from micritic and vague pelletal to skeletal micrite and skeletal.

— A. W. Walker —

Geologist

AW:rf
Dawson Creek
Feb. 1960

Weekly Geological Well Report #1 for Week Ending February 9, 1960

Depth : 840' Status W.O. Pump Repairs.

Drilled : 229' - 840'

Footage for Week : 611'

Markers : Top Evaporite 470' (+433')
Lower Carbonate 763' (+ 240')

Tests : DST #1. Middle Devonian, Upper Carbonate
335'-353'. Recovered 120' fresh water mud.
DST #2. Middle Devonian, Lower Carbonate
764'-807'. Recovered 720' fresh water.

Remarks : A 290' section of Middle Devonian, Upper Carbonate
was penetrated. Originally this section consisted
of skeletal limestones with grain size varying
from fine microcrystalline (rightly or wrongly called
micrites) to coarse, sorting varying from poor to
good and angularity of the grains varying from
angular to rounded (possibly pellets). The lower
180' was almost completely dolomitized giving a
fine microcrystalline to coarse microcrystalline
dolomite with some of the original lime skeletons
remaining. This section is 130' thicker than at
Davidson Creek and the lithology suggests that this
is another 'reef' very similar to the Windy Point
Reef. (* M. Jones 1959)
Underlying the 'reef' are 293' of anhydrite and
minor primary dolomites.
Below the evaporite section 83' of porous, micro-
crystalline, dolomite has to date been penetrated.
Original textures occasionally are preserved showing
the original rock to have been skeletal limestone.
The Devonian section penetrated so far at Windflower
shows gross similarities to that at Westerol 3A. How-
ever the salt found at Westerol 3A is absent at Wind-
flower and the tight dolomites above and below the
evaporite at Westerol 3A are represented by porous
'reefal' dolomites at Windflower. This correlation
suggests that the L. Carbonate is of Kep River age.
Both porous dolomites are absent at Davidson Creek.

Weekly Report 5/ - cont'd

Reservoirs

: Upper Carbonate: The bottom 50' of the U. Carbonate has good to fair intercrystalline porosity with scattered fine to medium, poor vuggy porosity. Net 50'. The 30' just above has a trace of porosity throughout with several bands 1-4' thick of good porosity - Net 30'. Well #1 over 4' of this poorer section recovered 120' of watery mud.

Lower Carbonate: To date 30' of gross reservoir (75' net) has been penetrated. Fair to good intercrystalline porosity and scattered fair fine to medium vuggy porosity was found. Well #2 testing the top 40' of this zone recovered 72' of fresh water.

Hydrocarbons: Both reservoirs were uniformly oil stained in part but contained only fresh water. This is not hard to visualize since both outcrop to the east.

— A. W. Walker —

Geologist

AWW:rf
Dawson Creek
Feb. 1960

DMP WINDFLOWER G-77

G-77 63° 00'; 113° 45'

L.B. 903'

Weekly Geological Well Report #5 for Week Ending February 16, 1960

Depth : 1507' Drilling in Pre-Devonian

Drilled : from 840' to 1350' - 510'
" 1370' to 1507' - 137'

Cored : from 1350' to 1370' - 20'

Total Footage for Week : 667'

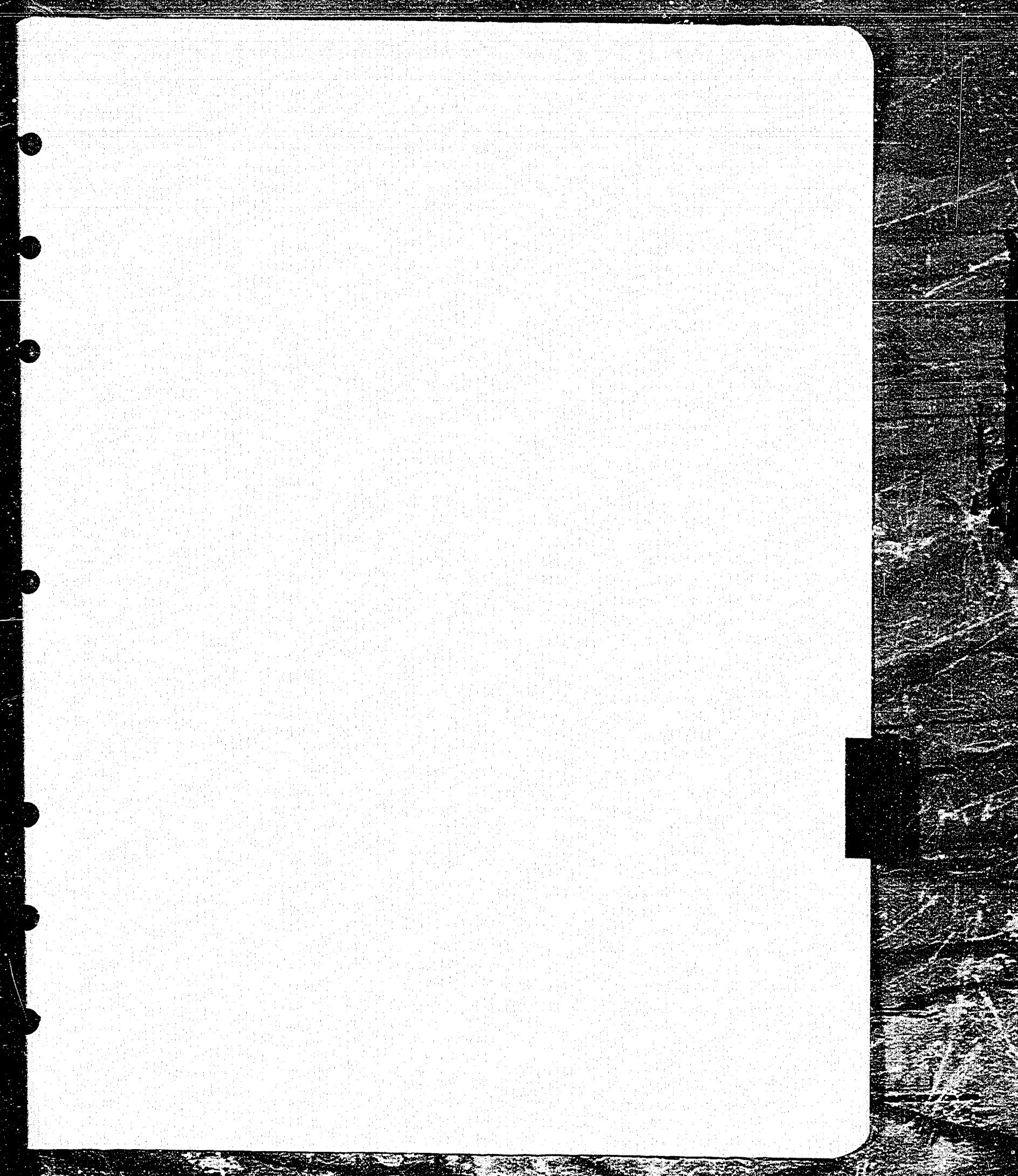
Tons : Pre-Devonian 1165' (- 262')

Remarks : A further 320' of microcrystalline dolomite was penetrated above the Pre-Devonian. Of this the top 90' and the lower 140' has some relict skeletal texture. The central 90' was an extremely hard dense primary dolomite. Rough drilling and the loss of a small amount of mud show this to be fractured throughout. Traces of vuggy porosity were developed between 1030' and 1130' in the lowermost skeletal dolomite.
The Pre-Devonian unconformity was represented by a typical basal 'conglomerate' of poorly sorted well worked sands and gravel which are highly pyritic and glauconitic.
The Pre-Devonian section consists of thinly interbedded shales, dolomites and anhydrite.

— A. W. Walker —

Geologist

AWW:rf
Dawson Creek
Feb. 1960



BIT RECORD

WELL MP WINDOWER G-77 LOCATION G-77 - 63°00' - 118°45' CONTRACTOR WARDMAN RIG #2

DATE SPUDDED January 17/60 F.T.D.

F.T.D. REACHED

NO.	SIZE	MAKE	TYPE	DEPTH INDEPTHOOT	F.T.G.	HRS.	WEIGHT	RPM.	G.P.M.	SERIAL	FORMATION	REMARKS
1	9"	H.T.C.	OSC-3	10	124	114	3,000	160	280	11018	Sand & Gravel, Shale	Hit Gary badly
2	9"	H.T.C.	OSC	124	141	17	3,000	160	280	93880	Shale	Pulled to casing
3	9"	H.T.C.	OSC	10	124	164	3,000	160	280	66119	Sand & Gravel & Shale	Stuck in hole
4	6 1/4"	H.T.C.	OSC-3	174	183	9	4,000	180	280	69630	limestone & shales	Pulled to case
5	4 3/4"	Boyle	Ø	183	190	7	8,000	70	145	68-57	limestone & shales	Can't get it out
5RR	4 3/4"	Boyle	Ø	190	203	13	8,000	80	145	68-59	limestone & shales	Can't get it out
6	6 1/4"	Sec	M4N	203	237	28	8,000	90	250	392603	limestone	Devonian
7	6 1/4"	H.T.C.	OSC	231	297	66	8,000	90	250	76336	Devonian limestone, shales	Dull
8	6 1/4"	H.T.C.	W7	297	383	86	8,000	100	270	71112	Devonian limestone & dolomite	Good
9	6 1/4"	Sec	M5	383	568	185	10,000	200	250	390411	Devonian limestone & shales	Good
10	6 1/4"	Sec	M4N	568	807	239	10,000	200	250	390419	Devonian limestone & shales	Good
11	6 1/4"	Sec	M4N	807	945	138	9,10,000	75-80	130	393607	Devonian dol & sh	Dull
12	6 1/4"	Sec	M4N	945	1000	55	10,000	150-170	230	390420	Devonian dol	Bald
13	6 1/4"	H.T.C.	W7	1000	1063	63	10,000	150	230	71116	Devonian dol	Face
14	6 1/4"	H.T.C.	OWS	1063	1119	56	10,000	180	230	71160	Devonian dol	Dull
15	6 1/4"	H.T.C.	W7	1119	1205	96	14,000	160	230	70170	Devonian dol	Dull & shales
16	6 1/4"	H.T.C.	W7	1205	1348	143	14,000	80-100	230	72049	Pre dev Sh, dol & sh	Dull & shales
5RR	4 3/4"	Boyle	Ø	1348	1368	20	8,000	120	150	68-59	Pre dev Sh & sh	Good
17	6 1/4"	H.T.C.	DWV	1368	1523	165	14,000	100-140	230	73215	Pre dev Sh & sh	Good
18	6 1/4"	Sec	M4N	1523	1644	111	14,000	150	230	386414	Pre dev Sh & sh	Good

DAILY MUD RECORD

WELL NAME IMP WINDFLOWER G-77 LOCATION G-77 - 63°00' - 118°45'

DATE	DEPTH	ADDITIVES			PROPERTIES			REMARKS & OPERATIONS
		GEL	CAUSTIC	QUEB.	WT.	VISC.	W.L.	F.C.
JAN 19/60	36	2100	50			150+		
JAN 19	141	300						
JAN 20	141	4600						
JAN 21	141	6000	50					
JAN 22	0							
JAN 23	0	700						
JAN 24	156	400	10					
JAN 25	156	4700	15					
JAN 26	174	800	50					
JAN 28	174	1200						
Feb 1	196	3000	75			40		
Feb 2	229	3300	50			35		
Feb 3	275	2800						
Feb 4	291	2000						
Feb 5	323	1500	50			150		
Feb 6	458	500				135		
Feb 7	676	3200				90		
Feb 8	807	3900						
Feb 9	840							
Feb 10	895	600						
Feb 11	980	4600	50			60		
Feb 12	1036					40		
Feb 13	1012	2700	50			65		
Feb 14	1205	600				50		
Feb 15	1348					45		
Feb 16	1507					47		
Feb 17	1644					57		

VERY LIGHT - UNCONTROLLED

8

6

Bicarb
100

Fibersol
5 sxs
8 sxs

Jellabak
6 sxs

sand dust
7 sxs
5 lbs

SPERSINE
100

150

100

Fibersol
8 sxs

22 sxs
7 1/2 sxs
5 sxs

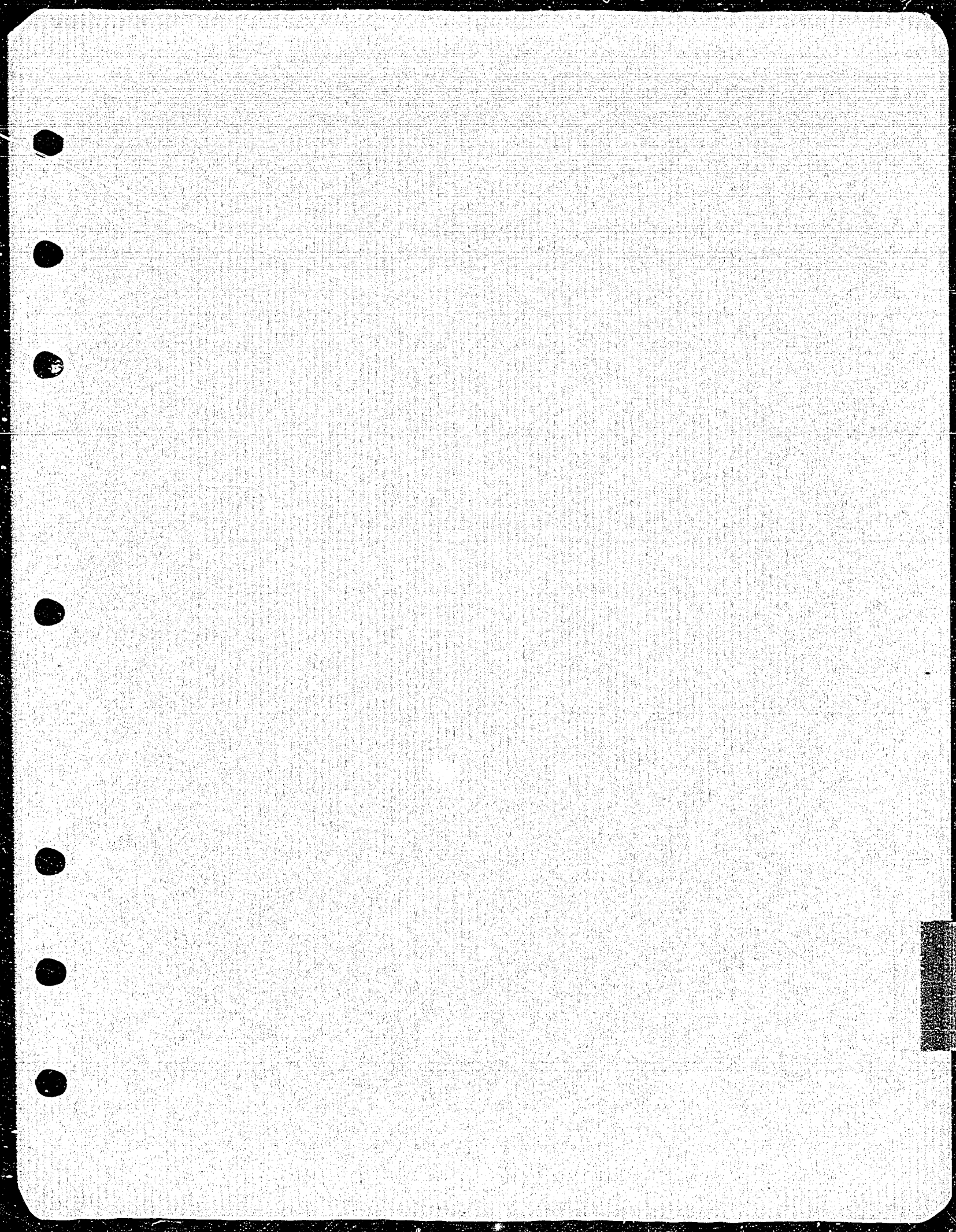
6 sxs
6 sxs

Bicarb
30

10

24 sxs

22 sxs
4 sxs

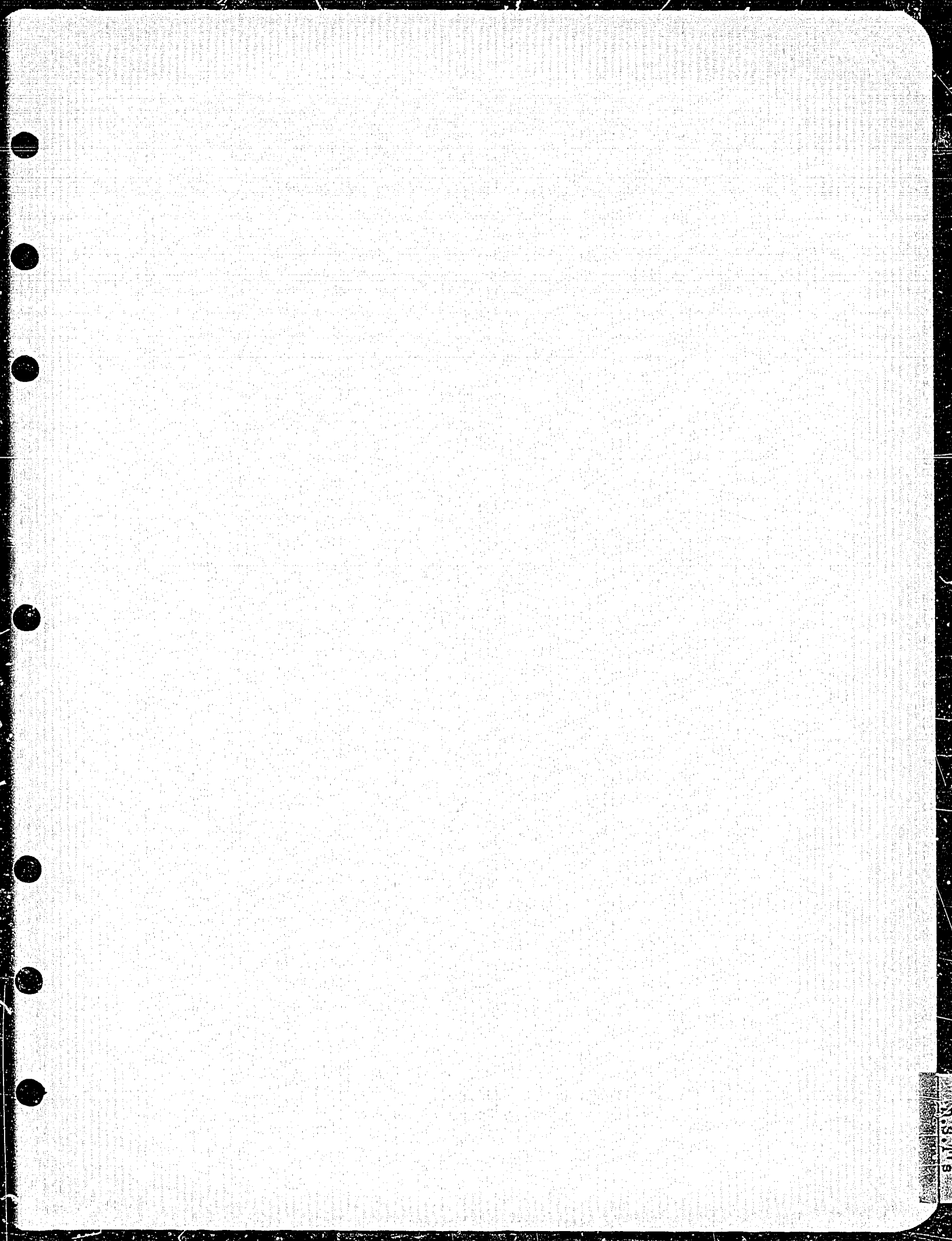


SURVEY:

WELL NAME: 2nd - 1st - 1st - 1st

LOCATION. _____

[illegible]



IMPERIAL OIL LIMITED

PEACE RIVER DISTRICT

DRILL STEM TEST REPORT # 1

Well Name Imp. Windflower #G-77 Formation M. Devonian Carbonate Date Feb. 5, 1960.Location G-77-63°00'-118°45' K.B. 803 Interval tested from 335 to 382Basis for test Dolomite, oil stained, porousResults Gr. 1.5 Weak Air Blow Recovered 180' fresh watery mud

TESTING DATA

Well Depth 383 Full Hole Size 6 1/4" Drill Pipe: 003 1/2" Weight 13.3Grade E Joint Type 1F Capacity 10.260 gal/ftRat Hole Top Nil Rat Hole Size — Drill Collars: 007 1/2" Feet 88Joint Type 1F Capacity 17.2 gal/ftSize Top Choke 1/2" Size Bottom Choke 1/4 - 3/4"Packer Type Straight Wall No. of Packers 1 Packer Size 5 1/4"Bomb Type Amerada No. of Bombs 2 Bomb Ranges 1675 (top) 2100 (bottom)Position of Bombs 382; 344 Hours on Clock 6Cushion: Type NilAir Chamber: Vol NilAmount —Length —Drilling Mud: Type Gel Weight 9.0 Visc 150 W.L. 8.0 NaCl — Ph —Recovery Mud: Type Gel Weight 9.0 Visc 20 W.L. 70+ NaCl — Ph —

	Time	Duration	
Tester Started in hole	3:00 PM	—	Weight set on packer <u>18,999 lbs.</u>
Tester on Bottom	4:00 PM	—	
Packer Set	4:08 PM	—	Mud level drop <u>Zero</u> feet
Tool Open	4:16 PM	0	
Tool Closed	4:16 PM	15	
Tool Open <u>1/2"</u>	4:31 PM	15	Pulled packer loose with <u>2</u> lbs.
<u>3/4"</u>	4:46 PM	45	
Tool Closed	5:31 PM	60	
Pulled Packer loose	6:16 PM	45	
Started out of hole	6:20 PM	—	
Tester out of hole	7:30 PM	—	

FLOW AND RECOVERY DATA: Flow Measured.....

Time	Pressure	Riser	MCF/day	Time	Pressure	Riser	MCF/day
1				7			
2				8			
3				9			
4				10			
5				11			
6				12			

Liquid to Surface Mud.....mins, Oil.....mins, Water.....mins, Est. rate.....

TOTAL FLUID IN DRILL PIPE

(including water cushion)	Type	Stands	Feet	ppm NaCl
1	Mud, watery, fresh	6	180	
2				
3				
4				
5				
6				

Sampling Position Sample No. Position Salinity of water 1200 ppm NaCl
 (Feet above packer) 8B
 Gravity of oil OAPI
 Gas (Sweet Sour)

Samples sent for analysis to.....

FIELD PRESSURE DATA: (Check if blanked off)

Top Bomb ()	Bottom Bomb (✓)
1.H.P. 159	1.H.P. 134
1st I.F.P. Nil	2nd I.F.P. 67
2nd F.F.P. 106	1st I.F.P. Nil
1st F.F.P. Nil	2nd F.F.P. 10
2nd S.I.P. 159	1st F.F.P. Nil
1st S.I.P. 159	2nd S.I.P. 155
F.H.P. 159	1st S.I.P. 153
B.H.T. 48	F.H.P. 168
OF	B.H.T. 48
OF	OF

Do charts show normal operation... Yes..... was test satisfactory... Yes.....

Remarks (Explain misruns etc.) Tool plugged with sand dust for first
 flow period and when opened on 1/4" and 1/2" chokes

Test No. 1 Signature A.W. Walker
 Testing Co. T.G. Eastland Ltd. Title Geologist
 Operator G. Fenton Well Name Imp. Windflower #G.77

T.G. EASTLAND ————— testers ltd.

6091 - 104 STREET • EDMONTON, ALBERTA

SERVICE REPORT

TEST No. One
Date Feb. 5/69
Ticket No. 4655

Well Name: IMPERIAL WINDELOWER G-77

LSD. $43^{\circ}-00'-118^{\circ}-45'$

Formation Tested:

TEST RESULT DATA

TYPE OF TEST: ☒ Standard ☐ Dual ☐ Straddle ☐ Casing

Started in Hole: 3:00 pm Tool Opened: 4:31 pm

From: _____ To: _____ Tail Pipe: _____

Initial Shut-in: 15 Min. Flow Period: 60 Min.

Main Hole Depth: _____ Rat Hole Depth: _____

Final Shut-in: 45 Min. Out of Hole: 7:30 pm

Hole Size Tested: _____ Main Hole _____ Rat Hole _____

Choke Bottom: $\frac{1}{2}'' - \frac{3}{4}''$

Casing Depth: 165' Size: 7'' Weight: 20#

Choke Surface: _____

Type of Drill Pipe: 3 1/2'' IF Tubing: _____

Flow Rate _____ Mcd/day Flare Line Riser: _____

Type of Packer(s): Straight wall

Mcd/day measured by: _____

Size of Rubber Element(s): 5 1/4''

Fluid Cushion: _____ Max Well Temp: 48 °F

REMARKS: Tight hole. Tool opened on 1/2''

DRLG. FLUID: Viscosity: _____ Weight: _____ W.L. _____

port for 15 minutes; on 3/4'' port for 45 mins.

FIELD (est.) _____ CORRECTED _____

Tool plugged on initial port, and on 1/2''

port with sawdust.

Initial Hydrostatic Pressure psig 160

Shut-In Press. #1 After 15 Min. psig 173

Initial Flowing Pressure psig 58

Max. Flowing Pressure psig 100

Shut-In Press. #2 After 45 Min. psig 158

FLUID RECOVERY: _____

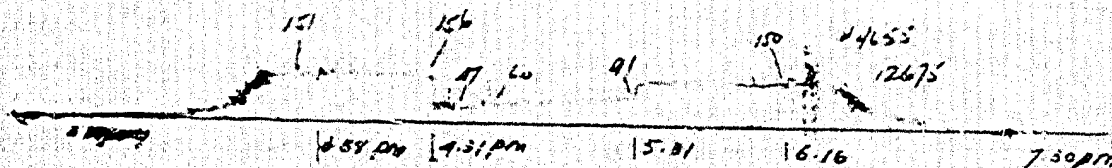
PRESENT DURING TEST

Your Representative H. W. Walker

Our Operator G. Fenton

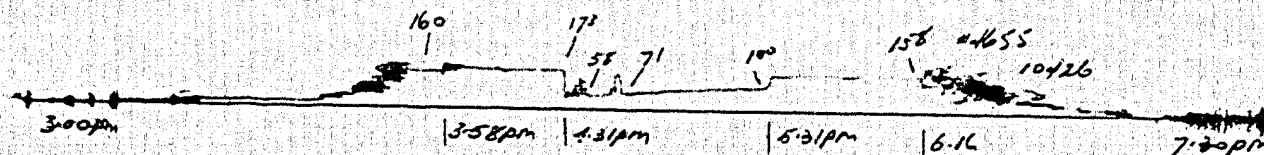
Toolpusher G. Smith

Drlg. Contractor Wardean Rig #2



RECORDER No. 12675 ELEMENT RANGE 0-1675 P.S.I. CLOCK SPEED: 6 HRS. RECORDER DEPTH: 344'

RECORDER No. 10426 ELEMENT RANGE 0-2100 P.S.I. CLOCK SPEED: 6 HRS. RECORDER DEPTH: 382'



TIME

Form No. T 20

T.G. EASTLAND *testers ltd.*

DRILL STEM TEST PRESSURE REPORT

Well Name: IMPERIAL WINDFLOWER G-77

Date: Feb. 5/60

Test No. 1

Ticket # 4655

Interval:

Formation:

Gauge No. 10426

Depth of Element 382'

B.H. Temp. 48°F

Cal. Equation $P_c = 1088.2 - .1$

	Time	T	Press. psig
Initial Hydro- static	-----		160
Initial Shut-in	3:58 pm	0	141
	4:01	3	174
	4:04	6	174
	4:07	9	174
	4:10	12	173
	4:13	15	173
	4:16	18	173
	4:19	21	173
	4:22	24	173
	4:25	27	173
	4:28	30	173
	4:31	33	173

Flowing Pressure	-----		58
			71
Final Shut-in	5:31pm	0	100
	5:34	3	154
	5:37	6	156
	5:40	9	157
	5:43	12	158
	5:46	15	158
	5:49	18	158
	5:52	21	158
	5:55	24	158
	5:58	27	158
	6:01	30	158
	6:04	33	158
	6:07	36	158
	6:10	39	158
	6:13	42	158
Final hydro- static	6:16	45	158
	-----		-

IMPERIAL OIL LIMITED
PEACE RIVER DISTRICT

DRILL STEM TEST REPORT #2

Well Name *Imp. Wind* Formation *D. V. M. L.* Date *Nov. 3, 1911*
Location *S. 77. 23. 22. N. 101. 103. 103* Interval tested from *76.4* to *80.7*
Basis for test *720' laminae porous oil stained*

Results *G. I. P. F. A. B. Rec. 720' fresh water*

TESTING DATA

Well Depth *80.7* Full Hole Size *6 1/4"* Drill Pipe: *00 3 1/2"* Weight *123#*
Grade *F* Joint Type *J. F.* Capacity *260 gal*
Rat Hole Top *76.4* Rat Hole Size *6 1/4"* Drill Collars: *00 2 1/4"* Feet *88'*
Joint Type *J. F.* Capacity *122 gal*
Size Top Choke *1/8"* Size Bottom Choke *1/4"*
Packer Type *Straight Wall* No. of Packers *2* Packer Size *5 1/4"*
Bomb Type *Limerade* No. of Bombs *2* Bomb Ranges *1675 (top) 2100 (bottom)*
Position of Bombs *82.6' 77.1'* Hours on Clock *6 hrs.*
Cushion: Type *None* Air Chamber: Vol. *None*
Amount *Nil* Length *None*
Drilling Mud: Type *Gel* Weight *9.4* Visc. *130* W. L. *None* NaCl *None* Ph. *None*
Recovery Mud: Type *None* Weight *None* Visc. *None* W. L. *None* NaCl *None* Ph. *None*

	Time	Duration	
Tester Started in hole	1:00 AM		Weight set on packer 15,800 lbs.
Tester on Bottom	2:50 AM		
Packer Set	2:50 AM		Mud level drop Zero feet
Tool Open	3:20 AM	5	
Tool Closed	3:25 AM	15	
Tool Open 1/4" choke	3:40 AM	60	Pulled packer loose with 3,000 lbs.
Tool Closed	4:00 AM	30	
Pulled Packer loose	5:10 AM		
Started out of hole	8:00 AM		
Tester out of hole	9:00 AM		

FLOW AND PRESSURE DATA: (See Logbook)

Time	Pressure	Riser	W. Log	Time	Pressure	Riser	W. Log
1				7			
2				8			
3				9			
4				10			
5				11			
6				12			

Liquid to Surface: Mud...mins. Oil...mins. Water...mins. Est. rate.....

TOTAL FLUID IN DRILL PIPE

Including water cushion	Type	Stands	Feet	ppm NaCl
1	Water - Fresh	2.0	720	
2				
3				
4				
5				
6				

Sampling Position Sample No. Position Salinity of water 25.00 ppm NaCl
(Feet above packer) 88' Gravity of oil OAPI
Gas (Sweet Sour)

Samples sent for analysis to.....

FIELD PRESSURE DATA: (Check if blanked off)

Top Bomb ()				Bottom Bomb (✓)			
1st H.P.	39.7	2nd I.F.P.	15.9	1st H.P.	40.2	2nd I.F.P.	16.8
1st I.F.P.		2nd F.F.P.	31.8	1st I.F.P.		2nd F.F.P.	31.9
1st F.F.P.		2nd S.I.P.	34.4	1st F.F.P.		2nd S.I.P.	33.5
1st S.I.P.	34.4	F.H.P.	38.4	1st S.I.P.	33.5	F.H.P.	38.4
B.H.T.		OF.		B.H.T.		OF.	

Do charts show normal operation Yes..... Was test satisfactory Yes.....

Remarks (Explain misruns etc.) Mandril froze and packer twisted with drill string while turning to open for 1st S.I. consequently we did not know which port was open.....
First Flow period port plugged with sand dust.....

Test No. 2..... Signature A.W. Walker.....

Testing Co. J.G. Eastland Testers Ltd Title Geologist.....

Operator Gerry Frester Well Name Imp. Windflower # G-77.....

SERVICE REPORT

TEST No. Two

Date Feb. 8/60

Ticket No. 4656

Well Name: IMPERIAL WINDELOWER G-77 LSD. 63° 11' 118° 45'

Formation Tested: Tight hole

TYPE OF TEST: ☒ Standard ☐ Duals ☐ Straddle ☐ Casing

From: _____ To: _____ Tail Pipe: _____

Main Hole Depth: _____ Rat Hole Depth: _____

Hole Size Tested: _____ Main Hole _____ Rat Hole _____

Casing Depth: 165' Size: 7" Weight: 20#

Type of Drill Pipe: 3 1/2" IF Tubing: _____

Type of Packer(s): Straight wall

Size of Rubber Element(s): 5 1/2"

REMARKS: Tool opened on 1/4" ports for
duration of test.

TEST RESULT DATA

Started in Hole: 1:00 a.m. Tool Opened: 3:40 a.m.

Initial Shut-In: 15 Min. Flow Period: 60 Min.

Final Shut-In: 30 Min. Out of Hole: 9:00 a.m.

Choke Bottom: 1/4"

Choke Surface: 1/8"

Flow Rate _____ Mol/day Flare Line Riser:

Mol/day measured by: _____

Fluid Cushion: _____ Max. Well Temp.: 60 (est.) °F

DRUG. FLUID: Viscosity: 130 Weight: 9.4 W.L. _____

FIELD (est.) _____ CORRECTED

Initial Hydrostatic Pressure psig 403

Shut-In Press. #1 After 15 Min. psig 344

Initial Flowing Pressure psig 166

Max. Flowing Pressure psig 327

Shut-In Press. #2 After 30 Min. psig 341

FLUID RECOVERY: _____

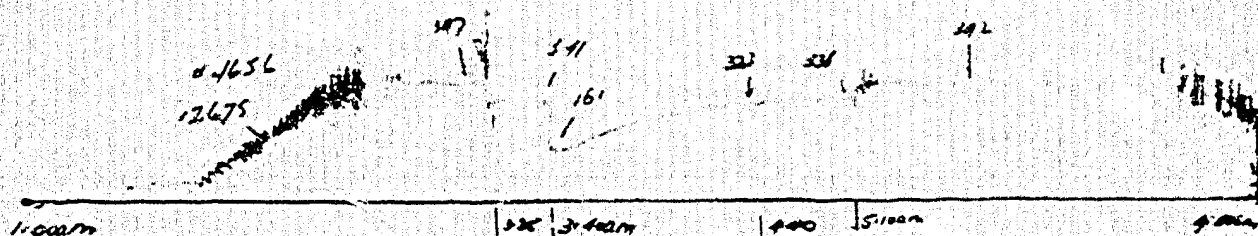
PRESENT DURING TEST

Your Representative H. W. Walker

Our Operator G. Eenton

Toolpusher G. Smith

Drig. Contractor Wardian Rig #2

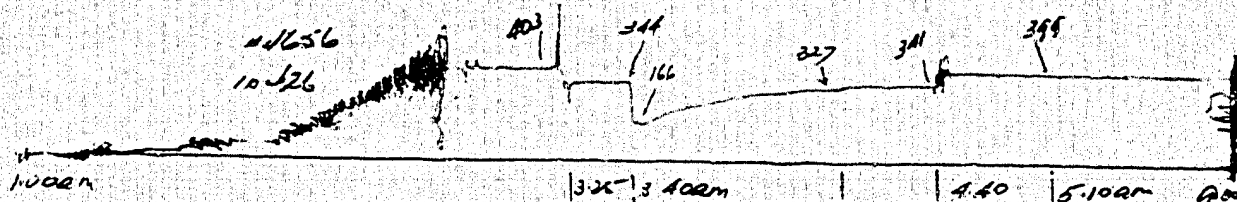


Inside recorder

RECORDER No. 12675 ELEMENT RANGE: 0-1675 P.S.I. CLOCK SPEED: 6 HRS. RECORDER DEPTH: 771'

RECORDER No. 10426 ELEMENT RANGE: 0-2100 P.S.I. CLOCK SPEED: 6 HRS. RECORDER DEPTH: 806'

Outside recorder



T.G. EASTLAND *testers ltd.*

DRILL STEM TEST PRESSURE REPORT

Well Name: IMPERIAL WINDFLOWER G-77

Date: Feb. 8/60

Test No. 2

Ticket # 4656

Interval:

Formation:

Gauge No. 10426

Depth of Element: 806'

B.H. Temp. 60°F (est.)

Cal. Equation $P_c =$

1088.2 - 0.1

	Time	T	Press. psig
Initial Hydro- static	-----		403

Initial Shut-in	3:25 am	0	251
	3:28	3	344
	3:31	6	344
	3:34	9	344
	3:37	12	344
	3:40	15	344

Flowing Pressure	-----		166
			327

Final Shut-in	4:40 am	0	327
	4:43	3	337
	4:46	6	338
	4:49	9	339
	4:52	12	339
	4:55	15	339
	4:58	18	341
	5:01	21	341
	5:04	24	341
	5:07	27	341
	5:10	30	341

Final Hydro- static	-----		399
---------------------------	-------	--	-----

DAILY DRILLING REPORT

LSD

SEC

TWN

RGE

W.

Contractor

Ward Dean

Type Rig

Falling 250

.. Month

Feb.

Day

1968

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

Total Contract Timehrs

Total Company Timehrs.

Toolpusher

Approved by _____

Imp. Windflower **G-77** LSD. SEC. TWN. RGE. W. Contractor **Wardean** Type Rig **Fairline 2500** Month **Feb** Day **18th** 19**60**

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	Hole Size	Formation				DEPTH		From	To	Hole Made	Hole Size	Formation				DEPTH		From	To	Hole Made	Hole Size	Formation						
		16 1/4	T.D.		6 1/4							16 1/4			6 1/4																	
DRILLING STRING		Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.			DRILLING STRING		Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.			DRILLING STRING		Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.					
		3 1/2		H 7	9.4p	207.66								47	9.4p	207.66																
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		7	H 3/4	1/2		DRILLING STRING				COLLAR						DRILLING STRING				COLLAR						DRILLING STRING						
DATA						32000				DATA										DATA												
BIT RECORD		No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE		BIT RECORD		No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE		BIT RECORD		No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE	
		Bit Serial No.				Table R.P.M.						Bit Serial No.				Table R.P.M.						Bit Serial No.				Table R.P.M.						
		Jet or Conventional -				Nozzle Size						Jet or Conventional -				Nozzle Size						Jet or Conventional -				Nozzle Size						
SURVEYS		Kind	at		Ft.		Deg. off		SURVEYS		Kind	at		Ft.		Deg. off		SURVEYS		Kind	at		Ft.		Deg. off							
SLUSH PUMP RECORD		HOURS		Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size	SLUSH PUMP RECORD		HOURS		Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size	SLUSH PUMP RECORD		HOURS		Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size									
		On Line	Circulating									On Line	Circulating								On Line	Circulating										
No. 1										No. 1									No. 1													
No. 2										No. 2									No. 2													
MUD RECORD		Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS		MUD RECORD		Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS		MUD RECORD		Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS							
											8 ³⁰	40																				
CORING		From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.		CORING		From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.		CORING		From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.							
DETAIL OF OPERATIONS AND REMARKS				From	To	Hrs.			DETAIL OF OPERATIONS AND REMARKS				From	To	Hrs.			DETAIL OF OPERATIONS AND REMARKS				From	To	Hrs.								
		RIG SERV. LOGGING		12	3:45	3 3/4					Rig SE		8	8:15	1 1/4					Ran velocity Survey		4	6:30	2 1/2								
		RIG OUT SCHLUMBERGER		3:45	4:15	1/2					Circulating		8:15	9	3/4					Layed down 7 D.C.		6:30										
		RUN IN, CLEAN HOLE TO		4:15	6:00	1 3/4					PULLED out		9	9:45	3/4					Picked up 7 singles			7	1								
		BOTTOM TO FINISH LOGGING									Logging		9:45	7	6 1/4					Ran to btm & circulated 7												
		STEAM KELLY FROM RATHOLE		6:00	6:30	1/2														while rigging to cement		8:30	9:30	1 1/2								
		1. BLOW KELLY																		Cementing		8:30	9:30	1 1/2								
		CIR, REAM TEN FEET		6:30	7:30	1														Laying down pipe		9:30	10:30	1								
		WORK ON PUMP		7:30	8:00	1/2														Circulating at 800 ft &												
																				Preparing to run plug # 2		10:30	12	1 1/2								
		Driller <i>Wm. Jones</i>								Driller <i>W. R. Reynolds</i>										Driller <i>R. DEATCH</i>												

HEADING UP & DRG. OUT: TOTCO: CONDITIONING MUD: CASING: LOGGING: RIG MAINTENANCE: REAMING CLEANING: MNFR. DRILLING LINE IN USE REEL SERIAL No. DID YOU CHECK BLOWOUT PREVENTER EQUIPMENT TODAY
 DRILLING: FISHING: TRIPPING: W.O.C. W O ORDERS: MISCELLANEOUS: WORKING PIPE: MNFR. OF KELLY HOSE IN USE HOSE SERIAL No. YES NO
 REAMING: CIRCULATING: CORING: D.S. TESTING: RIG REPAIRS: CONDITION HOLE: LOST CIRC.:

Total Contract Timehrs.

Total Company Timehrs.

Toolpusher *W. R. Reynolds*

Approved by

Form 34402 (250 EKS-3-59) LSD. SEC. TWN. RGE. W. Contractor *Mandian* Type Rig *7-1/2" 250* Month *Feb* Day *17* 19 *60*

1st Tour From: 12:00 Midnight To: 8:00 a.m.										2nd Tour From: 3:00 a.m. To: 4:00 p.m.										3rd Tour From: 4:00 p.m. To: 12:00 p.m.											
DEPTH		From	To	Hole Made	Hole Size	Formation				From	To	Hole Made	Hole Size	Formation				From	To	Hole Made	Hole Size	Formation									
		1644	0		6 1/4	SHALE GRANITE				1644								1644	TD												
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.								
		3 1/2		147	9' up	207-66																									
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		7	11 3/4	1 1/2	207	DRILLING STRING				COLLAR					DRILLING STRING				COLLAR					DRILLING STRING							
DATA		32000								DATA									DATA												
BIT RECORD		No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE		No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE		No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE				
		19	M414		12:45	8 3/4	1644	11000	12.1	150																					
Bit Serial No.		88 386414				Table R.P.M.				180	Bit Serial No.						Table R.P.M.					Bit Serial No.						Table R.P.M.			
Jet or Conventional -						Nozzle Size				OPEN	Jet or Conventional -						Nozzle Size					Jet or Conventional -						Nozzle Size			
SURVEYS		Kind	at		Ft.		Deg. off			Kind	at		Ft.		Deg. off			Kind	at		Ft.		Deg. off								
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										
No. 1		On Line	Circulating							On Line	Circulating						On Line	Circulating													
No. 2				300	10"	56	6"																								
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	65	10.5																											
		2																													
CORING		From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.			From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.			From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.								
DETAIL OF OPERATIONS AND REMARKS				From	To	Hrs.						From	To	Hrs.						From	To	Hrs.									
		RIG SERV. CIR HOLE TO LOG		12	12:45	3/4				Logging		4	8					SERVILE FIL. LOGGING		4:00	4:12	1/4									
		BLOW KELLY, STEAM HOLE - FILLING LINE		12:45	1:15	1/2																									
		PULL OUT		1:15	2:30	1/4																									
		RIG, SCHLUMBERGER LOGGING		2:30	3:15	3/4																									
				3:15	8 -	4 3/4																									
Driller		<i>Wm. Jones</i>								Driller	<i>Ch. Reynolds</i>								Driller	<i>R. BEATCH</i>											

HEADING UP & DRG. OUT: TOTCO: CONDITIONING MUD: CASING: LOGGING: RIG MAINTENANCE: REAMING CLEANING: MNFR. DRILLING LINE IN USE REEL SERIAL No. DID YOU CHECK BLOWOUT PREVENTER EQUIPMENT TODAY
 DRILLING: FISHING: TRIPPING: W.O.C. W O ORDERS: MISCELLANEOUS: WORKING PIPE: MNFR. OF KELLY HOSE IN USE HOSE SERIAL No. YES NO
 REAMING: CIRCULATING: CORING: D.S. TESTING: RIG REPAIRS: CONDITION HOLE: LOST CIRC.:

Total Contract Timehrs.

Total Company Timehrs.

Toolpusher

Approved by

IMP. WINDFLOWER'S G LOC. G 77' 63' 00" - 1180 H
 LSD. SEC. TWN. RGE. W.

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT

#31

Contractor WARDEN DRILLType Rig FAILINGMonth FEB Day 16 1960

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	Hole Size	Formation				DEPTH		From	To	Hole Made	Hole Size	Formation				DEPTH		From	To	Hole Made	Hole Size	Formation							
		14 32	1507	75	6 1/4							1507	1574	67	6 1/4	SHALE						1574	1644	70	6 1/4	SHALE - LAMINATE							
DRILLING STRING		Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.			DRILLING STRING		Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.			DRILLING STRING		Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.						
		3 1/2		H3	25 up	207-66						3 1/2		45	19	207.66						3 1/2		47	9 up	207.66							
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		7	4 1/4	1 1/2	207	DRILLING STRING				COLLAR		7	4 1/4	1 1/2	207.66	DRILLING STRING				COLLAR		7	4 1/4	1 1/2	207.66	DRILLING STRING							
DATA		32000								DATA		32000 10000								DATA		32000											
BIT RECORD		No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE		BIT RECORD		No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE		BIT RECORD		No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE		
		18	OWR	7 1/4		13 1/2		15000	137	2			18	OWR	7 1/4		10 1/2	15	1533	14500	163				19	M4N			9 1/4		14000	141	-
		Bit Serial No. 73215 Table R.P.M. 100										Bit Serial No. 386414 Table R.P.M. 180										Bit Serial No. 386414 Table R.P.M. 150											
		Jet or Conventional - Nozzle Size 1 1/2										Jet or Conventional - Nozzle Size Full										Jet or Conventional - Nozzle Size 1 1/2											
SURVEYS		Kind	at		Ft.		Deg. off		SURVEYS		Kind	at		Ft.		Deg. off		SURVEYS		Kind	at		Ft.		Deg. off		SURVEYS						
SLUSH PUMP RECORD		HOURS		Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size		SLUSH PUMP RECORD		HOURS		Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size		SLUSH PUMP RECORD		HOURS		Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size								
		On Line	Circulating								On Line	Circulating								On Line	Circulating												
				300	10"	56	6"								325	10	56	6								350	10"	26	6"				
MUD RECORD		Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS				MUD RECORD		Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS				MUD RECORD		Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS				
		12	60	9-8			WATER						830	50	10	15								400	67	10.3			WATER				
		2	60	9-8									2,	60	10									600	62	10.3							
		4	70	9-9									4	65	10									800	55	10.3							
		6	50	10																				1000	60	10.5							
		8	50	10																				1100	57	10.5							
CORING		From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.				CORING		From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.				CORING		From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.				
DETAIL OF OPERATIONS AND REMARKS				From	To	Hrs.					DETAIL OF OPERATIONS AND REMARKS				From	To	Hrs.					DETAIL OF OPERATIONS AND REMARKS				From	To	Hrs.					
		RIP SERV.		12	12:15	1/4							Work on Pump & Rig		8	8:30	1/2							SERVILE R.L.		400	4:15	1/4					
		DRILL		12:15	7:30	7 1/4							DRILL		830	10:15	1 3/4							DRILL		4:15	5:00	3/4					
		WORK ON PUMP		7:30	8:00	7 3/4							TRIP 3 DRILL COLLAR		10:15									WORK ON PUMP		5:00	5:30	1/2					
													DRILL TO BREAK		1:30	3 1/4								DRILL		5:30	11:00	5 1/2					
													WORK ON PUMP		1:30	2	1 1/2							GIR		11:00	11:15	1/4					
													DRILL		2									TRIP 6 SINGLES		11:15	11:45	1/2					
																								GIR TO LOG		11:45	12:00	1/4					
																								T.D. Preparing to log G.H.F.									
																								Driller <u>R. BEAUCH</u>									

HEADING UP & DRG. OUT: DRILLING: REAMING: CLASSES OF TIME BREAKDOWN: TOTCO: FISHING: CIRCUITING: 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.: MNFR. DRILLING LINE IN USE: MNFR. OF KELLY HOSE IN USE: REEL SERIAL No.: HOSE SERIAL No.: DID YOU CHECK BLOWOUT PREVENTER EQUIPMENT TODAY: YES NO

Total Contract Timehrs.

Total Company Timehrs.

Toolpusher W. J. W. W.

Approved by

IMPERIAL WINDFALL ER-677-630 002118 451

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT

130

LSD. SEC. TWN. RGE. W.

Contractor WARDEAN DRILL

Type Rig FAIRING

Month FEB Day 15 1966

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	Hole Size	Formation
	From	To	From	To			
1316	1348	32	6 1/4				
1350	1370	20	4 3/4				
1370	1432	62	6 1/4				

DRILLING STRING	Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.	INDICATOR WEIGHT OF TOTAL
3 1/2		37	3 up	207-86			30.000
3 1/2		40	10' 4"	207.66			30.000

BIT RECORD	No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE	
								Drilled	Reamed
16	WTR		6:15	19:34	1348	15000	143		
17	0	4		4	1370	4000	20		
18	00V	2:15		6:14		17000	60	20'	

SURVEYS	Kind	at	Ft.	Deg. off	HOURS		Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size
					On Line	Circulating				
SLUSH PUMP RECORD No. 1							250	10"	56	6"
SLUSH PUMP RECORD No. 2										

MUD RECORD	Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS	
						WATER	Measured out
12	70	10					
2	60	10					
4	60						
6	60	9.8					
8							

CORING	From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.

DETAIL OF OPERATIONS AND REMARKS	From	To	Hrs.
DRILL	12:15	12:45	1/2
PLUGGED BIT REVERSE CIR	12:45	2:00	1 1/2
DRILL	2:00	6:15	4 1/4
CIR. HALF HOUR CLEAN HOLE	6:15	6:45	1/2
PULLING OUT, TALLY PIPE	6:45	8:00	1 1/4

DETAIL OF OPERATIONS AND REMARKS	From	To	Hrs.
PICKED UP CIRC. BOP	8:30	8:45	1/4
RAISED WIRE MEMBERSHIP	8:45	10:24	1 3/4
Circulate. Core. BOP	10:24	11:00	1/4
WORK ON PUMP	11:00	11:15	1/4
CHANGING	11:15	11:30	1/4
BANK OF CORE	11:30	11:45	1/4
PULLING OUT CORE	11:45	12:00	1/4
RECOVERED CORE	12:00	12:15	1/4

DETAIL OF OPERATIONS AND REMARKS	From	To	Hrs.
LAY DOWN CORE BBL	4:15	4:30	1/4
RUN IN	4:30	5:15	3/4
REAM 1320' - 1370'	5:15	6:30	1 1/4
DRILL	6:30	12:00	5 1/2

CLASSES OF TIME BREAKDOWN	
HEADING UP & DRG. OUT:	TOTCO:
DRILLING:	FISHING:
REAMING:	CIRCULATING:
CONDITIONING MUD:	TRIPPING:
CORING:	CORING:
CASING:	LOGGING:
W.O.C.	W O ORDE:
D.S. TESTING:	RIG REPAIRS:
RIG MAINTENANCE:	MISCELLANEOUS:
CONDITION HOLE:	REAMING CLEANING:
WORKING PIPE:	LOST CIRC.:
MNFR. DRILLING LINE IN USE	REEL SERIAL No.
MNFR. OF KELLY HOSE IN USE	HOSE SERIAL No.

DID YOU CHECK BLOWOUT PREVENTER EQUIPMENT TODAY	
YES	NO

Driller: W. J. Davis

Driller: C. E. Ryan

Driller: X. BEATCH

Total Contract Timehrs.

Total Company Timehrs.

Toolpusher

Approved by

YES NO

IMPERIAL WINDFALL # LOC: 677-63000-18045 IMPERIAL OIL LIMITED DAILY DRILLING REPORT #29
 LSD. SEC. TWN. RGE. W. Contractor WARDEAN DRILL Type Rig FALLING Month FEB Day 14 1960

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	Hole Size	Formation				From	To	Hole Made	Hole Size	Formation				From	To	Hole Made	Hole Size	Formation									
		1184	1205	21	6 1/4					1205	1284	49	6 1/4	SHALE				1224	1316	62	6 1/4	SHALE									
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.						
		3 1/2		34	24 up	207-86					3 1/2		34	5	217-85					3 1/2		36	4 up	207-86							
		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	7	4 3/4	1 1/2	207-86	DRILLING STRING				COLLAR	7	4 3/4	1 1/2	207-86	DRILLING STRING				COLLAR	7	4 3/4	1 1/2	207-86	DRILLING STRING						
		DATA					28000				DATA					28000				DATA					28000						
BIT RECORD		No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE		No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE		No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE				
		15	W7	12:5	3:45	14	1205	14000	86		16	W7R	7		7		14000	49		16	W7R			14:34		14000	111	-			
		Bit Serial No. 7-70120-W7R-72049 Table R.P.M. 150										Bit Serial No. 72049 Table R.P.M. 80										Bit Serial No. 72049 Table R.P.M. 100									
		Jet or Conventional - 72049 Nozzle Size 6 1/2										Jet or Conventional - Nozzle Size FULL										Jet or Conventional - Nozzle Size 1 1/2									
SURVEYS		Kind	at		Ft.		Deg. off				Kind	at		Ft.		Deg. off				Kind	at		Ft.		Deg. off						
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										
		No. 1		200	10"	56	6"						200	10	57	6'						220	10"	56	6"						
		No. 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	60	9			WATER				8	60	9	12						4:00	60	9.2									
		2	60	9							10	55	9	12						6:00	60	9.2			WATER						
		4	55								2	60	9	12						8:00	57	9.2									
											4	65	9	13						10:00	57	9.2									
																				11:00	40	9.2									
CORING		From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.				From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.				From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.						
DETAIL OF OPERATIONS AND REMARKS				From	To	Hrs.							From	To	Hrs.							From	To	Hrs.							
		RIG SERV.		12	12:30	1/4					RIG SERV		8	8:30	1/2							SERVICE R.L.		4:00	4:15	1/4					
		DRILL		12:30	3:45	2 1/2					PUT NEW POP VALVE											DRILL		4:15	12:00	7 3/4					
		CUT TWO INCH OFF DRILL		3:45	4:15						Button in Pump		8:30	9	1/2																
		MIDDLE FOR STIPPER.																													
		PULL OUT FOR BIT		4:15	5:45	1																									
		W.O. AIRLINE																													
		BREAKING BIT		5:45	6:30	3/4																									
		RUNNING IN BIT		6:30	8:00	1 1/2																									
		Driller		Wm. Jones								Driller		O. R. Reynolds										Driller		F. BEATCH					

 HEADING UP & DRG. OUT: TOTCO: CONDITIONING MUD: CASING: LOGGING: RIG MAINTENANCE: REAMING CLEANING: MNFR. DRILLING LINE IN USE REEL SERIAL No. DID YOU CHECK BLOWOUT PREVENTER EQUIPMENT TODAY
 DRILLING: FISHING: TRIPPING: W.O.C. W.O. ORDERS: MISCELLANEOUS: WORKING PIPE: LOST CIRC.: MNFR. OF KELLY HOSE IN USE HOSE SERIAL No. YES NO
 REAMING: CIRCULATING: CORING: D.S. TESTING: RIG REPAIRS: CONDITION HOLE:

Total Contract Timehrs. Total Company Timehrs. Toolpusher Approved by

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT

#23

IMPERIAL WINDFLO R-677 LOC-677-630-118043 LSD. SEC. TWN. RGE. W. Contractor Wardman Type Rig Fairing 2500 Month Feb Day 13 1960

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	Hole Size	Formation						DEPTH		From	To	Hole Made	Hole Size	Formation						DEPTH		From	To	Hole Made	Hole Size	Formation								
		1091	1112	21	6 1/4									1112	1142	30	6 1/4	LINE								1142	1184	42	6 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.									
		3 1/2		34	27 up	88-19						3 1/2			31		207.86						3 1/2			32	16" P	207.86										
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						COLLAR						DRILLING STRING						COLLAR						DRILLING STRING								
DATA						23000						DATA												DATA						28,000								
BIT RECORD		No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE			No.		Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE			No.		Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE							
		14	OWS	10:03		13		10,000	H4			14		OWS	11:15		10	14 1/2	1119	15,000	53'			12		WT			11 1/4		14,000	65'						
		Bit Serial No. 71160 Table R.P.M. 150										Bit Serial No. 70120 Table R.P.M. 180										Bit Serial No. 70120 Table R.P.M. 100																
		Jet or Conventional - Nozzle Size OPEN										Jet or Conventional - Nozzle Size FULL										Jet or Conventional - Nozzle Size 1 1/2																
SURVEYS		Kind	at		Ft.		Deg. off		Kind				at		Ft.		Deg. off		Kind				at		Ft.		Deg. off		Kind				at		Ft.		Deg. off	
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	HOURS				Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size							
No. 1		On Line	Circulating					On Line				Circulating					On Line				Circulating					On Line				Circulating								
No. 2				100	10"	56	6"							200	10"	56	6"							200	10"	56	6"							200	10"	56	6"	
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	65	9.2			WATER 10 BBLs						12		98	9.2									6:00		60	9.2			WATER							
		2	65				G-ELL 600																															
		4	100	92			SANDUST. H4																		8:00		60	9.2										
		6	100																						10:00		50	9										
		8	100	92			lost some mud to hole																															
CORING		From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.	From				To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.	From				To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.	From				To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.				
DETAIL OF OPERATIONS AND REMARKS		RIG SERV						RIG SERV						RIG SERV						SERVILLI R-11																		
		DRILL						DRILL						DRILL						DRILL																		
		MIX MUD.						MIX MUD.						MIX MUD.						MIX MUD.																		
		DRILL						DRILL						DRILL						DRILL																		
		W.O. PUMP						W.O. PUMP						W.O. PUMP						W.O. PUMP																		
		DRILL						DRILL						DRILL						DRILL																		
Driller		Wm. Jones						Driller						C. B. Ryan						Driller						P. B. A. T. M.												

HEADING UP & DRLG. OUT: TOTCO: CONDITIONING MUD: CASING: LOGGING: RIG MAINTENANCE: REAMING CLEANING: MNFR. DRILLING LINE IN USE REEL SERIAL No. DID YOU CHECK BLOWOUT PREVENTER EQUIPMENT TODAY

DRILLING: FISHING: TRIPPING: W.O.C. W O ORDERS: MISCELLANEOUS: WORKING PIPE: MNFR. OF KELLY HOSE IN USE HOSE SERIAL No. YES NO

REAMING: CIRCULATING: CORING: D.S. TESTING: RIG REPAIRS: CONDITION HOSE: LOST CIRC.:

Total Contract Time hrs.

Total Company Time hrs.

Toolpusher

Approved by

IMPERIAL WINDFLOWER #G-77 Loc: -G-77-63° 0' -118° 45' IMPERIAL OIL LIMITED
 LSD. SEC. TWN. RGE. W. Contractor WARDEAN DRLG #2 Type Rig FAILING 2500 Month February Day 12 1960

DAILY DRILLING REPORT

#27

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	Hole Size	Formation				DEPTH		From	To	Hole Made	Hole Size	Formation				DEPTH		From	To	Hole Made	Hole Size	Formation									
		1010	1036	26	6 1/4							1036	1063	27	6 1/4	LINE						1063	1091	28	6 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.								
		3 1/2		31	14 up	88-19					3 1/2			32	20	88-19					3 1/2			33	19 up	88-19									
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			4 3/4	1 1/2		DRILLING STRING				COLLAR			4 3/4	1 1/2		DRILLING STRING				COLLAR			4 3/4	1 1/2		DRILLING STRING									
DATA				178		22,000				DATA						22,000				DATA						22,000									
BIT RECORD		No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE		No.		Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE		No.		Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE						
		13	W7	1000		8		10,000	36				13	W7	6 1/2	331	14 1/4	10,000	63				14	OWS	500 P.M.		6 1/2		10,000						
		Bit Serial No. 71116 Table R.P.M. 180										Bit Serial No. 71116 Table R.P.M. 150										Bit Serial No. 71160 Table R.P.M. 150													
		Jet or Conventional - Nozzle Size OPEN										Jet or Conventional - Nozzle Size Full										Jet or Conventional - Nozzle Size 1 1/2													
SURVEYS		Kind TOTCO at 1000 Ft. 2.0 Deg. off										Kind at Ft. Deg. off										Kind at 1000 Ft. 2.0 Deg. off													
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											
				150	10"	56	6"									100	10	56	6									150	10"	56	6"				
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	50	9.2	High		CELL 1700										Losing circ						600	40	9.2			CELL 1000							
		2	55	9.2			SAWDUST 22 SACKS																800	40	9.2			WATER							
		4	55				CAUSTIC 50 BLS																1000	60	9.2										
		6	75																																
		8	75	8-9																															
CORING		From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.				From		To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.				From		To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.								
DETAIL OF OPERATIONS AND REMARKS		RIG SERV. 12 12:15 1/4										Rig SERV 8 8:30 1/2										SERVILE 8:12- 400 4:15 1/4													
		DRILLG. 12:30 4:00 3 3/4										DRILG 8:30 12 3 1/2										FINISH OUT 4:15 4:30 1/4													
		MIXING MUD 4:00 6:45 2 3/4										WORK ON pump 12 12:30 1/2										RUN IN 4:30 5:00 1/2													
		LOST CIRCULATION 6:45 8:00 1 1/4										DRILG 12:30 3:30 1/2										DRINN 5:00 7:45 2 3/4													
		DRILLG 6:45 8:00 1 1/4										Pulling out 3:00 4 1/2										WORK ON PUMP 7:45 8:00 1/4													
		NOT LOOSING CIRC.																				DRINN 8:00 9:45 1 3/4													
																						CHANGE MUD G-AL-E 9:45 10:00 1/4													
																						DRINN 10:00 12:00 2													
Driller		J. M. Jones										Driller A. E. Reynolds										Driller R. BEATH													

HEADING UP & DRLG. OUT: TOTCO: FISHING: CIRCULATING: CASING: W.O.C. D.S. TESTING: LOGGING: W O ORDERS: RIG REPAIRS: RIG MAINTENANCE: MISCELLANEOUS: CONDITION HOLE: REAMING CLEANING: WORKING PIPE: LOST CIRC.: MNFR. DRILLING LINE IN USE: MNFR. OF KELLY HOSE IN USE: REEL SERIAL No.: HOSE SERIAL No.: DID YOU CHECK BLOWOUT PREVENTER EQUIPMENT TODAY: YES NO

Total Contract Time hrs.

Total Company Time hrs.

Toolpusher

Approved by

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT

#26

2. W. I. N. D. L. A. W. SEC.

TWN.

RGE.

W.

Contractor

WARDEN DRILL

Type Rig

FALLING

Month

FEB

Day

11 19.60

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	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	Hole Size	Formation	From	To	Hole Made	Hole Size	Formation	From	To	Hole Made	Hole Size	Formation						
970	980	10	6 1/4			980	995	5 1/4	5 1/4		995	1010	12	6 1/4	LIME						
Size-D.P.	Stand	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.	Size-D.P.	Stand	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.	Size-D.P.	Stand	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.				
3 1/2		28	11' up	88-14				30	26			3 1/2		30	11' up	88.19	-				
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		1 3/4	1 1/2		DRILLING STRING	COLLAR					DRILLING STRING	COLLAR	2	4 3/4		88.19	DRILLING STRING				
DATA			1 7/8		20.000	DATA						DATA					21.000				
BIT RECORD	No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE		No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE				
								Drilled	Reamed								Drilled	Reamed			
	12	M4V	163		7 1/2		10.000	35		12	M4V	5 1/4		12 1/4		1000	50				
Bit Serial No.	390420					Table R.P.M.	180			Bit Serial No.	390420					Table R.P.M.	180				
Jet or Conventional						Nozzle Size	OPEN			Jet or Conventional						Nozzle Size	F				
SURVEYS	Kind	at		Ft.		Deg. off		Kind	at		Ft.		Deg. off		Kind	at		Ft.		Deg. off	
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							
No. 1			150	10	56	6"			100	10	56	6			200	10	56	6"			
No. 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	80	9.2												10.0	40	9.2				
	2	80	9.2												12.0	40	9.2				
	6	90	9.2																		
	8																				
CORING	From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.	From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.	From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.			
DETAIL			From	To	Hrs.			From	To	Hrs.			From	To	Hrs.						
OPERATIONS AND REMARKS	RIG SERV		12	12:15	1/4	WORK ON PUMP		8:30	9:45	1 1/4	SERVILE FIL. BOP'S		4:00	4:15	1/4						
	DRILL		12:15	2:30	2 1/4	DRILL		9:45	12:00	2 1/4	DRILL		4:15	7:00	2 3/4						
	WORK ON PUMP		2:30	4:30	2	DRILL		4:30	4:45	1/4	PUMP OUT SURVEY		7:00	8:00	1						
	DRILL		4:30	4:45	1/4	DRILL		4:45	6:15	1 1/2	RUN IN		8:00	9:00	1						
	W.O. PUMP RE -		4:45	6:15	1 1/2	DRILL		6:15	6:45	1/2	DRILL		9:00	12:00	3						
	MOVE AIR-CHAMBER, CLEAN		6:15	6:45	1/2																
	DRILL		6:45	8:00	1 1/4																
	W.O. PUMP		8:00																		

Driller: W. J. Jones

Driller:

Driller: F. B. BENTON

HEADING UP & DRUG. 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.:MNFR. DRILLING LINE IN USE
MNFR. OF KELLY HOSE IN USE

REEL SERIAL No.

HOSE SERIAL No.

DID YOU CHECK BLOWOUT
PREVENTER EQUIPMENT TODAY

YES NO

Total Contract Time

Total Company Time

Toolpusher

Approved by

Approved by

WINDFALLER LSD. G 77 SEC. TWN. RGE. W Contractor WARDEAN-DRILL Type Rig FAIRLINE Month FEB Day 9 1960

	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	Hole Size	Formation		From	To	Hole Made	Hole Size	Formation		From	To	Hole Made	Hole Size	Formation								
		840	0	6 1/4									840	854	14	6 1/4									
	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.							
			24	DOWN	88-19											174P	88.19								
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					DRILLING STRING	COLLAR					DRILLING STRING	COLLAR	2	4 3/4		88.19	DRILLING STRING							
	DATA					DRILL COLLARS	DATA					DRILL COLLARS	DATA				20,000	DRILL COLLARS							
BIT RECORD	No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE	No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE	No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE	
	11	M4N	1 1/2		1 1/2												11	M4N			2 1/2		7000	47	93'
	Bit Serial No.	392607				Table R.P.M.	Bit Serial No.					Table R.P.M.	Bit Serial No.	392607				Table R.P.M.	180						
	Jet or Conventional -					Nozzle Size OPEN	Jet or Conventional -					Nozzle Size	Jet or Conventional -					Nozzle Size OPEN							
SURVEYS	Kind	at		Ft.		Deg. off	Kind	at		Ft.		Deg. off	Kind	at		Ft.		Deg. off							
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							
No. 1	On Line	Circulating					On Line	Circulating					On Line	Circulating											
No. 2															200	10"	60	6"							
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							
																		GEL 6 BALLS							
CORING	From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.	From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.	From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.							
DETAIL OF OPERATIONS AND REMARKS	RIG SERV 12. 12:15 1/4						Installing 1.0.h standby pump 7/4"x10"G.D. with 6" liners. Powered by D13000" Cat" motor.						SERVILE RIG 4:00 4:15 1/4												
	MOVE MUD PUMP FROM RIG HOUSE						Warmed up and started motor.						W/O PUMP 4:15 7:00 2 3/4												
	WAIT ON S.T.D. BY PUMP. 12:15 7:00 6 3/4						Installed pump mud end and changing over mud lines.						RUN IN 7:00 8:00 1												
	SPOTING PUMP. 7:00 8 1						George H. Lytle						REAM 93' 8:00 9:00 1												
													DRILL 9:00 10:00 1												
													8W. W/O PUMP 10:00 10:30 1/2												
													LOST CIR MIX MUD												
													WAIT ON WATER 10:30 12:00 1 1/2												
	Driller <i>Wm. Jones</i>						Driller <i>A.E. Reynolds</i>						Driller <i>R. BEATCH</i>												

 HEADING UP & DRG. OUT: TOTCO: CONDITIONING MUD: CASING: LOGGING: RIG MAINTENANCE: REAMING CLEANING: MNFR. DRILLING LINE IN USE REEL SERIAL No. DID YOU CHECK BLOWOUT PREVENTER EQUIPMENT TODAY
 DRILLING: FISHING: TRIPPING: W.O.C. W O ORDERS: MISCELLANEOUS: WORKING PIPE: MNFR. OF KELLY HOSE IN USE HOSE SERIAL No. YES NO
 REAMING: CIRCULATING: CORING: D.S. TESTING: RIG REPAIRS: CONDITION HOLE: LOST CIRC.:

Total Contract Timehrs.

Total Company Timehrs.

Toolpusher *Wm. Jones*

Approved by

LSD. SEC. TWN. RGE. W.

Contractor

WARDMAN TRAC

Type Rig

ROTARY

Month FEB 13

Day 8

1960

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	Hole Size	Formation						DEPTH		From	To	Hole Made	Hole Size	Formation						DEPTH		From	To	Hole Made	Hole Size	Formation						
		807												807	840	33	6 1/4	LIME								840										
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					COLLAR	3	4 1/4		88 1/9	DRILLING STRING					COLLAR					DRILLING STRING									
		DATA										DATA					2 1/2 1/2 1/2					DATA														
BIT RECORD		No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE			No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE			No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE							
												11	11 1/4	1 1/2		1 1/2	840	10000	3.3																	
		Bit Serial No.					Table R.P.M.					Bit Serial No.					Table R.P.M.					Bit Serial No.					Table R.P.M.									
		Jet or Conventional -					Nozzle Size					Jet or Conventional -					Nozzle Size					Jet or Conventional -					Nozzle Size									
SURVEYS		Kind	at			Ft.			Deg. off			Kind	at			Ft.			Deg. off			Kind	at			Ft.			Deg. off							
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													
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									
																	DST #2 - 764-807										V.O. 60 MIN.									
																	Recovered 120 feet fresh water																			
CORING		From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.					From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.					From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.									
DETAIL OF OPERATIONS AND REMARKS		SER RIG W.O. AIR LINES		600	100	1						LAD DOWN TESTER		8	10	2						SERVILE FIL. BOPS		400	410	1/4										
		PICK UP VIST TOOL.		100	145	3/4						RAN IN HOLE		10	11	1						WAIT ON PUMP MOTOR		415	1200	7 3/4										
		RAN IN TO TEST		145	300	1 1/4						CIRCULATING		11	11 1/2	1 1/4																				
		TESTING		300	515	3 1/4						PILG		11 1/2	12 1/2	1																				
		HOIST DST #2		515	530	1/4						WORK IN MUD PUMP		12 1/2	11 1/2	1																				
		W.O. PUMP		530	700	1 1/2						WILG		11 1/2	14 1/2	1 1/2																				
		HOIST		700	800	1						RIG WENT OUT SIDE OFF																								
												PUMP MOTOR																								
												PULLED ONTO DRILLER RIG 145 4 2 1/4																								
												Driller		Driller					Driller																	

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

Total Contract Timehrs.

Total Company Timehrs.

Toolpusher

Approved by

WINDFLOWER LSD 6.7 SEC. TWN. RGE. W. Contractor WARDEAN DRILLING Type Rig FALLINGE Month FEB Day 7 1960

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	Hole Size	Formation				DEPTH		From	To	Hole Made	Hole Size	Formation				DEPTH		From	To	Hole Made	Hole Size	Formation									
		614	626	62	6 1/4							676	755	77	6 1/4							733	807	52	6 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.								
		3 1/2		19	13.44	88-19					3 1/2			22	33	88-19					3 1/2			23	34	88-19									
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		3				DRILLING STRING				DRILL COLLARS				COLLAR		3	8 1/2			78-19				DRILLING STRING				DRILL COLLARS							
DATA		20000										DATA		20000										DATA		20000									
BIT RECORD		No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE		No.		Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE		No.		Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE						
		10	MHN	7 1/4		12		10000	120		10		MHN	7 1/4		19 1/4		10000	196		10		MHN	7 1/4		22 1/4	207	10000	216						
		Bit Serial No. 370419 Table R.P.M. 150										Bit Serial No. 370419 Table R.P.M. 125										Bit Serial No. 370419 Table R.P.M. 180													
		Jet or Conventional - Nozzle Size OPEN										Jet or Conventional - Nozzle Size FULL										Jet or Conventional - Nozzle Size OPEN													
SURVEYS		Kind	at		Ft.		Deg. off		Kind		at		Ft.		Deg. off		Kind		at		Ft.		Deg. off		Kind		at		Ft.		Deg. off				
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														
No. 1		On Line	Circulating	300	12	70	5 1/4		On Line		Circulating	300	12	70	5 1/4		On Line		Circulating	300	12	70	5 1/4												
No. 2																																			
MUD RECORD		Time	Visc.	Wt.	WL	pH	ADDITIVES — POUNDS				Time		Visc.	Wt.	WL	pH	ADDITIVES — POUNDS				Time		Visc.	Wt.	WL	pH	ADDITIVES — POUNDS								
		12	60	94			WATER 30 BBLs										600 GELL										20 BALS L-ELL								
		2	65				GELL 1300										4 SASKI SAWDUST										2 BALS SAWDUST								
		4	70	94			FIBER-SEAL-100										10 LBS BYCARE																		
		6	80														25 BALS WATER																		
		8	90	94																															
CORING		From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.				From		To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.				From		To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.								
DETAIL OF OPERATIONS AND REMARKS				From	To	Hrs.			From		To	Hrs.			From		To	Hrs.			From		To	Hrs.											
		RIP SERV.		12	12 1/2	1/4			RIP SERV		8	8 30	1/4			SERVILE R.C. & BOPs		400	430	1/2															
		DRILL		12 1/2	5 00	1/4			DRILL		8 30	3	5 1/4			DRILL		430	730	3															
		W.O. PUMP		5 00	5 30	1/2			BRAKE AIR COMPRESSOR		3	3 15	1/4			AIR		730	800	1/2															
		DRILL		5 30	8 00	7/4			DRILL		3 15	4	3/4			PUMP TO TEST		800	900	1															
																WORK ON AIR COMP.		900	1200	3															
Driller		J. H. Smith										Driller										R. B. Smith													

 HEADING UP & DRG. OUT:
 DRILLING:
 REAMING:

 CLASSES OF TIME BREAKDOWN
 TOTCO:
 FISHING:
 CIRCUATING:

 CASING:
 W.O.C.
 D.S. TESTING:

 LOGGING:
 W.O. ORDERS:
 RIG REPAIRS:

 RIG MAINTENANCE:
 MISCELLANEOUS:
 CONDITION HOLE:

 REAMING CLEANING:
 WORKING PIPE:
 LOST CIRC.:

 MNFR. DRILLING LINE IN USE
 MNFR. OF KELLY HOSE IN USE

 REEL SERIAL No.
 HOSE SERIAL No.

 DID YOU CHECK BLOWOUT
 PREVENTER EQUIPMENT TODAY
 YES NO

Total Contract Timehrs.

Total Company Timehrs.

Toolpusherhrs.

Approved by

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT

H 21

WINDFLOWER LSD 17 SEC.

TWN.

RGE.

W.

Contractor WARDEAN-DRILLING

Type Rig FAIRING

Month FEB

Day 6

1960

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	Hole Size	Formation				From	To	Hole Made	Hole Size	Formation				From	To	Hole Made	Hole Size	Formation											
		398	488	69	6 1/4					458	556	98	6 1/4	LIME				526	604	58	6 1/4	LIME											
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.										
		3 1/2		12	20	3-88-19				3 1/2		15		88 1/2				3 1/2		17	12" up	88-19											
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								DRILLING STRING				DRILL COLLARS											
DATA						19000								19000				4000								18000							
BIT RECORD		No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE		No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE		No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE						
		9	M5	3:20		6 1/2		10000	84		9	M5			14		8000	152		9	M5			13 1/4	568	10000	185						
		10	M4N	7:30		4 1/4		10000	46		10	M4N	7:30		4 1/4		10000	46		10	M4N	7:30		4 1/4		10000	46						
SURVEYS		Kind at Ft. Deg. off				Kind at Ft. Deg. off				Kind at Ft. Deg. off				Kind at Ft. Deg. off				Kind at Ft. Deg. off				Kind at Ft. Deg. off				Kind at Ft. Deg. off							
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	HOURS				Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size
		On Line	Circulating			200	12 in	70	5 1/4	On Line	Circulating			350	12 in	70	5 1/4	On Line	Circulating			200	12	70	5 1/4	On Line	Circulating			200	12	70	5 1/4
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								
							Some water									losing some mud									Still losing some mud.								
																10 7 1/2									WATER								
																2 FIBERSENK									FIBERSENK 12 BALS								
																30 1/2 13 1/2									SAWDUST 6 "								
																									L-FENK 22 "								
CORING		From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.				From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.				From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.								
DETAIL OF OPERATIONS AND REMARKS		RIG SERV.				12	12:15	1/4	RIG SERV				8	8:30	1/2	SERVILE FIL BOP				400	4:15	1/4	SERVILE FIL BOP				400	4:15	1/4				
		SERV. SWIVEL COMPLETE				12:15	3:30	3 1/4	D-29				8:30	4	7 1/2	DRINK				4:15	6:00	1 3/4	DRINK				4:15	6:00	1 3/4				
		DRILLG				3:30	8:00	4 1/2								PUMP OUT SURVEY				6:00	6:45	3/4	PUMP OUT SURVEY				6:00	6:45	3/4				
																RUN IN				6:45	7:30	3/4	RUN IN				6:45	7:30	3/4				
																DRINK				7:30	12:00	4 1/2	DRINK				7:30	12:00	4 1/2				
Driller		W. J. J. J.				Driller				O. E. Reynolds				Driller				F. BEATCH				Driller				F. BEATCH							

HEADING UP & DRG. OUT: TOTCO: CONDITIONING MUD: CASING: LOGGING: RIG MAINTENANCE: REAMING CLEANING: MNFR. DRILLING LINE IN USE REEL SERIAL No. DID YOU CHECK BLOWOUT PREVENTER EQUIPMENT TODAY

DRILLING: FISHING: TRIPPING: W.O.C. MISCELLANEOUS: WORKING PIPE: MNFR. OF KELLY HOSE IN USE HOSE SERIAL No. YES NO

REAMING: CIRCULATING: CORING: D.S. TESTING: RIG REPAIRS: CONDITION HOLE: LOST CIRC.:

Total Contract Timehrs.

Total Company Timehrs.

Toolpusher

Approved by

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT

420

P. WINDFLOWER LSD 6.17 SEC. TWN. RGE. W. Contractor WARDEAN-DRILLING Type Rig FADING Month FEB Day 5 1960

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		Hole Size		Formation		From		To		Hole Made		Hole Size		Formation		From		To		Hole Made		Hole Size		Formation																			
317		373		56		6 1/4						373		383		10		1 1/4				383		15		398		6 1/4		LIME																			
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.															
3 1/2				9		16 ft up		88-19				3 1/2				9		6 1/4		88-19				3 1/2				10		214P		88-19																	
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												DRILLING STRING		COLLAR		3								DRILLING STRING		COLLAR								DRILLING STRING		COLLAR													
DATA								15'000				DATA												DATA										15'000															
BIT RECORD		No.		Type		Time On Bottom At		Time Pulled At		Total Hours Run		Depth Pulled		Weight On Bit M Pounds		FOOTAGE Drilled		Reamed				No.		Type		Time On Bottom At		Time Pulled At		Total Hours Run		Depth Pulled		Weight On Bit M Pounds		FOOTAGE Drilled		Reamed											
8		W7				11:30				8'000		77										9		M5		9:30				6		8'000		15'															
Bit Serial No.		71112		Table R.P.M.		100		Bit Serial No.		Table R.P.M.				Bit Serial No.		390411		Table R.P.M.		100		Jet or Conventional		Nozzle Size		OPEN		Jet or Conventional		Nozzle Size		OPEN		Kind		at		Ft.		Deg. off									
SURVEYS		Kind		at		Ft.		Deg. off		Kind		at		Ft.		Deg. off		Kind		at		Ft.		Deg. off		Kind		at		Ft.		Deg. off		Kind		at		Ft.		Deg. off									
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							
								200		12		65		5 1/4										200		12		70		5 1/4																			
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		Time		Visc.		Wt.		W L		pH		ADDITIVES — POUNDS	
		12		135		9		7-6		7		WATER 10 BBL'S		10		100		9.6		7-6		7				10		135		9		9																	
		2		135		=								12		1		9		7-6		7																											
		H		140		=								Ren		f		(DST #1)		(No information kept)						10		135		9		9																	
		6		150		=		7-9		7																																							
		8		150		8-2																																											
CORING		From		To		Ft. Cored		Ft. Rec'd.		Core No.		Type Bbl.		From		To		Ft. Cored		Ft. Rec'd.		Core No.		Type Bbl.		From		To		Ft. Cored		Ft. Rec'd.		Core No.		Type Bbl.													
DETAIL OF OPERATIONS AND REMARKS		RIG SERV.		12		12:15		1/4		DRILL SERV		8		8:15		1/4		SERVILE DR		4:15		6:15		2		T-5 TIDE		6:15		7:00		3/4		PUMP OUT		7:00		8:00		1									
		DRILL		12:15		1:15		1		DRILL		8:15		9:30		1 1/2		BRACKET DOWN		7:00		8:00		1		CHANGING SWIVEL		8:15		9:30		1 1/4		RUN IN REAMING		9:30		10:30		1									
		COOLING PUMP MOTOR		1:15		1:30		1/4		WORK ON SWIVEL		2:30		3:00		1/2		DRILL		10:30		11:00		1/2		DRILL		11:00		12:00		1																	
		DRILL		1:30		2:30		1		DRILL		3:00		6:00		3		DRILL		10:30		11:00		1/2		DRILL		11:00		12:00		1																	
		WORK ON SWIVEL		2:30		3:00		1/2		DRILL		3:00		6:00		3		DRILL		10:30		11:00		1/2		DRILL		11:00		12:00		1																	
		DRILL		3:00		6:00		3		DRILL		3:00		6:00		3		DRILL		10:30		11:00		1/2		DRILL		11:00		12:00		1																	
		WORK ON SWIVEL		6:00		6:15		1/4		DRILL		6:15		7:30		1 1/4		DRILL		10:30		11:00		1/2		DRILL		11:00		12:00		1																	
		DRILL		6:15		7:30		1 1/4		DRILL		6:15		7:30		1 1/4		DRILL		10:30		11:00		1/2		DRILL		11:00		12:00		1																	
		WORK ON SWIVEL		7:30		8:00		1/2		DRILL		7:30		8:00		1/2		DRILL		10:30		11:00		1/2		DRILL		11:00		12:00		1																	
Driller		M. J. Jones		Driller		A. C. Reynolds		Driller		R. E. BATES																																							

HEADING UP & DRLG. OUT: TOTCC. CONDITIONING MUD: CASING: LOGGING: RIG MAINTENANCE: REAMING CLEANING: MNFR. DRILLING LINE IN USE REEL SERIAL No. DID YOU CHECK BLOWOUT PREVENTER EQUIPMENT TODAY

DRILLING: FISHING: CIRCUITING: TRIPPING: CORING: W.O.C. W.O. ORDERS: MISCELLANEOUS: WORKING PIPE: MNFR. OF KELLY HOSE IN USE HOSE SERIAL No. YES NO

REAMING: D.S. TESTING: RIG REPAIRS: CONDITION HOLE: LOST CIRC.: MNFR. OF KELLY HOSE IN USE HOSE SERIAL No. YES NO

Total Contract Timehrs.

Total Company Timehrs.

Toolpusherhrs.

Approved by

Wardle Drilling Co. LSD. 67 SEC. TWN. RGE. W. Contractor Wardle Drilling Type Rig Fall 2500 Month Feb 4 Day 4 1960

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	Hole Size	Formation				From		To	Hole Made	Hole Size	Formation				From		To	Hole Made	Hole Size	Formation																		
		291	291	0								291	296	5	6 1/4							296	317	21	6 1/4	LIME																
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 Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE		No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE		No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE															
Bit Serial No.		Table R.P.M.										Bit Serial No.		Table R.P.M.										Bit Serial No.		Table R.P.M.																
Jet or Conventional -		Nozzle Size										Jet or Conventional -		Nozzle Size										Jet or Conventional -		Nozzle Size																
SURVEYS		Kind	at				Ft.				Deg. off				Kind		at				Ft.				Deg. off				Kind		at				Ft.				Deg. off			
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																					
No. 1		On Line	Circulating						On Line		Circulating				On Line		Circulating																									
No. 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					GELL-1500									Regained Circulation				4	120	9.																				
							SANDUST SACKS 5									but still losing some				6	120	9.																				
							CAUSTIC - 50 lbs													8	120	9.	7.6	7	FIBERSEAL T.BAL																	
							LOST CIRCULATION PLUG #1													10	120	9.																				
CORING		From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.				From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.				From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.																	
		20	20	15	15	1	CLORIDE																																			
		DOWN 8:15 AM, NO RETURNS																																								
DETAIL OF OPERATIONS AND REMARKS		From		To	Hrs.	RIG SERV.		12		12:15	1/4	SERV RIG		8		8:30	1/2	SERVILE F.L.		4:00		4:15	1/4																			
						RIG TO CEMENT OFF LOST						WORK ON LIGHT PLANT		8:30		9	1/2	WORK ON PUMP		4:15		7:00	2 3/4																			
						CIRCULATION ZONE		12:15		4:30	3 3/4	WORK ON SWIRL PUT						DRILL		7:00		8:00	1																			
						WORK ON CEMENT UNIT		4:30		6:00	1 1/2	NEW PACKING		9		11	2	WORK ON PUMP		8:00		8:30	1/2																			
						CEMENTING		6:00		6:15	1/4	MINER MUD		11		1	2	DRILL		8:30		9:00	1/2																			
						PULL OUT		6:15		6:45	1/2	RAN IN HOLE		1		1:30	1/2	WORK ON PUMP		9:00		9:30	1/2																			
						W.O. CEMENT		6:45		8:00	1 1/4	DILG CIRCULATING		1:30		2	1 1/2	DRILL		9:30		12:00	2 1/2																			
						MIX MUD						WORK ON PUMP		2		2:30	1/2																									
												DILG		2:30		3	1 1/2																									
Driller		J. J. Jones										Driller		A. E. Reynolds										Driller		R. BEATCH																

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

Total Contract Timehrs.

Total Company Timehrs.

Toolpusher J. Smith

Approved by

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT

18

 IMP. WINDFLOWER LSD. 672 SEC. TWN. RGE. W. Contractor WARRDEAN-DRILLING Type Rig FAIRING Month FEB Day 3 1960

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	Hole Size	Formation				DEPTH		From	To	Hole Made	Hole Size	Formation				DEPTH		From	To	Hole Made	Hole Size	Formation			
275										275		291	16	5"	LIME				291						6 1/4 LIME				
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.			
3 1/2		6		10 up	88-19					3 1/4		6		10 1/4	88-19					3 1/2		6		26 1/4	88-19				
DRILLING STRING										DRILLING STRING										DRILLING STRING									
DRILL										DRILL										DRILL									
COLLAR										COLLAR										COLLAR									
DATA										DATA										DATA									
BIT RECORD										BIT RECORD										BIT RECORD									
No. Type Time On Bottom At Time Pulled At Total Hours Run Depth Pulled Weight On Bit M Pounds FOOTAGE Drilled Reamed										No. Type Time On Bottom At Time Pulled At Total Hours Run Depth Pulled Weight On Bit M Pounds FOOTAGE Drilled Reamed										No. Type Time On Bottom At Time Pulled At Total Hours Run Depth Pulled Weight On Bit M Pounds FOOTAGE Drilled Reamed									
7 OSC 7 1/2										7 OSC 330 11 1/4 291 4000 57										8 47 1 1/4 5'									
Bit Serial No. Table R.P.M. Nozzle Size Jet or Conventional -										Bit Serial No. 76336 Table R.P.M. 100 Nozzle Size Full Jet or Conventional -										Bit Serial No. 71112 Table R.P.M. 90 Nozzle Size OPEN Jet or Conventional -									
SURVEYS										SURVEYS										SURVEYS									
SLUSH PUMP RECORD										SLUSH PUMP RECORD										SLUSH PUMP RECORD									
No. 1										No. 1										No. 1									
No. 2										No. 2										No. 2									
MUD RECORD										MUD RECORD										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									
WATER 20.00 GELL SAW DUST 70 SPSK																													
CORING										CORING										CORING									
From To Ft. Cored Ft. Rec'd. Core No. Type Bbl.										From To Ft. Cored Ft. Rec'd. Core No. Type Bbl.										From To Ft. Cored Ft. Rec'd. Core No. Type Bbl.									
DETAIL OF OPERATIONS AND REMARKS										DETAIL OF OPERATIONS AND REMARKS										DETAIL OF OPERATIONS AND REMARKS									
RIP SERV										RIP SERV										SERVING R.P.									
CHANGE HEADS, LINERS IN										THROW OUT KELLY HOSE										FINISH OUT									
PUMP. CHECK AIR-CHAMBER										MIXED MUD										CLEAN PULLED COLLAR									
AND SUCTION										DILG LASSING CIRCULATING										RUN IN									
RUN IN HOLE										MIXED MUD + SAWDUST										REAM 5'									
TRY BLOW KELLY HOSE FROZE										DILG										POST CIR PULL OUT									
THAWING KELLY HOSE										LOST CIRCULATION										WFO MUD									
A.M.O. LIGHT-PLANT										PLUG BIT STARTED																			
WAITING ON STEAM.																													
Driller <u>W. J. Smith</u>										Driller <u>Al Reynolds</u>										Driller <u>BEATLH</u>									

CLASSES OF TIME BREAKDOWN: HEADING UP & DRLG. OUT: TOTCO: FISHING: REAMING: 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.: MNFR. DRILLING LINE IN USE: REEL SERIAL No.: MNFR. OF KELLY HOSE IN USE: HOSE SERIAL No.: DID YOU CHECK BLOWOUT PREVENTER EQUIPMENT TODAY: YES NO

Total Contract Time hrs.

Total Company Time hrs.

Toolpusher W. J. Smith

Approved by

IMP. WINDFALLS D. 77 SEC. TWN. RGE. W. Contractor WARDEAN-DRILLING Type Rig FAILING Month FEB. Day 2 1960

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	Hole Size	Formation						From	To	Hole Made	Hole Size	Formation						From	To	Hole Made	Hole Size	Formation									
		203	229	23	6 1/4	LIME						228	262	33	6 1/4	LIME						262	273	13	6 1/4	LIME									
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.								
		3 1/2		4	16 IN	88-19						3 1/2		6	10 1/4	88-19						3 1/2		6											
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						
DATA							14-000										DATA							14-000											
BIT RECORD		No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE			No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE			No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE						
		6	MHN			9 1/4		8000				7	QSC	1030		9 1/4			30			7	QSC			7 1/2		4000	43	-					
		Bit Serial No. 392603					Table R.P.M. 90					Bit Serial No. 70336					Table R.P.M. 90					Bit Serial No. 70336					Table R.P.M. 90								
		Jet or Conventional -					Nozzle Size OPEN					Jet or Conventional -					Nozzle Size 10/16					Jet or Conventional -					Nozzle Size OPEN								
SURVEYS		Kind	at			Ft.	Deg. off			Kind	at			Ft.	Deg. off			Kind	at			Ft.	Deg. off												
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																				
				150	12 IN	60	5 1/2				30	12	65	5 1/2			220	12	60	5 1/4															
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	40	8-4	7-8	8	SAW-DUST 2. SACK								SAW-DUST 10			4	30				L-60												
		2	=												600 GALL			6	37				SAW-DUST												
		4	=															8	37																
		6	45	8-6	=	=												10	40	8.4	8	7													
		8	45																																
CORING		From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.			From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.			From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.												
DETAIL OF OPERATIONS AND REMARKS				From	To	Hrs.			From	To	Hrs.			From	To	Hrs.			From	To	Hrs.														
		RIG SERV.		12	12:15	1/4			RIG SERV		8	830	1/2			SERVILE FTL.		4:15		430	1/4														
		SERV. SWIVEL		12	12:30	1/4			TRIP TO CHANGE BIT		830	1030	2			DRILL		430		600	1 1/2														
		DRILLING		12:30	7:00	6 1/2			DILG		1030	130	3			DRILL		600		730	1 1/2														
		W.O. PUMP.		7:00	7:15	1/4			MIXED MUD 25% CIRCUL.		130	230	1			W/O PUMP		730		800	1/2														
		DRILLING		7:15	8:00	3/4			DILG		230	9	1/2			DRILL		800		960	1														
																W/O PUMP		900		930	1/2														
																DRILL		930		940	1/4														
																PUMP OUT		940		1010	1/2														
																PUMP PUMP APART		1010		1000	1 1/4														

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT

WARDEN DRILLING SEC. TWN. RGE. W. Contractor WARDEN DRILLING Type Rig FAIRLINE Month FEB. Day 1 1966

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	Hole Size	Formation				From		To	Hole Made	Hole Size	Formation				From		To	Hole Made	Hole Size	Formation											
		186	190	4	4 3/4	LIME						190	197	7	4 3/4							203	3	206	6 1/4	LIME									
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.										
		3 1/2		2	36	88-19	25'03					3 1/2		2	28	88-19	25'05					3 1/2		3	29'4	88-19	25'03								
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				COLLAR								DRILLING STRING				COLLAR								DRILLING STRING					
DATA										DATA										DATA															
BIT RECORD		No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE		No.		Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE		No.		Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE						
		5	0	2 1/4		3 1/2		4000					5	0	1		1		4000	7				6	0	3:45		4	203	8000	20				
		Bit Serial No. 68-59				Table R.P.M. 70						Bit Serial No. 68-59				Table R.P.M. 7						Bit Serial No. 68-59 / (392603)				Table R.P.M. 200									
		Jet or Conventional - J				Nozzle Size 12WC						Jet or Conventional - J				Nozzle Size						Jet or Conventional -				Nozzle Size OPEN									
SURVEYS		Kind	at		Ft.		Deg. off		Kind		at		Ft.		Deg. off		Kind		at		Ft.		Deg. off		Kind		at		Ft.		Deg. off				
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	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				On Line		Circulating							
				550	12	37	5 1/2					300	12	37	5 1/2					250	12	70	5 1/2												
MUD RECORD		Time	Visc.	Wt.	WL	pH	ADDITIVES — POUNDS		Time		Visc.	Wt.	WL	pH	ADDITIVES — POUNDS		Time		Visc.	Wt.	WL	pH	ADDITIVES — POUNDS		Time		Visc.	Wt.	WL	pH	ADDITIVES — POUNDS				
		12	50	9	78	4					3	35	9	7.8	8	15.00 9.6L				4:00	32	8.4		1-EL 1700				6:00	30	9	SP-ARSEAN 100				
																				8:00	30	9		CAUSTIC 20				10:00	30	9	7.8 8. SHAWQUEST 5 BALS				
CORING		From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.	From		To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.	From		To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.	From		To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.	From		To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.
		123	190	7		(1)				190	197	7		(2)				197	203	23	13	2													
DETAIL OF OPERATIONS AND REMARKS		RIP SERV. 12-12' 1/4		From	To	Hrs.	RIP SERV. 12-12' 1/4		From	To	Hrs.	RIP SERV. 12-12' 1/4		From	To	Hrs.	RIP SERV. 12-12' 1/4		From	To	Hrs.	RIP SERV. 12-12' 1/4		From	To	Hrs.	RIP SERV. 12-12' 1/4		From	To	Hrs.	RIP SERV. 12-12' 1/4			
		CORING		12:55	1:30	1 1/4	CORING		8	10:00	2	CORING		10:30	10:33	1/2	CORING		4:05	5:12	1	CORING		5:12	5:45	1/2	CORING		5:45	6:45	1	CORING			
		PULL OUT, LAY DOWN CORE BBL		2:00	4:30	2 1/2	PULL OUT, LAY DOWN CORE BBL		10:30	2:30	4	PULL OUT, LAY DOWN CORE BBL		2:30	3	1/2	PULL OUT, LAY DOWN CORE BBL		6:45	7:00	1/4	PULL OUT, LAY DOWN CORE BBL		7:00	7:30	1/2	PULL OUT, LAY DOWN CORE BBL		7:30	8:30	1	PULL OUT, LAY DOWN CORE BBL			
		TO RECOVER CORE, REASSEMBLE BBL		4:30	5:15	3/4	TO RECOVER CORE, REASSEMBLE BBL		2:30	3	1/2	TO RECOVER CORE, REASSEMBLE BBL		3	4	1	TO RECOVER CORE, REASSEMBLE BBL		7:30	8:30	1	TO RECOVER CORE, REASSEMBLE BBL		8:30	9:15	3/4	TO RECOVER CORE, REASSEMBLE BBL		9:15	9:45	1/2	TO RECOVER CORE, REASSEMBLE BBL			
		PUT NEW VALVE ON SHAFT		5:15	6:00	3/4	PUT NEW VALVE ON SHAFT		3	4	1	PUT NEW VALVE ON SHAFT		3	4	1	PUT NEW VALVE ON SHAFT		8:30	9:15	3/4	PUT NEW VALVE ON SHAFT		9:15	9:45	1/2	PUT NEW VALVE ON SHAFT		9:45	10:45	1	PUT NEW VALVE ON SHAFT			
		RUN IN, CIR HOLE		6:00	7:00	1	RUN IN, CIR HOLE		3	4	1	RUN IN, CIR HOLE		3	4	1	RUN IN, CIR HOLE		9:15	9:45	1/2	RUN IN, CIR HOLE		9:45	10:45	1	RUN IN, CIR HOLE		10:45	11:00	1/4	RUN IN, CIR HOLE			
		START CORE 2. NO. MUD.		7:00	8:00	1	START CORE 2. NO. MUD.		3	4	1	START CORE 2. NO. MUD.		3	4	1	START CORE 2. NO. MUD.		10:45	11:00	1/4	START CORE 2. NO. MUD.		11:00	11:00	1/4	START CORE 2. NO. MUD.		11:00	11:00	1/4	START CORE 2. NO. MUD.			
		WORK ON PUMP.		7:00	8:00	1	WORK ON PUMP.		3	4	1	WORK ON PUMP.		3	4	1	WORK ON PUMP.		11:00	11:00	1/4	WORK ON PUMP.		11:00	11:00	1/4	WORK ON PUMP.		11:00	11:00	1/4	WORK ON PUMP.			
Driller		J. M. Smith		Driller		A. L. Reynolds		Driller		K. B. Smith		Driller		K. B. Smith		Driller		K. B. Smith		Driller		K. B. Smith		Driller		K. B. Smith		Driller		K. B. Smith		Driller			

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

Total Contract Timehrs.

Total Company Timehrs.

Toolpusherhrs.

Approved by

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT

#15

W.P. WINDFLOVER LSD. 6.17 SEC. TWN. RGE. W. Contractor Type Rig Month Jan Day 31 1960

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		Hole Size		Formation		From		To		Hole Made		Hole Size		Formation		From		To		Hole Made		Hole Size		Formation													
		174										174		183		9		6 1/4				183		186		3		4 3/4		Lime													
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.							
		3 1/2				2		36		88-19				3 1/2				1		down						3 1/2				1		23'-0		44.47									
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		2		4 3/4				88-19		DRILLING STRING		DRILL COLLARS		COLLAR		2				88-19		DRILLING STRING		DRILL COLLARS					
DATA														DATA												DATA																	
BIT RECORD		No.		Type		Time On Bottom At		Time Pulled At		Total Hours Run		Depth Pulled		Weight On Bit M. Pounds		FOOTAGE Drilled		Reamed		No.		Type		Time On Bottom At		Time Pulled At		Total Hours Run		Depth Pulled		Weight On Bit M. Pounds		FOOTAGE Drilled		Reamed							
		H-		OSC 3																4		OSC 3		3 30		4 30		1		183				9'									
Bit Serial No.														Bit Serial No.		69630												Bit Serial No.															
Jet or Conventional														Jet or Conventional		C												Jet or Conventional															
Nozzle Size														Nozzle Size														Nozzle Size															
SURVEYS		Kind		at		Ft.		Deg. off		Kind		at		Ft.		Deg. off		Kind		at		Ft.		Deg. off		Kind		at		Ft.		Deg. off		Kind		at		Ft.		Deg. off			
SLUSH PUMP RECORD		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	
No. 1																																											
No. 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							
CORING		From		To		Ft. Cored		Ft. Rec'd.		Core No.		Type Bbl.		From		To		Ft. Cored		Ft. Rec'd.		Core No.		Type Bbl.		From		To		Ft. Cored		Ft. Rec'd.		Core No.		Type Bbl.							
DETAIL OF OPERATIONS AND REMARKS		RIG SER-12-12:15 1/4		From		To		Hrs.		Service Rig		From		To		Hrs.		Service Rig		From		To		Hrs.		Service Rig		From		To		Hrs.		Service Rig		From		To		Hrs.			
		PRIME PUMP-STEAM TO PIPE		12:15		3:00		2 3/4		Change water lines to pump		8:30		9:30		1		SEALING RIG		4:00		4:15		1/4		CONDITION MUD		4:15		7:30		3 1/4		FULL TO CORE		7:30		8:00		1/2			
		V.V.O. SHAKER MOTOR (KEL)		3:00		3:45		3/4		motor		9:30		11:30		2		PICK UP CORE BBL.		8:00		9:00		1		SERVING		9:00		9:30		1/2		SERVING		9:30		10:00		1/2			
		PAT HEAD-GASKET IN AIR COMPRESSOR		3:45		5:15		1 1/2		Work on lights		11:30		12:00		1/2		PICK UP CORE BBL.		9:00		9:30		1/2		SERVING		9:30		10:00		1/2		SERVING		9:30		10:00		1/2			
		STEAM AIR-LINES		5:15		6:00		3/4		Pressure up to 550 psi		12:00		1:00		1		PICK UP CORE BBL.		9:30		10:00		1/2		SERVING		10:00		10:45		3/4		SERVING		10:45		11:00		1/4			
		RUN IN STEAM FROST PLUGS		6:00		6:30		1/2		Drill out plug		1:00		2:00		2		PICK UP CORE BBL.		10:00		10:45		3/4		SERVING		10:45		11:00		1/4		SERVING		11:00		11:15		1/4			
		FROM PIPE		6:30		7:00		1/2		Mix mud & work on lights		2:00		3:00		1		PICK UP CORE BBL.		10:45		11:00		1/4		SERVING		11:00		11:15		1/4		SERVING		11:15		11:30		1/4			
		TRY CIR. PUMP MOTOR STOPING		7:00		8:00		1		Drilling		3:00		4:00		1		PICK UP CORE BBL.		11:00		11:15		1/4		SERVING		11:15		11:30		1/4		SERVING		11:30		11:45		1/4			
		TRY PRESS-UP LEAKING																PICK UP CORE BBL.		11:15		11:30		1/4		SERVING		11:30		11:45		1/4		SERVING		11:45		12:00		1/4			
		TIGHTEN SHAFFER.																PICK UP CORE BBL.		11:30		11:45		1/4		SERVING		11:45		12:00		1/4		SERVING		12:00		12:15		1/4			
Driller		W. J. J. J.								Driller		A. R. J. J.						Driller		F. J. J. J.						Driller		F. J. J. J.						Driller		F. J. J. J.							

 HEADING UP & DRIG. OUT: TOTCO: CONDITIONING MUD: CASING: LOGGING: RIG MAINTENANCE: REAMING CLEANING: MNFR. DRILLING LINE IN USE REEL SERIAL No. DID YOU CHECK BLOWOUT PREVENTER EQUIPMENT TODAY
 DRILLING: FISHING: TRIPPING: W.O.C. W O ORDERS: MISCELLANEOUS: WORKING PIPE: MNFR. OF KELLY HOSE IN USE HOSE SERIAL No. YES NO
 REAMING: CIRCULATING: CORING: D.S. TESTING: RIG REPAIRS: CONDITION HOLE: LOST CIRC.:

Total Contract Time hrs.

Total Company Time hrs.

Toolpusher

Approved by

Approved by

Approved by

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT #11

LINE W. MCLENDREW W. C. 77 SEC. TWN. RGE. W. Contractor WARDEAN DRILLING Type Rig FAILING Month JAN Day 28 1960

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	Hole Size	Formation				DEPTH		From	To	Hole Made	Hole Size	Formation				DEPTH		From	To	Hole Made	Hole Size	Formation																																			
DRILLING STRING		Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.			DRILLING STRING		Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.			DRILLING STRING		Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.																																		
3IT RECORD		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																																							
		No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE		No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE		No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE																																		
		Bit Serial No.										Table R.P.M.										Bit Serial No.										Table R.P.M.																													
		Jet or Conventional -										Nozzle Size										Jet or Conventional -										Nozzle Size																													
SURVEYS		Kind	at			Ft.			Deg. off			Kind	at			Ft.			Deg. off			Kind	at			Ft.			Deg. off																																
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																																				
		No. 1	On Line	Circulating						No. 2	On Line	Circulating						No. 1	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																																				
CORING		From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.				From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.				From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.																																				
DETAIL OF OPERATIONS AND REMARKS																																																													
		RIG SERV.																																																											
		WAIT ON CEMENT										12 7:30 7 1/2										SERVILE RIG										400 4:15 1 1/4										MOVED mud																			
		SLACK OFF CASING LAY -																				FINISH NIPPLE UP										4:15 6:00 1 3/4										Turned & mud pump																			
		DOWN LANDING JOINT.										7:30 8:00 1/2										CHANGE ST AM LINES										6:00 7:30 1 1/2										Put on CONTROL Head																			
																						TO FIT PUMP & TANK										7:30 9:00 1 1/2										Turn 7" casing off																			
																						WELD FLOW LINE										7:30 9:00 1 1/2										PIPE RACK																			
																						TRY START PUMP MOTOR																																							
																						RAD. LONE										9:00 10:00 1																													
																						TAKE RAD OF FOR REPAIRS										10:00 12:00 2																													
		Driller <u>W. J. Jones</u>																				Driller <u>F. BEATCH</u>																				Driller <u>G. L. Reynolds</u>																			

HEADING UP & DRILL. OUT: TOTCO: CONDITIONING MUD: CASING: LOGGING: RIG MAINTENANCE: REAMING CLEANING: MNFR. DRILLING LINE IN USE REEL SERIAL No. DID YOU CHECK BLOWOUT PREVENTER EQUIPMENT TODAY
DRILLING: FISHING: TRIPPING: W.O.C. W. O. ORDERS: MISCELLANEOUS: WORKING PIPE: MNFR. OF KELLY HOSE IN USE HOSE SERIAL No. YES NO
REAMING: CIRCULATING: CORING: D.S. TESTING: RIG REPAIRS: CONDITION HOLE: LOST CIRC:

Total Contract Timehrs.

Total Company Timehrs.

Toolpusher W. J. Jones

Approved by

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT

IND. WINDFLOWER 677 LSD SEC TWN RGE W Contractor: WARREN DRILLING Type Rig FALLING Month JAN Day 27 1960

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	Hole Size	Formation				DEPTH		From	To	Hole Made	Hole Size	Formation				DEPTH		From	To	Hole Made	Hole Size	Formation							
					9"																												
		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.						
		3 1/2		2	36	88-19						3 1/2		2	10"	6034																	
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						DRILLING STRING		DRILL COLLARS		COLLAR						DRILLING STRING		DRILL COLLARS		COLLAR						DRILLING STRING		DRILL COLLARS			
		DATA										DATA										DATA											
BIT RECORD		No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE		No.		Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE		No.		Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE				
										92										139													
		Bit Serial No. 97706		Table R.P.M. 180		Jet or Conventional -		Nozzle Size				Bit Serial No.		Table R.P.M.		Jet or Conventional -		Nozzle Size				Bit Serial No.		Table R.P.M.		Jet or Conventional -		Nozzle Size					
SURVEYS		Kind	at		Ft.		Deg. off		Kind		at		Ft.		Deg. off		Kind		at		Ft.		Deg. off		Kind		at		Ft.		Deg. off		
		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									
SLUSH PUMP RECORD		No. 1		No. 2		150																											
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						
		400								Heat										RAIN 5 JTS. 7" 20" J55 R2 SC													
		=		6-H																STEWART & LLOYDS CASING TO 165.18A													
CORING		From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.		From		To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.		From		To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.		From		To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.		
DETAIL OF OPERATIONS AND REMARKS		RIG SERV. 12-12-54		From		To	Hrs.	RIG SERV		From		To	Hrs.	SERV. FILE		From		To	Hrs.	SERV. FILE		From		To	Hrs.	SERV. FILE		From		To	Hrs.		
		REAMING		12:15		1:30		1 1/4		REAMING		8		8:30		1 1/4		SERV. FILE		4:00		4:12		1 1/4		SERV. FILE		4:00		4:12		1 1/4	
		TRIP TO CHANGE BIT		1:30		2:30		1		REPAIR FROM 30' 174		8:30		9:30		1		GIR. WORKING PIPE STARTING		4:12		7:00		2 3/4		GIR. WORKING PIPE STARTING		4:12		7:00		2 3/4	
		V.I.O. DRAWWORKS		2:30		4:00		1 1/2		FUEL. out		1:30		2:30		1		CEMENTING UNIT		4:12		7:00		1 1/2		CEMENTING UNIT		4:12		7:00		1 1/2	
		REAMING TO CLEAN HOLE		4:00		5:00		1		RIG & RIG CASING		2:30		3:30		1		CEMENTING UNIT		4:12		7:00		1 1/2		CEMENTING UNIT		4:12		7:00		1 1/2	
		V.I.O. PUMP.		5:00		5:30		1/2		RIG TO CLEAN & REAMING		3:30		4:00		1/2		W/D CEMENT		7:30		12:00		4 1/2		W/D CEMENT		7:30		12:00		4 1/2	
		CHANGE SUB, STR BACK DC TWICE		5:30		6:30		1																									
		REPAIR TONG LINES		6:30		7:00		1/2																									
		TRY TO BREAK SUB ON P.C.		7:00		8:00																											
		Driller								Driller								Driller		R. BEATCH													

HEADING UP & DRLG. OUT: TOTCO: CONDITIONING MUD: CASING: LOGGING: RIG MAINTENANCE: REAMING CLEANING: MNFR. DRILLING LINE IN USE REEL SERIAL No. DID YOU CHECK BLOWOUT PREVENTER EQUIPMENT TODAY

Total Contract Time hrs.

Total Company Time hrs.

Toolpusher

Approved by

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT

 677
 IMP. WINDFLOWER LSD. SEC. TWN. RGE. W. Contractor WARDEAN DRILLING Type Rig FAILING Month JAN Day 26 1940

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	Hole Size	Formation				From		To	Hole Made	Hole Size	Formation				From		To	Hole Made	Hole Size	Formation										
		170	174	4	9"	SHALE																												
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.									
		3 1/2		2	36	88-19																												
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		3				DRILLING STRING				COLLAR						DRILLING STRING				COLLAR						DRILLING STRING								
DATA										DATA										DATA														
BIT RECORD		No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE		No.		Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE		No.		Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE					
		3	OSC.			15 1/4	174	8000	4																									
		Bit Serial No. 66119				Table R.P.M. 70						Bit Serial No.				Table R.P.M.						Bit Serial No.				Table R.P.M.								
		Jet or Conventional -				Nozzle Size						Jet or Conventional -				Nozzle Size						Jet or Conventional -				Nozzle Size								
SURVEYS		Kind	at		Ft.		Deg. off		Kind		at		Ft.		Deg. off		Kind		at		Ft.		Deg. off		Kind		at		Ft.		Deg. off			
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	HOURS		Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size	HOURS		Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size			
No. 1		On Line	Circulating					On Line		Circulating				On Line		Circulating				On Line		Circulating				On Line		Circulating						
No. 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		Time		Visc.	Wt.	W L	pH	ADDITIVES — POUNDS			
		1200	400		6-8																													
		200	=																															
		400	=																															
		600	=		6-4																													
		800	=																															
CORING		From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.		From		To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.		From		To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.		From		To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.			
DETAIL OF OPERATIONS AND REMARKS				From	To	Hrs.			From		To	Hrs.			SERVILE RIL.		From		To	Hrs.			HAY 405 1/4		From		To	Hrs.						
		RIG SERV		12	1215	1/4			RIG SERV		8	830	1/2			LAY DOWN CASING.		412		500	3/4			412		500	3/4							
		DRILL		1215	1115	1			Circulating		830	930	1			RUN IN REAMING.		500		630	1/2			500		630	1/2							
		CIR HOLE		1115	1415	1/2			SURVEY		930	945	1/4			CIR HOLE CLEAN		630		700	1/2			630		700	1/2							
		TRIP OUT CONDITION HOLE		1415	300	1 1/4			PULLED out		945	1015	1/2			PULL OUT		700		730	1/2			700		730	1/2							
		RUN IN WORK TIGHT HOLE		300	845	3/4			TRY TO RUN CASING		1015	1045	1/2			RIL TO RUN CASING																		
		WORK ON PUMP.		345	436	3/4			RAN IN CON HOLE		1045	1305	2			RUN ONE JOINT																		
		CIR.		430	515	3/4			PULLED out		1305	115	1/2			LAY BACK DOWN		730		830	1			730		830	1							
		Pull out, W.O.P. MOTOR		515	600	3/4			TRY TO RUN CASING		1115	315	2			THAW OUT 7" COLLARS		830		900	1/2			830		900	1/2							
		RUN IN REAM, TOP TO BOTTOM		600	645	3/4			PULLING out CASING		315	4	3/4			PICK UP 7" COLLAR TRY TO																		
		CIR 645 715		715	800	3/4			Driller. J. E. Reynolds						Driller. R. BEATH																			

CLASSES OF TIME BREAKDOWN

HEADING UP & DRG. OUT:	TOTCO:	CONDITIONING MUD:	CASING:	LOGGING:	RIG MAINTENANCE:	REAMING CLEANING:	MNFR. DRILLING LINE IN USE	REEL SERIAL No.	DID YOU CHECK BLOWOUT PREVENTER EQUIPMENT TODAY
DRILLING:	FISHING:	TRIPPING:	W.O.C.	W O ORDERS:	MISCELLANEOUS:	WORKING PIPE:			
REAMING:	CIRCULATING:	CORING:	D.S. TESTING:	RIG REPAIRS:	CONDITION HOLE:	LOST CIRC.:	MNFR. OF KELLY HOSE IN USE	HOSE SERIAL No.	YES NO

Total Contract Timehrs.

Total Company Timehrs.

Toolpusher

Approved by

IMP. WINDFILL W.R. 677 LSD. SEC. TWN. RGE. W. Contractor WARDEN-DRILLING Type Rig FAILING Month JAN. Day 25 1960

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	Hole Size	Formation				DEPTH		From	To	Hole Made	Hole Size	Formation				DEPTH		From	To	Hole Made	Hole Size	Formation											
		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.										
		3 1/2		2		3-88-19																3 1/2		2	14'	8819											
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				DRILLING STRING		DRILL COLLARS				COLLAR				DRILLING STRING		DRILL COLLARS				COLLAR				DRILLING STRING		DRILL COLLARS									
		DATA										DATA										DATA															
BIT RECORD		No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE				No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE				No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE						
		Bit Serial No.		66119		Table R.P.M.						Bit Serial No.		66119		Table R.P.M.								Bit Serial No.		66119		Table R.P.M.									
		Jet or Conventional -				Nozzle Size						Jet or Conventional -				Nozzle Size								Jet or Conventional -				Nozzle Size									
SURVEYS		Kind	at		Ft.		Deg. off				Kind		at		Ft.		Deg. off				Kind		at		Ft.		Deg. off										
		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									
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								
CORING		From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.						From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.						From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.								
DETAIL OF OPERATIONS AND REMARKS																																					

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT # 8

17th P. WINDFLOWER 672

SEC.

TWN.

RGE.

W.

Contractor WARDEAN DRILLING

Type Rig FALLING

Month JAN. 24 Day 1960

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	Hole Size	Formation				DEPTH		From	To	Hole Made	Hole Size	Formation				DEPTH		From	To	Hole Made	Hole Size	Formation															
		156	156	0	9"	GRAVEL, SHALE																																			
DRILLING STRING		Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.			DRILLING STRING		Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.			DRILLING STRING		Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.														
		3 1/2																																							
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 Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE		No.		Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE		No.		Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE												
									Drilled	Reamed									Drilled	Reamed									Drilled	Reamed											
SURVEYS		Kind	at		Ft.		Deg. off		SURVEYS		Kind	at		Ft.		Deg. off		SURVEYS		Kind	at		Ft.		Deg. off		SURVEYS		Kind	at		Ft.		Deg. off							
SLUSH PUMP RECORD		HOURS		Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size		SLUSH PUMP RECORD		HOURS		Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size		SLUSH PUMP RECORD		HOURS		Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size		SLUSH PUMP RECORD		HOURS		Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size							
No. 1		On Line	Circulating						No. 1		On Line	Circulating						No. 1		On Line	Circulating						No. 1		On Line	Circulating											
No. 2									No. 2									No. 2									No. 2														
MUD RECORD		Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS		MUD RECORD		Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS		MUD RECORD		Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS		MUD RECORD		Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS							
		2.	75				GELL. 2700 BLS									2.000 gell									SPOT DIESEL FUEL AT BIT 745 PM.																
		4	300				CAUSTIC. 15'									100 pounds									845 PM PUMPED 1 BBL.																
							SANDUST. 7 SACKS									4 200 10. 8									945 PM PUMPED 1 BBL.																
																									1045 PM PUMPED 1 BBL.																
																									1145 PM PUMPED 1 BBL.																
CORING		From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.		CORING		From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.		CORING		From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.		CORING		From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.							
DETAIL OF OPERATIONS AND REMARKS		RIG SERV.		From	To	Hrs.			DETAIL OF OPERATIONS AND REMARKS		RIG SERV.		From	To	Hrs.			DETAIL OF OPERATIONS AND REMARKS		RIG SERV.		From	To	Hrs.			DETAIL OF OPERATIONS AND REMARKS		RIG SERV.		From	To	Hrs.								
		OFF BOTTOM, STUCK IN HOLE		12	12:15	1/4					RIG SERV.		8	8:15	1/4					SERVILE RIL.		4:00	4:15	1/2																	
		LOST CIR, FALLING GRAVEL		12:15	1.	3/4					THROW TOP SINGLE ON STRING		8:15	1						BRAKE OF SINGLE		4:15	5:00	3																	
		MIX. MUD, SAW-DUST		1.	5	4					MIXED MUD PUMP ON									THAW OUT																					
		TRY TO CIR, GOT SOME RETURNS									PIT IN HOLE DID NOT									START CEMENTING																					
		SLOWLY.		5	6:30	1 1/2					GET CIRCULATING BACK		8:15	11:15	2					UNIT TO SPOT ON		5:00	6:45	1 3/4																	
		BLOW STD. PIPE, K. HOSE		6:30	6:45	1/4					RIG TO RUN 2" DOWN HOLE									SPOTTING DIESEL FUEL		6:45	12:00	2 1/2																	
		MIXING MUD.		6:45	8	1 1/4					RAN 2" DOWN 80' HOLE																														
		STUCK AT 154' K.B.									BRIDGE @ CIRCULATING		11:15	3:30	3 3/4																										
		Driller								Driller										Driller																					

HEADING UP & DRLG. OUT: TOTCO: CONDITIONING MUD: CASING: LOGGING: RIG MAINTENANCE: REAMING CLEANING: MNFR. DRILLING LINE IN USE REEL SERIAL No. DID YOU CHECK BLOWOUT PREVENTER EQUIPMENT TODAY

DRILLING: FISHING: TRIPPING: W.O.C. W O ORDERS: MISCELLANEOUS: WORKING PIPE: MNFR. OF KELLY HOSE IN USE HOSE SERIAL No. YES NO

REAMING: CIRCULATING: CORING: D.S. TESTING: RIG REPAIRS: CONDITION HOLE: LOST CIR.:

Total Contract Time hrs.

Total Company Time hrs.

Toolpusher

Approved by

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT

Report 7

IMPERIAL OIL LTD.

SEC.

TWN.

RGE.

W.

Contractor WARDEN

Type Rig FALLING

Month JAN

Day 23 1960

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	Hole Size	Formation				DEPTH		From	To	Hole Made	Hole Size	Formation				DEPTH		From	To	Hole Made	Hole 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								COLLAR		DRILLING STRING								COLLAR		DRILLING STRING								
DATA										DATA										DATA										
BIT RECORD		No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE		No.		Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE		No.		Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE	
BIT		Serial No.	Table R.P.M.				Nozzle Size		BIT		Serial No.		Table R.P.M.				Nozzle Size		BIT		Serial No.		Table R.P.M.				Nozzle Size			
SURVEYS		Kind	at		Ft.		Deg. off		SURVEYS		Kind	at		Ft.		Deg. off		SURVEYS		Kind	at		Ft.		Deg. off					
SLUSH PUMP RECORD		HOURS		Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size	SLUSH PUMP RECORD		HOURS		Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size	SLUSH PUMP RECORD		HOURS		Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size							
No. 1		On Line	Circulating					No. 1		On Line	Circulating					No. 1		On Line	Circulating											
No. 2								No. 2								No. 2														
MUD RECORD		Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS		MUD RECORD		Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS		MUD RECORD		Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS					
		1	200				GELL - 400 lbs																							
		3	250				CAUSTIC - 10 - lbs																							
		5	300																											
		7	400																											
		8	400																											
CORING		From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.		CORING		From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.		CORING		From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.					
DETAIL OF OPERATIONS AND REMARKS		From	To	Hrs.	DETAIL OF OPERATIONS AND REMARKS		From	To	Hrs.	DETAIL OF OPERATIONS AND REMARKS		From	To	Hrs.																
RIG SERV.		12	12:15	1/4	RIG SERV.		8	8:15	1/4	SERVILL RIG		400	4:15	1/4																
W.O. PUMP		12:15	12:45	1/2	PUT RIGT HOLE CASING IN		8:15	9:30	1 1/4	DRILL		4:15	5:00	3/4																
CIR RAT.H. CANNOT GET SOCK IN		12:45	1	1/4	SPUD IN @ 945'		9:45	10:45	1	WORK ON PUMP		5:00	5:15	1/4																
PULL OUT SOCK CIR RAT.H. BIT		1	1:30	1/2	DILG		10:45	11:30	3/4	DRILL		5:15	10:30	5 1/2																
BIT PLUGGED WITH GRAVEL W.O. PUMP.		1:30	2:30	1	WORK ON PUMP		11:30	12:30	1	CLEAN SCREEN ON PUMP		10:30	10:45	1/4																
CIR RAT.H. MIX MUD.		2:30	3:30	1	DILG		12:30	1	1/2	DRILL		10:45	11:00	1/4																
TRY TO DROP SOCK GRAVEL FALL IN		3:30	4:15	3/4	WORK ON PUMP MUD		1	2	1	LOST CIR CLEAN GRAVEL																				
REAM + CIR RAT.H.		4:15	7:00	1	DILG		2	4	2	OUT OF PIT																				
TRY SOCK IN HOLE AGAIN		7:00	8:00	1	WORK ON PUMP DILG					ROTATING PIPE		11:00	12:00	1																
Driller: W. J. Smith		Driller: A. L. Reynolds		Driller: R. BEATCH																										

HEADING UP & DPLG. OUT: TOTCO: CONDITIONING MUD: CASING: LOGGING: RIG MAINTENANCE: REAMING CLEANING: MNR. DRILLING LINE IN USE REEL SERIAL No. DID YOU CHECK BLOWOUT PREVENTER EQUIPMENT TODAY

DRILLING: FISHING: TRIPPING: W.O.C. W O ORDERS: MISCELLANEOUS: WORKING PIPE: MNR. OF KELLY HOSE IN USE HOSE SERIAL No. YES NO

REAMING: CIRCULATING: CORING: D.S. TESTING: RIG REPAIRS: CONDITION HOLE: LOST CIRC.

Total Contract Timehrs.

Total Company Timehrs.

Toolpusher

Approved by

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT

WINDFLOWER L3571 SEC. TWN. RGE. W. Contractor WARDEAN Type Rig FAIRHILL Month JAN Day 22 1960

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	Hole Size	Formation						From	To	Hole Made	Hole Size	Formation						From	To	Hole Made	Hole Size	Formation																			
		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.																		
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					DRILLING STRING					COLLAR					DRILLING STRING					COLLAR					DRILLING STRING																		
		DATA												DATA												DATA																			
BIT RECORD		No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE			No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE			No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE																
									Drilled	Reamed									Drilled	Reamed								Drilled	Reamed																
		Bit Serial No.											Table R.P.M.											Bit Serial No. RR-93830											Table R.P.M.										
		Jet or Conventional -											Nozzle Size											Jet or Conventional -											Nozzle Size										
SURVEYS		Kind	at			Ft.			Deg. off			Kind	at			Ft.			Deg. off			Kind	at			Ft.			Deg. off																
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																				
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																		
																						4	100				GEL 700 #																		
																						6	100																						
																						8	100																						
																						12	200																						
CORING		From	To	Ft. Cored	Ft. Rec'd	Core No.	Type Bbl.					From	To	Ft. Cored	Ft. Rec'd	Core No.	Type Bbl.					From	To	Ft. Cored	Ft. Rec'd	Core No.	Type Bbl.																		
DETAIL OF OPERATIONS AND REMARKS		From To Hrs.											From To Hrs.											From To Hrs.																					
													SKID RIG TEN FT.											SERVILE RIG																					
													RIG UP.											FIL TO DIL RAT HOLE																					
																								DIL RAT HOLE																					
																								REPAIR ROTARY CHIAN																					
																								FINISH RAT HOLE																					
																								HOLE FAIRHILL SANDPT																					
																								LET SOLE IN CIR.																					
																								MIX MUD																					
																								WORK ON PUMP																					
		Driller											Driller											Driller																					

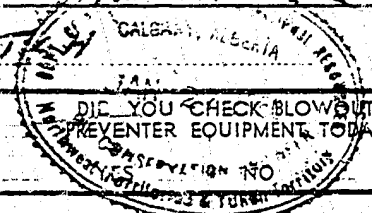
HEADING UP & DRLG. OUT: TOTCO: CONDITIONING MUD: CASING: LOGGING: RIG MAINTENANCE: REAMING CLEANING: MNFR. DRILLING LINE IN USE REEL SERIAL No.
 DRILLING: FISHING: TRIPPING: W.O.C. W O ORDERS: MISCELLANEOUS: WORKING PIPE: MNFR. OF KELLY HOSE IN USE HOSE SERIAL No.
 REAMING: CIRCULATING: CORING: D.S. TESTING: RIG REPAIRS: CONDITION HOLE: LOST CIRC.:

Total Contract Timehrs.

Total Company Timehrs.

Toolpusher

Approved by



Form 34402 (250 bks.-3-59)
 SEC. TWN. RGE. W. Contractor WARDEN Type Rig 25 TO Kelly Month JAN Day 21 1960

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	Hole Size	Formation				DEPTH		From	To	Hole Made	Hole Size	Formation				DEPTH		From	To	Hole Made	Hole Size	Formation						
DRILLING STRING	Size-D.P.									Size-D.P.										Size-D.P.												
	Stands									Stands										Stands												
	Singles									Singles										Singles												
	Kelly									Kelly										Kelly												
DRILLING STRING	Drill, Collar Ft.									Drill, Collar Ft.										Drill, Collar Ft.												
	Core Bbl. Ft.									Core Bbl. Ft.										Core Bbl. Ft.												
	INDICATOR WEIGHT OF TOTAL									INDICATOR WEIGHT OF TOTAL										INDICATOR WEIGHT OF TOTAL												
	DRILLING STRING									DRILLING STRING										DRILLING STRING												
BIT RECORD	DATA									DATA										DATA												
	No.									No.										No.												
	Type									Type										Type												
	Time On Bottom At									Time On Bottom At										Time On Bottom At												
SURVEYS	Kind									Kind										Kind												
	at									at										at												
	Ft.									Ft.										Ft.												
	Deg. off									Deg. off										Deg. off												
SLUSH PUMP RECORD	On Line									On Line										On Line												
	Circulating									Circulating										Circulating												
	Pump Press									Pump Press										Pump Press												
	Length of Pump Stroke									Length of Pump Stroke										Length of Pump Stroke												
MUD RECORD	Time									Time										Time												
	Visc.									Visc.										Visc.												
	Wt.									Wt.										Wt.												
	W L									W L										W L												
CORING	ADDITIVES — POUNDS									ADDITIVES — POUNDS										ADDITIVES — POUNDS												
	From									From										From												
	To									To										To												
	Ft. Cored									Ft. Cored										Ft. Cored												
DETAIL OF OPERATIONS AND REMARKS	Core No.									Core No.										Core No.												
	Type Bbl.									Type Bbl.										Type Bbl.												
	From									From										From												
	To									To										To												
DETAIL OF OPERATIONS AND REMARKS	Hrs.									Hrs.										Hrs.												
	From									From										From												
	To									To										To												
	Hrs.									Hrs.										Hrs.												
DETAIL OF OPERATIONS AND REMARKS	Driller									Driller										Driller												
	From									From										From												
	To									To										To												
	Hrs.									Hrs.										Hrs.												

HEADING UP & DRG. OUT: TOTCO: CONDITIONING MUD: CASING: LOGGING: RIG MAINTENANCE: REAMING CLEANING: MNFR. DRILLING LINE IN USE REEL SERIAL No.

DRILLING: FISHING: TRIPPING: W.O.C. W.O. ORDERS: MISCELLANEOUS: WORKING PIPE: MNFR. OF KELLY HOSE IN USE HOSE SERIAL No.

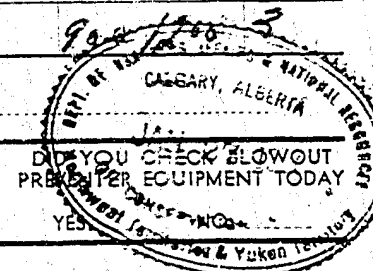
REAMING: CIRCULATING: CORING: D.S. TESTING: RIG REPAIRS: CONDITION HOLE: LOST CIRC.: YES

Total Contract Timehrs.

Total Company Timehrs.

Toolpusher

Approved by



IMPERIAL OIL LIMITED

DAILY DRILLING REPORT

Form 34402 (250 bks.-3-59)

 1111 675
 WINDFLOWER LSD. SEC. TWN. RGE. W. Contractor WARDIAN Type Rig 2500 FAIRLINE Month JAN 20 Day 20 1966

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	Hole Size	Formation				DEPTH		From	To	Hole Made	Hole Size	Formation				DEPTH		From	To	Hole Made	Hole Size	Formation															
					9										9"																										
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.														
											3 1/2			2	36	2-56-14																									
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 Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE		No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE		No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE														
		Bit Serial No.				Table R.P.M.						Bit Serial No.				Table R.P.M.						Bit Serial No.				Table R.P.M.						Bit Serial No.				Table R.P.M.					
		Jet or Conventional -				Nozzle Size						Jet or Conventional -				Nozzle Size						Jet or Conventional -				Nozzle Size						Jet or Conventional -				Nozzle Size					
SURVEYS		Kind	at		Fr.		Deg. off		Kind		at		Fr.		Deg. off		Kind		at		Fr.		Deg. off		Kind		at		Fr.		Deg. off										
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	HOURS		Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size	HOURS		Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size										
No. 1		On Line	Circulating					On Line		Circulating				On Line		Circulating				On Line		Circulating				On Line		Circulating													
No. 2				1.00																																					
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		Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS													
							600 FBR SEAL							WATER							WATER							WATER													
							35 GELL							GELL 2500 BLS							GELL 2500 BLS							GELL 2500 BLS													
							100 BARRELS							GELL FLAKE 100 BLS							GELL FLAKE 100 BLS							GELL FLAKE 100 BLS													
							WATER																																		
							50 CAUSTIC																																		
CORING		From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.	From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.	From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.	From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.	From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.										
DETAIL OF OPERATIONS AND REMARKS		From		To	Hrs.	From		To	Hrs.	From		To	Hrs.	From		To	Hrs.	From		To	Hrs.	From		To	Hrs.	From		To	Hrs.												
		12		8		8		15	1/4	8		15	1/4	8		15	1/4	8		15	1/4	8		15	1/4	8		15	1/4												
		MIXED MUD				RIG SERV.				SERVILE FIL.				SERVILE FIL.				SERVILE FIL.				SERVILE FIL.				SERVILE FIL.															
		WORKING CASING				MIX MUD. FOR LOST CIR.				CIR C SPUDING TWO				CIR C SPUDING TWO				CIR C SPUDING TWO				CIR C SPUDING TWO				CIR C SPUDING TWO															
		TRY TO GET LOOSE				PUMP MUD IN HOLE NO RETURN				IN LINE TO 85'				IN LINE TO 85'				IN LINE TO 85'				IN LINE TO 85'				IN LINE TO 85'															
		+ MUD RETURNS				PICK UP D.C. TO SPUD ON				TRYING TO PULL				TRYING TO PULL				TRYING TO PULL				TRYING TO PULL				TRYING TO PULL															
						CASING TO BREAK LOOSE & TIGHT				CASING				CASING				CASING				CASING				CASING															
						SPOT. 1030 11 1/2																																			
						STD. BACK D.C. MAKE UP TWO INCH																																			
						LIN TO CIR DOWN BESIDE CASING																																			
						CIR SPUD TWO INCH LINE DOWN																																			
						BY CASING, CIR 20 FT.																																			
		Driller: A. R. F. ALDERS				Driller: W. J. ALDERS				Driller: F. B. ALDERS				Driller: F. B. ALDERS				Driller: F. B. ALDERS				Driller: F. B. ALDERS				Driller: F. B. ALDERS															

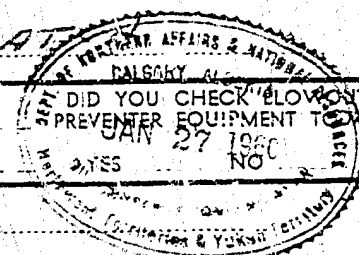
 CLASSES OF TIME BREAKDOWN
 HEADING UP & DRG. OUT: TOTCO: CONDITIONING MUD: CASING: LOGGING: RIG MAINTENANCE: REAMING CLEANING: MNFR. DRILLING LINE IN USE REEL SERIAL No.
 DRILLING: FISHING: TRIPPING: W.O.C. W O ORDERS: MISCELLANEOUS: WORKING PIPE: MNFR. OF KELLY HOSE IN USE HOSE SERIAL No.
 REAMING: CIRCULATING: CORING: D.S. TESTING: RIG REPAIRS: CONDITION HOLE: LOST CIRC.:

Total Contract Timehrs.

Total Company Timehrs.

Toolpusher: J. Smith

Approved by: J. Smith



IMP

WINDFLOWER

LSD

SEC

TWN.

RGE

W..

Contractor

WARDEN

Type Rig 25-55

... Month May

Day.....19.....1960

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	Hole Size	Formation				DEPTH		From	To	Hole Made	Hole Size	Formation				DEPTH		From	To	Hole Made	Hole Size	Formation							
		106	141	30'	9	ROCK						141	141	0	9"																		
DRILLING STRING		Size-D.P.	Stands	Single	Kelly	Drill. Collar Ft.	Core Bbl. Ft.			DRILLING STRING		Size-D.P.	Stands	Single	Kelly	Drill. Collar Ft.	Core Bbl. Ft.			DRILLING STRING		Size-D.P.	Stands	Single	Kelly	Drill. Collar Ft.	Core Bbl. Ft.						
		3 1/2		9		56 1/4	506 420					3 1/2	2	2	22 1/2	2-56 1/4																	
BIT RECORD		No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE		No.		Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE		No.		Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE				
		1	OSC	-	3:00	10	124	3	124																								
		2	OSC	5:15	6:00	1 1/4	141	3	17																								
SURVEYS		Kind		at		Ft.		Deg. off		Kind		at		Ft.		Deg. off		Kind		at		Ft.		Deg. off		Kind		at		Ft.		Deg. off	
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									
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								
																5 SACKS 50 LBS									LEN 41 BA FIBER SEAL 60 BA TEL FLAKE 5' B								
CORING		From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.		From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.		From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.												
DETAIL OF OPERATIONS AND REMARKS				From	To	Hrs.			RIG SERV		From	To	Hrs.			SERVICE RIG.		From	To	Hrs.													
				12	1	1			MIX MUD. CIR.		8	9:30	1 1/2			FINISH RUN P.P.P.		400	400	1 1/2													
				1	3	2			REANI. CIR.		9:30	10	1/2			PICK UP LANDING JOINT		410	530	1 1/4													
				3	4:30	1 1/4			WORK ON PUMP MOTOR		10	11	1			TRY TO GET LOST PER STUCK		530	630	1													
				4:30	5:15	3/4			PULL OUT WORK TIGHT SPOTS		11	12	1			MIX MUD W/P PUMP		630	730	1													
				5:15	6:30	1 1/4			RUN IN TO CLEAN HOLE FOR							TRY TO GET CIR.		730	800	1/2													
				6:30	7	1/2			CASING, REANI 30 FT. TO BOTTOM		12	1:30	1 1/2			MIX MUD		800	840	3/4													
				7					CIR HOLE OF CASING		1:30	2:00	1/2			TRY TO GET CIR.		840	910	1/2													
									PULL OUT TO RUN CASING		2:00	3:00	1			MIX MUD W/P PUMP		910	11:00	1 3/4													
									RUNNING CASING 7"		3:00	4:00				PUMP IN HOLE TRY PULL		11:00	12:00	1													
									Driller... A. E. REYNOLDS							Driller... R. BEAT																	

CLASSES OF TIME BREAKDOWN	
HEADING UP & DRLG. OUT:	TOTCO: CONDITIONING
DRILLING:	FISHING: TRIPPING:
REAMING:	CIRCULATING: CORING:

CASING:	LOGGING:
W.O.C.	W O ORDERS:
D.S. TESTING:	RIG REPAIRS:

RIG MAINTENANCE:
MISCELLANEOUS:
CONDITION HOLE:

REAMING CLEANING:
WORKING PIPE:
LOST CIRC.:

MNFR. DRILLING LINE IN USE
MNFR. OF KELLY HOSE IN USE

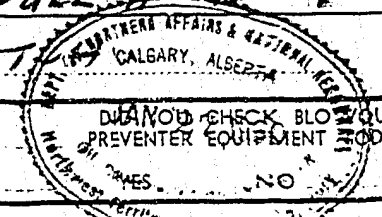
...PEEL SERIAL No.
...HOSE SERIAL No.

Total Contract Timehrs.

Total Company Timehrs.

Toolpusher

Approved by _____



Imperial
Form 34402 (250 bks.-3-59)

Windflower G77 LSD

SEC. _____ TWN. _____ RGE. _____ W _____

Contractor 11 Gordon St. #2 Type Rig 2500

Month Jan Day 18 19 60

	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	Hole Size	Formation		From	To	Hole Made	Hole Size	Formation		From	To	Hole Made	Hole Size	Formation							
							36	60	29	9"	Gravel		60	110	40	9"	L-RAVEN							
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.						
													3 1/2		1	36'	56.14							
	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		COLLAR					DRILLING STRING		COLLAR					DRILLING STRING					
	DATA						DATA							DATA										
BIT RECORD	No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE		No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE							
								Drilled	Reamed								Drilled	Reamed						
	1	OSC3						36										8	10.000					
	Bit Serial No. 11018						Table R.P.M. 10						Bit Serial No. 11018						Table R.P.M. 180					
	Jet or Conventional -						Nozzle Size						Jet or Conventional -						Nozzle Size					
SURVEYS	Kind	at				Ft.	Kind				at				Ft.	Kind				at				Ft.
						Deg. off						Deg. off						Deg. off						Deg. off
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										
	No. 1														150	12	70	6 1/4						
	No. 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				
															400	200								
	150							194							600	200								
								200							800	190								
															1000	180								
CORING	From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.	From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.	From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.						
DETAIL OF OPERATIONS AND REMARKS	1-25X25 Pipe Burnt in Fire Well						1-25X25 Pipe Burnt in Fire Well						1-25X25 Pipe Burnt in Fire Well											
	Let Circulating Pump Motor Ready for Run						Let Circulating Pump Motor Ready for Run						Let Circulating Pump Motor Ready for Run											
	Ser Rig						Ser Rig						Ser Rig											
	Try to make Core Hole						Try to make Core Hole						Try to make Core Hole											
	Falling in Gravel						Falling in Gravel						Falling in Gravel											
	Core to Clean						Core to Clean						Core to Clean											
	Pump Press						Pump Press						Pump Press											
	Clean Gravel out of Pump						Clean Gravel out of Pump						Clean Gravel out of Pump											
	Clean Plugel Bit Screen						Clean Plugel Bit Screen						Clean Plugel Bit Screen											
	Core Run in Water						Core Run in Water						Core Run in Water											
Pump also Run Mud						Pump also Run Mud						Pump also Run Mud												
Driller..... R. B.						Driller..... R. B.						Driller..... R. B.												

CLASSES OF TIME BREAKDOWN									
HEADING UP & DRG. OUT:	TOTCO:	CONDITIONING MUD:	CASING:	LOGGING:	RIG MAINTENANCE:	REAMING CLEANING:	MNFR. DRILLING LINE IN USE	REEL SERIAL No.	
DRILLING:	FISHING:	TIPPING:	W.O.C.	W O ORDERS:	MISCELLANEOUS:	WORKING PIPE:			
REAMING:	CIRCULATING:	CORING:	D.S. TESTING:	RIG REPAIRS:	CONDITION HOLE:	LOST CIRC.:	MNFR. OF KELLY HOSE IN USE	HOSE SERIAL No.	

1. DID YOU CHECK SLOWDOWN
PREVENTER EQUIPMENT TO
YES NO

Total Contract Timehrs. Total Company Timehrs. Toolpusher [Signature] Approved by [Signature]

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT

Windsor 677 LSD. SEC. TWN. RGE. W. Contractor Warden Drilling Co. Type Rig 2500 ft. Month Jan 12 Day 12 1960

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	Hole Size	Formation	From		To	Hole Made	Hole Size	Formation	From		To	Hole Made	Hole 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.	Bbl. Ft.	Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.												
DRILL		Number	OD	ID	Length	INDICATOR WEIGHT	OTAL	DRILL	Number	OD	ID	Length	INDI	DRILL	Number	OD	ID	Length	INDICATOR WEIGHT	OTAL											
COLLAR		DRILLING STRING						DRILL COLLARS						DRILL COLLARS		DRILLING STRING						DRILL COLLARS									
DATA								DATA						DATA																	
BIT RECORD		No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE	No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE	No.	Type	Time On Bottom At	Time Pulled At	Total Hours Run	Depth Pulled	Weight On Bit M Pounds	FOOTAGE						
Bit Serial No.		Table R.P.M.						Bit Serial No.						Table R.P.M.						Bit Serial No. 11018						Table R.P.M. 150					
Jet or Conventional -		Nozzle Size						Jet or Conventional -						Nozzle Size						Jet or Conventional -						Nozzle Size					
SURVEYS		Kind	at	Ft.	Deg. off	Kind						at	Ft.	Deg. off	Kind						at	Ft.	Deg. off								
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												
No. 1		On Line	Circulating					On Line	Circulating					On Line	Circulating																
No. 2																															
MUD RECORD		Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS						Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS													
																		1800 gal 50# Aquatic													
																		300 gal													
CORING		From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.	From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.	From	To	Ft. Cored	Ft. Rec'd.	Core No.	Type Bbl.												
DETAIL OF OPERATIONS AND REMARKS		DIGGING RAT HOLE						DIGGING RAT HOLE						Digging Rat Hole						From 4:15 To 5:45 Hrs. 1 1/2											
		SAND & BOULDERS						LOOSE SAND						Pack Pump						5:45 6:00 1/4											
		CAVING						9 BOULDERS						Show up Pump						6:00 6:30 1/2											
														Spad. Drill						6:30 10:00 3 1/2											
														Ream To Clean Hole						10:00 11:00 1											
														Working on Pump						11:00 12:00 1											
Driller								Driller												Driller R.B.											

HEADING UP & DRLG. OUT: TOTCO: CONDITIONING MUD: CASING: LOGGING: RIG MAINTENANCE: REAMING CLEANING: MNFR. DRILLING LINE IN USE REEL SERIAL No.
DRILLING: FISHING: TRIPPING: W.O.C. W O ORDERS: MISCELLANEOUS: WORKING PIPE: MNFR. OF KELLY HOSE IN USE HOSE SERIAL No.
REAMING: CIRCULATING: CORING: D.S. TESTING: RIG REPAIRS: CONDITION HOLE: LOST CIRC:

Total Contract Timehrs.

Total Company Timehrs.

Toolpusher

Approved by

