

IOE SUN BLACKSTONE

E-72

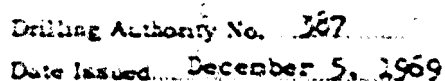
Drilling Authority No. 387
Date Issued 5 December 1969

WELL NAME ICE Sun Blackstone E-72
FIELD
LOCATION: Unit E Area: Section 72 Grid 61-20-122-00
Latitude 61-11-27 Longitude 122-24-54
U.W.L.R. 61.19083 - 122.24533
U.W.I. 3005726120122000

Rig Release Date
Status
Information Release Date

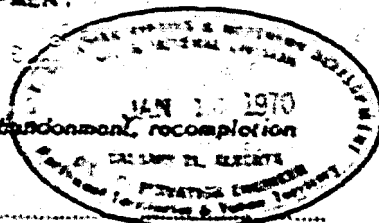
CHANGE OF NAME:

DATE RECEIVED	INDEX
5/12/69	Application for a Drilling Authority.
	Well Completion Data.
	Well History Report.
	Application to Amend a Drilling Authority.
	Application to change a Well Name.
13-1-70	Application to Abandon a Well or Suspend Drilling.
	Application to Alter Condition of a Well.
9-1-70	Well History Supplement.
	Well Completion Data.
	Work-over Report No.
	Application to Commingle Production before Measurement.
	Data for Back Pressure Test on Natural Gas Wells - Monograph 7 Method.
	Data for Back Pressure Test on Natural Gas Wells - Vitter's Method.
	M.P.R. - Oil - Calculations.
	New Oil Well Report.
	New Gas Well Report.
	Well Inspection Report.
	Rig Inspection Report.
	Battery Inspection Report.
	Equipment Report.
	Well Card.
	New Service Well Report.
	Monthly Water Flood Operations Report
	Monthly Water Receipts and Disposal of Fluids Report
	Logs. Large scale..... Small scale.....



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 ICE Sun Blackstone E-72 61° 20' 122° 00'

Permit No. 3168 Leave No. _____

Imperial Oil Limited Exploratory Licence No. 1265
(Permitter, Licensee, Lessee)

Imperial Oil Enterprises Exploratory Licence No. 1266
(Operator)

Location: Unit E Section 72 Grid 61° 20' 122° 00'

Latitude 61° 11' 27" North Longitude 122° 14' 54" West

From Established Reference Marker Seismic & Topographic Control

Universal Well Location Reference Lat. 61/19083° N Long. 122.24833° W

	DATE	DEPTH	Pool(s)
Spudded	Dec 11/69		Interval(s) open to production
Suspended			
Resumed Operations			
Finished Drilling	Dec 26/69	3590	
Dejected			Elevation: Gr. 993 K.B. 2007
Complete (gas/oil)			Rig No. 5
Abandoned	Dec 30/69	3590	Drilling Contractor S & T
Rig released	Dec 30/69	3590	Contractor's Business Licence No. 564

CASING RECORD

Casing Size (inches)	Grade	Weight	Amount	Set at -	Sacks of Cement and Additives
8 5/8	E40	24	345.29	352.64	200 + 2% CaCl ₂
2.					
3.					
4.					
5.					
6.					

GEOLOGICAL TOPS	ELEVATION		CORE RECORD					
	Depth	Sub-Sea	From	To	Rec.	From	To	Rec.
Devonian	18	+989	2350	2370	20			
Island River	90	+917	2370	2397	27			
Shale Unit	190	+847						
Dark Shale	227	-1228						
Arrowhead	2329	-1322						
Hume/Dolomite	2364	-2157						

Chincha/Ashyrite	5292	-2285	LOG RECORD			
Basel Red Beds	3462	-2455	No. No.	Type of Log	From	To
Precambrian	3472	-2465	1	BECSGRC	0	358
SED	3590		1	FDC	2270	359
			1	IES	359	359
			1	Porosity Lithology	2220	359
			1	Velocity Survey	0	358
			1	SNP	2270	359
			1	Continuous Dipmeter	359	358

LAND 52-90 (2) (2-69;

Unique Well Identifier: 300E726120122000

CEMENTING RECORD (Plugs, Squeezes, etc.)				PENETRATING RECORD (Dye, Jet)				SERVICING RECORD (Acidizing, Fracking, etc.)			
Date	From	To	Remarks	Date	From	To	Remarks	Date	From	To	Remarks
Dec 29	3590	3490	50 sacks								
Dec 29	2590	2290	100 sacks + 2x CaCl ₂ felt at 2275								
Dec 29	410	300	80 sacks + 2x CaCl ₂ felt at 270								
Cut off casing 3' below ground level 5 sacks in surface + welded on steel nipple plate. 5 sacks in mouse hole 5" sacks in rat hole.											

DRILL STEM TESTS

No.	Date	Formation	From	To	V.O. Mins.	I.S.I. Mins.	F.S.I. Mins.	I.S.I.B.H.P.	F.S.I.B.H.P.	I.F.R.H.P.	F.F.R.H.P.	I.R.P.	F.R.P.	REMARKS
1	Dec 28	Arrowhead	2335	2475	60	60	120	926	926	143	527	1160	1160	Recovered 180' mud cut water. 800' salt water (212,000 PPW NaCl) Field Pressures BUT 102°F

ANALYSIS				PRESENT STATUS OF WELL			
Lab. No.	Sample	From	To	Oil	Gas	Dry	Susp.
Cal-2-1483	Water	2335	2475				
Source DST # 1				(Interval)			
				(Interval)			

Company Imperial Oil Limited

Signed by *[Signature]*

Title Well Records Supervisor

Date January 9, 1970

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



File No. _____
Drilling Authority No. 387

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT

~~OIL AND GAS~~ DIVISION

Application to Abandon a Well and Suspend Drilling

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

Name and number of well: **IOE Sun Blackstone E-77-61-20-122-00**
Location: Unit **E** Section **72** Township **61° 20' 122° 00'**
Latitude **61° 41' 27"** Longitude **120° 13' 35"**
From Established Reference Marker **Scientific and Topographic Control**
Universal Well Location Reference **Lat: 61.69083°N Long: 122° 24.533°W**
Permit No. **3168** Lease No. _____

Imperial Oil Enterprises Ltd.

(Permittee, Licensee, Lessee)

Date of commencement of proposed program: **December 29, 1969**

OIL, GAS, AND WATER ENCOUNTERED
(Depths)

Oil at: **None Encountered**
Gas at: **None Encountered**
Water at: **2315' - 2475'**
Total Depth: **2910'** Date of last operations: **December 30, 1969**
Present condition of well: _____

Standing - Ready to Abandon

CASING RECORD

Casing Size O.D. Inches	Weight	Amount	Set At	Sacks of Cement and Additives	Amount Pulled
1. 8-5/8"	24.0	345.19	357.64	200 sacks + 24 CaCl₂	None
2.					
3.					
4.					
5.					

PROPOSED ABANDONMENT PROGRAM

No.	Depth	Geological Formation	Number of Sacks of Cement	Remarks
1	3520' - 3490'	Pre-Cambrian	50 sacks	Do not feel
2	2520' - 2290'	Arrowhead	100 sacks + 24 CaCl₂	Feel in 8 hours.
3	410' - 300'	Shale	80 sacks + 24 CaCl₂	Feel in 8 hours
4	Surface	5-sack cement plug plus same plate on 4" river to be erected.		

The following logs have been run: **IES, BHCS, SHP, FDC**

Other operations proposed: _____

SHP Drilling Company Ltd.

Operations to be carried out by **Imperial Oil Enter. Ltd.** Contractor Licence No. **554**

Address **11642 - 142 Street, Edmonton** Address **10025 Jasper Ave., Edmonton**

Responsible Agent in field **E. L. Kennedy**

Dated at **Edmonton** this **7** Day of **January** 19 **70**

Signed by **G. J. McPherson** Company **Imperial Oil Enterprises Ltd.**

Title **Development Manager** Operator's Exploratory Licence No. **1266**

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

(For RESOURCE MANAGEMENT DIVISION use only)

APPROVAL

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

Confirming oral approval given by Mr. G.E. Blum
on the 29th December 1969, including item No. 4

Dated **13th January** 19 **70**

B. H. Thomas
Oil Conservation Engineer

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

Drilling Authority No. 367

Project No.

File No.



DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
RESOURCE MANAGEMENT DIVISION

Application for a Drilling Authority

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

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

Name and number of well LWE San Blackstone E-72-61-20-122-00
Location: Unit E Section 72 Grid 61° 20' 122° 00'
Latitude 61° 11' 27" Longitude 122° 14' 54"
From Established Reference Marker Seismic and Topographic Control
Universal Well Location Reference Lat.: 61.19083°N Long: 122.24833°W
Elevation: Ground K.R. feet above sea level.
Well is expected to produce from Arrowhead formation at a depth
of about 1800 feet. Expected total final depth 3300
Area assigned to well.

(For Oil Conservation Engineer's use only)

Permit No. 3168 Lease No. - Acreage 61,596
Permitter, licensee, or lessee Imperial Oil Limited
Exploratory Licence No. 1265 (IOL)
Surface owned by Crown or Crown
Petroleum and natural-gas rights owned by Crown
(If different submit name and address of owner and occupant.)
We propose to use the following strings of casing, either cementing or landing them as indicated below:—

Casing Size O.D. (Inches)	Weight (Lb./Ft.)	Grade	New or Used	Estimated Depth	Status of Cement
1. <u>8-5/8"</u>	<u>248</u>	<u>J-55</u>	<u>New</u>	<u>0-350</u>	<u>To Surface</u>
2.					
3.					
4.					
5.					

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

Hydril - double gate Shaffer

Well will be drilled with Rotary Rig No. 5 by S&T Drilling Co. Ltd.

(Drilling Contractor or company)

Responsible agent of applicant:— Contractor's Business Licence No. 564
At well E. L. Kennedy At registered office G. M. McPherson
Address 11650 - 142 St. Edmonton Address 10025 - Jasper Ave. Edmonton
It is understood that if changes become necessary, notice of the change of plan will be submitted.
Dated at Edmonton this 4 day of December 19 69
Signed by G. M. McPherson Company Imperial Oil Enterprises Ltd.
Title Development Manager Operator's Licence No. 1266 (IOE)

(For Resource Management Division use only)

APPROVED

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

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

Dated 5th December 19 69

Oil Conservation Engineer

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

LAND 52-90-1 (3-67)

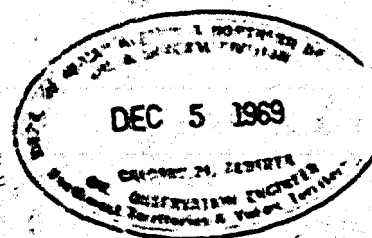
UNIQUE WELL IDENTIFIER - 306E226120122600

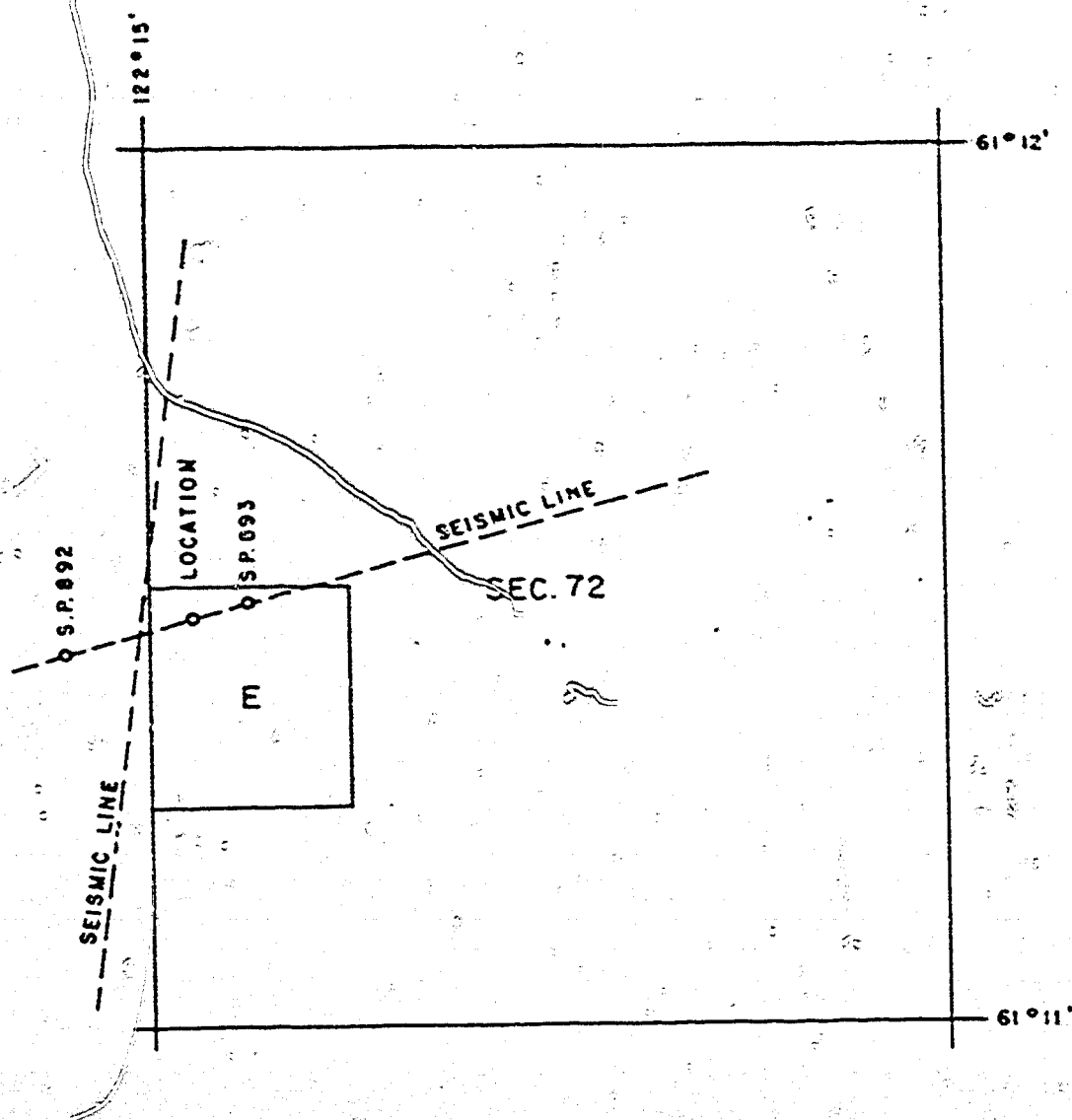
(over)

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

3. Protection Casing must be approved by the Oil Conservation Engineer
4. We draw your attention to Sections 95 and 96 of the Canada Oil and Gas Land Regulations.

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





IMPERIAL OIL ENTERPRISES LTD.
LOCATION SKETCH
ICE Sun Blackstone E-72-61-20-122-00 SCALE: 4" = 1 MI.
SHOT POINTS PLOTTED FROM GEOPHYSICAL SURVEY. LOCATION STAKED 400 FEET WEST OF S.P. 893 ON SEISMIC LINE. LATITUDE: 61°11' 27" N. SCALED FROM MAP. LONGITUDE: 122°14' 54" W. DECEMBER 4, 1969 W.G.W.

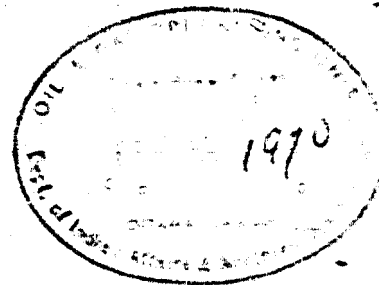
7-11-4-82.

IOE SUN BLACKSTONE E-72

61° 20' 122° 00'

7-11-4-82

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Company: Imperial Oil Limited

Signed By: *John A. Beth*

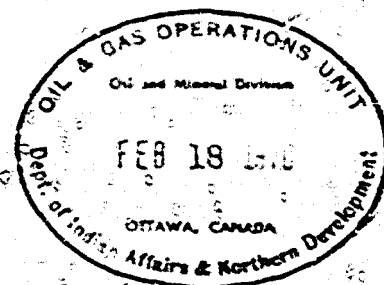
Title: Well Records Supervisor

Date: January 20, 1970

SUMMARY OF WELL DATA

SECTION I

- (a) Well Name and Number - IOE Sun Blackstone E-72-61-20-122-00
- (b) Permittee - Imperial Oil Limited
- (c) Operator - Imperial Oil Enterprises Ltd.
10025 Jasper Avenue
Edmonton, Alberta
- (d) Location - E-72.61-20-122-00
Latitude 61° 11' 27" North
Longitude 122° 14' 54" West
Universal Well Location Reference Lat: 61°19083"N
Long: 122.24833"W
Unique Well Identifier - 300E726120122000
- (e) Co-ordinates - N/A
- (f) Permit Number - 3168
- (g) Drilling Contractor - S & T #5
Rotary
- (h) Drilling Authority - #387 issued December 5, 1969
- (i) Classification - NFW
- (j) Elevations - K.B. 2007.1'
Gr. 993.3'
- (k) Spud - December 11, 1969
- (l) Completed Drilling - December 26, 1969
- (m) FTD 3590'
- (n) Status - Dry & Abandoned
- (o) Rig Release - December 30, 1969
- (p) Hole Size -
- | Size | From | To |
|--------|------|----------|
| 12-1/4 | 0 | 367 |
| 7-7/8 | 367 | 3590 FTD |
- (q) Casing - Ran 11 joints 343.96' 8-5/8" 24# H40 Mannesmann casing set at 357.64 with 200 sacks of cement plus 2% CaCl₂.



SECTION 11

GEOLOGICAL SUMMARY

(a) FORMATION TCPS

<u>Formation</u>	<u>Log</u>	<u>Sample</u>
Devonian	18	
Island River	90	90
Shale Unit	190	
Dark Shale	2235	2195
Arrowhead	2329	2329
Hume/Dolomite	3164	3164
Chinchaga/Anhydrite	3292	3292
Basal Red Beds	3462	
Precambrian	3472	

(b) Cored Intervals

<u>#</u>	<u>Interval</u>	<u>Recovery</u>	<u>Formation</u>
1	2350-2370	20/20	Arrowhead
2	2370-2397	27/27	Arrowhead

(c) CORE DESCRIPTION

Core #1 2350-2370 Rec 20/20

Limestone, white-light brown, tight, few isolated asphalt.
many corals, massive stroms, tubular stroms, framework
building, solitary rugosa, reef edge to fore reef.

10, 7, 8, 8, 9, 9, 7, 7, 8, 8, 8, 7, 7, 8, 8, 8, 9, 7,
8, 9 minutes per foot.

Core #2 2370-2397 Rec 27/27

Limestone, light brown, tight, micritic; few stroms, bitumen,
breccia.

15, 13, 10, 10, 13, 12, 12, 12, 11, 13, 12, 12, 13, 13, 11,
13, 14, 15, 15, 16, 15, 16, 18, 16, 20, 18, 21 minutes per foot.

(d) SAMPLE DESCRIPTION

0' - 20'	Gravel (Drift)
20' - 30'	Shale, medium grey, slightly calcareous
30' - 40'	Limestone, medium brown, fine - medium grained, micro skeletal, crinoids, trace pyrite.
40' - 90'	Shale, medium grey, slightly calcareous, limestone stringers, charophyta?
90' - 120'	Limestone, light brown, medium grain, intraclast-micr. 3% clear cement. Limestone, light brown, medium grained, variably microskeletal in bands. Numerous brachs and cup corals. Some gastros and intraclasts charophyta (?), trace pyrite.
190' - 380'	Shale, medium grey, slightly calcareous, a few interbeds of argillaceous limestone.
380' - 640'	Shale, medium grey, fissile, slightly micaceous, 3-5% siltstone.
640' - 1000'	Shale as above, 1 - 2% siltstone.
1000' - 1510'	Shale, medium grey, slightly micaceous, 1 - 2% siltstone.
1510' - 1620'	Shale, as above. Siltstone, and fine sandstone, very light grey, calcareous quartzose with biotite and trace feldspar, tight, trace glauconite.
1620' - 1850'	Shale, medium grey with 1 - 3% siltstone to fine sandstone.
1850' - 2000'	Shale, medium grey, very slightly calcareous.
2000' - 2195'	Very slightly calcareous, 1% light grey siltstone.
2195' - 2330'	Shale, dark grey-brown, becoming very dark grey brown and bituminous. Downwards 1% pyrite, trace dark brown to black bituminous sand.

- 2330' - 2350' Limestone, white and light brown, chalky, corals, stroms, crinoids.
- 2350' - 2400' Limestone, white and light brown, reefal edge or fore reef, stroms - tabular and massive. Corals - colonial (brain) finger and rugosa. Few brachs, essentially tight, no stains, much bit. Few very fractured and micro-faults, stylolites, light brown, mainly lime mud or sand. Extensively brecciated, much bitumen.
- 2400' - 2435' Limestone, light brown and white, fine-medium crystalline, chalky, skeletal, micritic, strom at 2400'. Corals, crinoids, pellets? Few small brachs, bitumen.
- 2435' - 2500' Limestone, light and medium brown and white. Microcrystalline, chalky, mainly tight skeletal sand, corals, crinoids, few stroms. Bitumen. Many corals at 2480' and 2490'.
- 2500' - 2610' Limestone, variably light and medium brown becoming darker downwards, fine to medium crystalline, micritic-skeletal, slightly chalky, crinoids, corals, some bitumen.
- 2610' - 2650' Limestone, light to medium brown and white, fine to medium crystalline, slightly chalky, skeletal micritic, many crinoids, a few corals.
- 2650 - 2800' Limestone, dark brown, crypto crystalline, dense, mainly micrite with occasional bands of small crinoids.
- 2800' - 2845' Limestone, dark brown, microcrystalline, micritic, chalky, a few small crinoids. slightly pyritic, small brachs, trace bitumen.
- 2845' - 2925' Limestone, brown microcrystalline, micritic, slightly pyritic, chalky, small brachs, trace bitumen, calcispheres?
- 2925' - 2960' Limestone, medium brown, medium crystalline, intra-clasts, micritic? chalky.
- 2960' - 2990' Limestone, light brown, microcrystalline, micritic, slightly chalky, intraclast- micr.?, chalky.
- 2990' - 3000' Limestone, light brown, microcrystalline, micritic, slightly pyritic, slightly chalky.
- 3000' - 3025' Limestone, light brown, microcrystalline, micritic, slightly pyritic, slightly chalky.
- 3025' - 3165' Limestone, light to very light brown, sometimes greyish, microcrystalline, chalky, slightly pyritic.

- 3165' - 3175' Dolomite, white, coarse crystalline (dogs tooth) porosity from drilling time. No HC stain
- 3175' - 3235' Dolomite, light brown and light grey, microcrystalline, occasionally very finely crystalline, pyritic, reconstr. micrite, few small brachs, trace coarse white dolomite in veinlets.
- 3235' - 3290' Dolomite, light brown and light grey as above. Intra-clasts 1% white dolomite (micritic - intraclasts)
- 3290' - 3405' Anhydrite, light to medium brown and light grey, variably calcareous, microcrystalline, occasionally crystallotopic in dolomite, interbedded with dolomite, light brown, micro to finely crystalline
- 3405' - 3445' Dolomite, medium to dark brown, micro to very fine crystalline, pinpoint and intercrystalline porosity estimated 5-8%, no stain. Interbedded anhydrite and dolomite as above.
- 3445' - 3460' Dolomite, light to medium brown, very fine crystalline, trace pinpoint porosity, trace pyrite. Interbedded anhydrite and dolomite as above.
- 3460' - 3470' Dolomite, red, argillaceous to sandy, grading quickly downwards to siltstone - sandstone, red dolomitic, angular.
- 3470' - 3510' Granit, dominantly red, K and Na-feldspar, quartz and mafics. Weathering evidenced by conversion of feldspar to clay.
- 3510' - 3590' Granite, more grey than red, feldspars unweathered. More mafic than above with magnetite and green epidote.
FTD

(c)

- 7 -

NOTE: All percentages are of the total rock cored (IN THE INTERVALS
INDICATED)
Paleontological Determinations

IOE BLACKSTONE E-72 61°20' - 122°00'

PALEONTOLOGY

CORE #1: 2350 - 2370' and CORE #2: 2370 - 2397'

Interval: 2350 - 2361'

02%	Crinoids
01%	Brachiopods
01%	Massive Corals
02%	Cup Corals
05%	Cylindrical Stromatoporoids
05%	Massive Stromatoporoids
05%	Nodular Stromatoporoids
15%	Tabular Stromatoporoids

Interval: 2361 - 2368'

02%	Crinoids
02%	Ramose Corals
02%	Cup Corals
05%	Cylindrical Corals
46%	Massive Stromatoporoids
05%	Nodular Stromatoporoids
10%	Tabular Stromatoporoids

Interval: 2368 - 2379'

02%	Crinoids
01%	Brachiopods
03%	Ramose Corals
02%	Cup Corals
64%	Massive Stromatoporoids

Interval: 2379 - 2386'

33%	Crinoids
02%	Brachiopods
04%	Cup Corals
03%	Nodular Stromatoporoids
42%	Massive Stromatoporoids

Interval: 2386 - 2397'

05%	Crinoids
01%	Brachiopods
04%	Cup Corals
10%	Cylindrical Stromatoporoids
25%	Massive Stromatoporoids
10%	Nodular Stromatoporoids

ENGINEERING SUMMARY

SECTION III

(*) Drill Stem Tests

DST #1 - 2335-2475 VO 60" SI 60/120"

Recovered 180' mud cut water and 800' salt water. (212,000 PPM NaCl).

HP 1160-1160 FP 143-527 SIP 926-926

BHT - 102°F.

(Pressures reported are field figures)



TEST DATA						TOOL SEQUENCE	
Formation	ARROWHEAD	Zinc Thickness					
Interval	2335 - 2475	2475 - 2590			P.O. SUB.	.50	
Type of Test	OPEN HOLE, STRADDLE, CONVENTIONAL.				D.P. SUB.	.50	
Time Started in Hole	0600	Mins	Time Ended	0850	MFE TOOL	9.10	
First Flow	5	Min	Initial Shut In	60	BYPASS TOOL	3.00	
Second Flow	60	Min	Second Shut In		JARS	6.95	
Third Flow		Min	Final Shut In	120	RECORDER	4.40	
Pulled loose Wt	1257	Lbs	Out of Hole	1500	SAFETY JOINT	1.75	
Wt Set on Packers	25,000	Lbs	Pulled Loose Wt	15,000	S.S. & PACKER	9.20	
Description of Blow During Test					T.C. & PACKER	5.25	
FAIR AIR BLOW DECREASING TO WEAK THROUGHOUT TEST.				TOTAL		40.65	
				STUB.		1.50	
				PERF.		31.00	
				RECORDER		4.40	
				RECORDED		4.40	
				SUB.		2.00	
				DRILL COLLARS		93.47	
				T.C. & STUB.		3.25	
				TOTAL INTERVAL		140.02	
				PACKER		3.50	
				PERF.		13.00	
				RECORDER		4.40	
				SUBS.		2.00	
				DRILL PIPE		1090.47	
				B.N. & PERF.		1.50	
				TOTAL BELOW INTV.		1114.87	
				TOTAL LENGTH		1295.54	
				Elevation		1007 KB. 993 GL.	
				Bottom Hole Choke Size		1/2"	
				Fluid Cushion Type		NIL - Amt.	
				MUD AND HOLE DATA			
				Mud Type		GYP W.L. 12.4	
				Filter Cake		2/32 Visc 98 Wt 9.5	
				Time Taken			
				Contractor		S & T DRLG. Rig No. 5	
				Drill Pipe Size		4 1/2 FH	
				Drill Collar Size		2 7/8 ID Length 272'	
				Main Hole Size		7 7/8"	
				Rat Hole Size			
				RESISTIVITY			
				CHLORIDE CONTENT			
Recovery Water				%	°F	ppm.	
Mud sample filtrate				%	°F	ppm.	
District	HIGH LEVEL	Ticket No.	D 02619	Date	DECEMBER 28, 1969	Test No.	1 J.T. No. 1
Company	IMPERIAL OIL ENTERPRISES LTD.			Address 10025 JASPER AVENUE-			
Well Name	10E SUN BLACKSTONE E-72			EDMONTON 15, ALBERTA			
Number	61°-20'-122°-00'			Field	WILDCAT Province ALBERTA		
Formation	ARROWHEAD			Co. Rep.	D. MURPHY		
and Interval	2335 - 2475 DST#1			Technician	L. STEINBACK		
Distribution of Reports							
7 - EDMONTON.							



0 02619

PRESSURE DATA

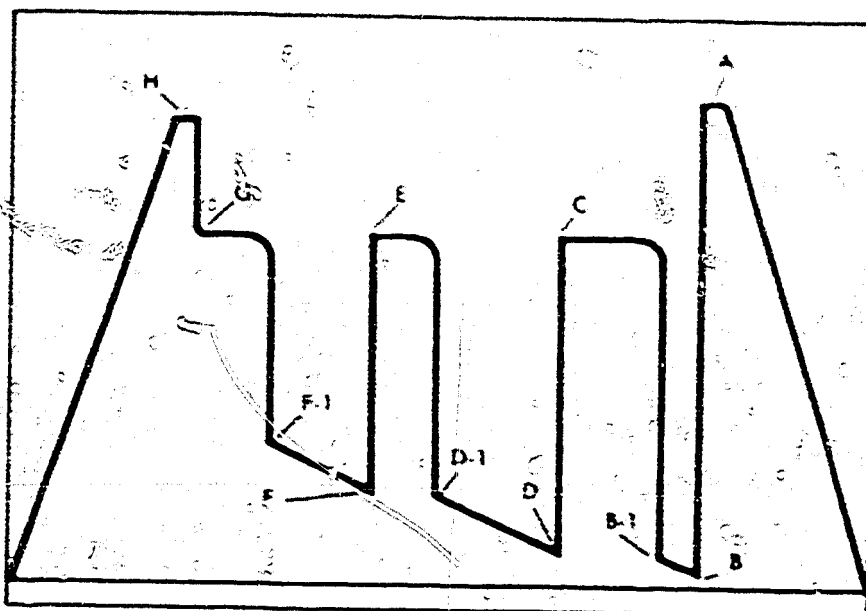
FLUID SAMPLE REPORT

TEST DATA					FLUID SAMPLE REPORT	
INSTRUMENT NO.	AK1-2086	AK1-2527	AK1-2115	AK1-2594	Sample No.	
CAPACITY gals	4400	4000	4600	4450	Type	5
INSTRUMENT DEPTH FT.	2315	2368	2372	2492	Depth	"
INSTRUMENT OPENING	INSIDE	OUTSIDE	OUTSIDE	OUTSIDE	Volume	2500 C.C.
PRESSURE GRADIENT psi/ft						
WELL TEMP °F	102					
INITIAL HYDROSTATIC	A 1133#	1155#	1158#	1213#	Sample Pressure	
FIRST FLOW	B 35#	53#	66#		50	psi at Surface
	B-1 138#	162#	162#	A-1 1392#	Viscosity	API #L °F
INITIAL SHUT-IN	C 888#	912#	913#		Gas-Oil Ratio	Cu. Ft. Bbl.
SECOND FLOW	D 133#	155#	156#			
	D-1 536#	563#	564#			
SECOND SHUT-IN	E			RAN BELOW	Recovery	
THIRD FLOW	F			STRADDLE.	Cu. Ft. Gas	
	F-1				cc Oil	
FINAL SHUT-IN	G 885#	909#	910#	A-2 1081#	cc Water	1800
FINAL HYDROSTATIC	H 1135#	1157#	1158#	1216#	cc Mud	
REMARKS:					Total Liquid cc	1800

PRESSURE INCREMENTS

[illegible]

GUIDE TO IDENTIFICATION OF DRILL STEM TEST PRESSURE CHARTS



- A. Initial Hyd. Mud
- B. First Flow
- C. Initial Shut-In
- D. Second Flow
- E. Second Shut-In
- F. Third Flow
- G. Final Shut-In
- H. Final Hyd. Mud

The following points are either fluctuating pressures or points indicating other packer settings (testing different zones).

- A-1, A-2, A-3, etc. Initial Hyd. Pressures
- B, B-1, Initial Flow Pressures
- C, Initial Shut-In
- D-1, D-2, D-3, etc. Second Flow Pressures
- E, Second Shut-In
- F, F-1, F-2, Third Flow Pressures
- G, Final Shut-In
- H, Final Hyd. Pressures
- Z — Special pressure points such as pumping pressures recorded for formation breakdown.

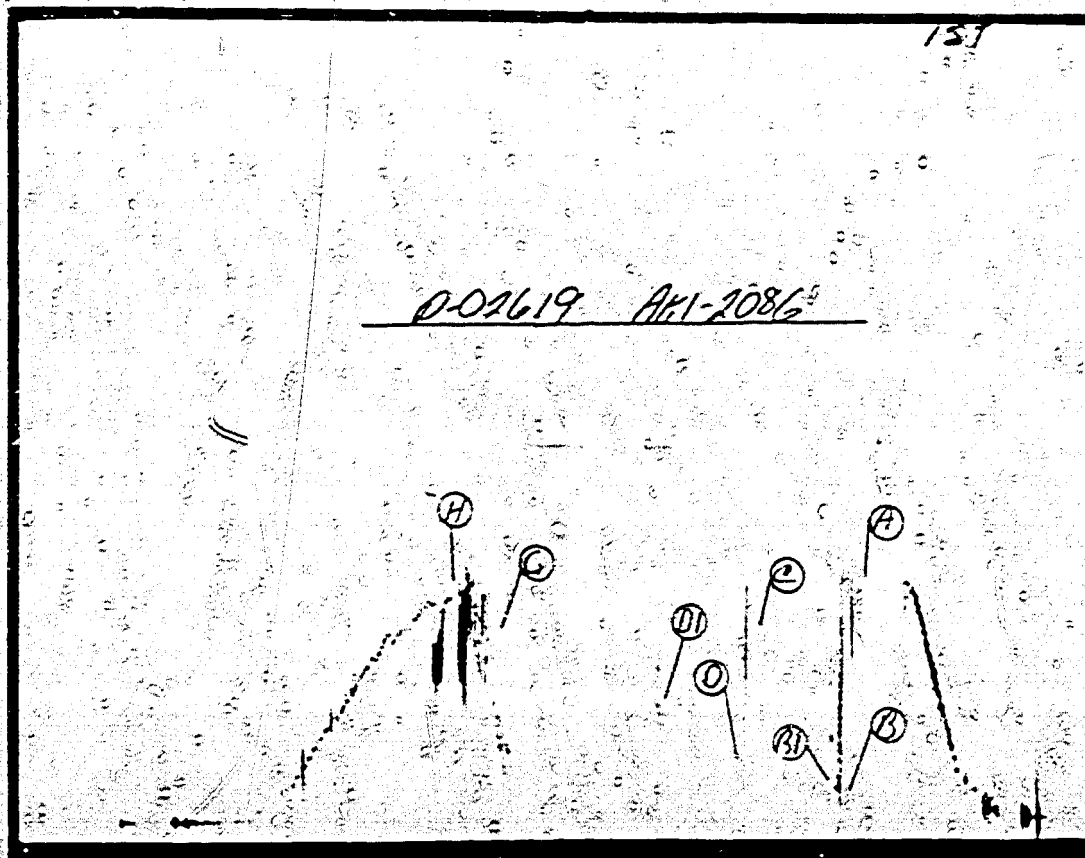


FIELD
REPORT NO.
D 02619

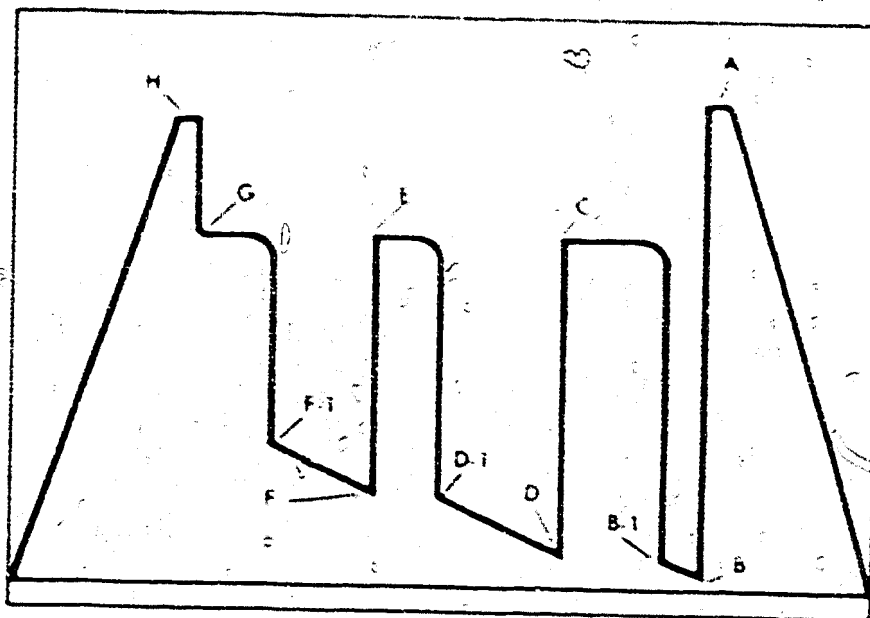
RECORDER NO.
AK1-2086

CAPACITY
4400

REPORTS
REQUESTED
7



GUIDE TO IDENTIFICATION OF DRILL STEM TEST PRESSURE CHARTS



- A. Initial Hyd Mud
- B. First Flow
- C. Initial Shut-In
- D. Second Flow
- E. Second Shut-In
- F. Third Flow
- G. Final Shut-In
- H. Final Hyd Mud

The following points are either fluctuating pressures or points indicating other packer settings (testing different zones).

- A-1, A-2, A-3, etc. Initial Hyd Pressures
- B, B-1, Initial Flow Pressures
- C, Initial Shut-In
- D-1, D-2, D-3, etc. Second Flow Pressures
- E, Second Shut-In
- F, F-1, F-2 Third Flow Pressures
- G, Final Shut-In
- H, Final Hyd Pressures
- Z - Special pressure points such as pumping pressures recorded for formation breakdown.



FIELD
REPORT NO

D 02619

RECORDER NO

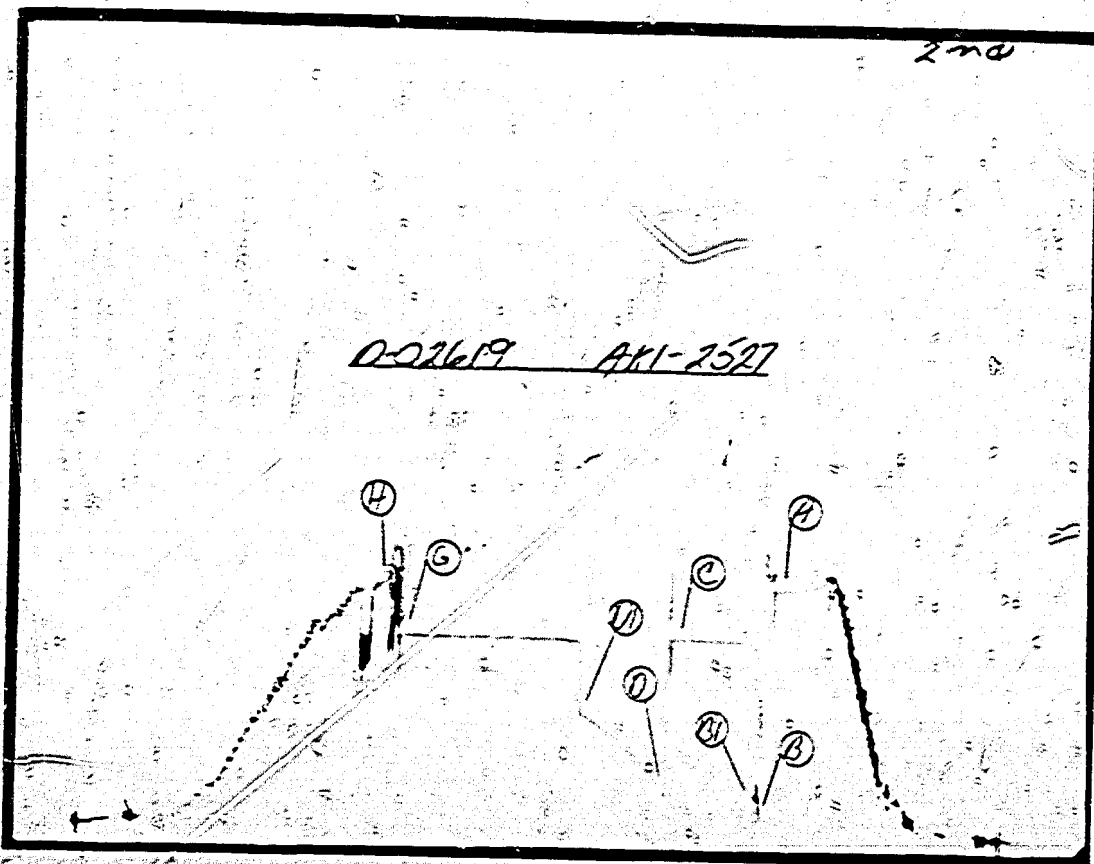
AKI-2527

CAPACITY

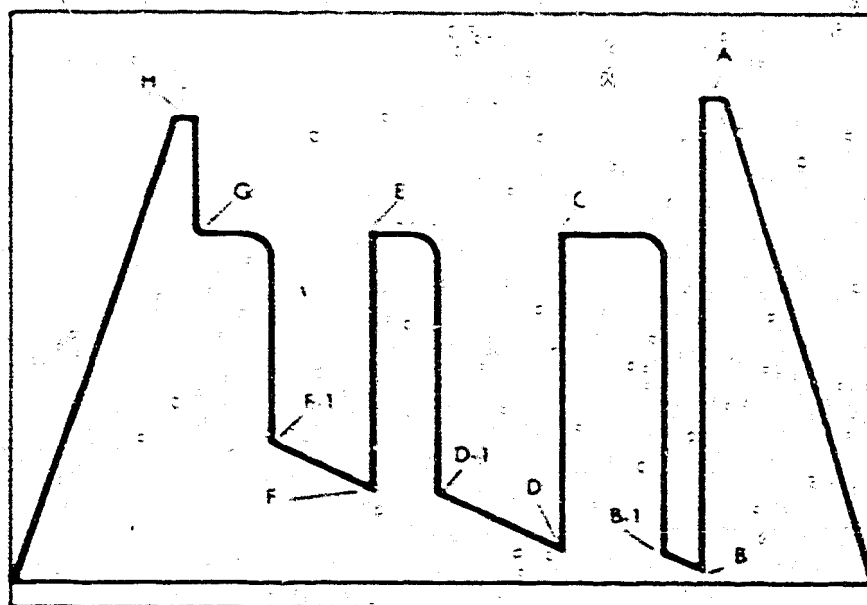
4000

REPORTS
REQUESTED

7



GUIDE TO IDENTIFICATION OF DRILL STEM TEST PRESSURE CHARTS



- A: Initial Hyd. Mud
- B: First Flow
- C: Initial Shut-In
- D: Second Flow
- E: Second Shut-In
- F: Third Flow
- G: Final Shut-In
- M: Final Hyd. Mud

The following points are either fluctuating pressures or points indicating other packer settings (testing different zones).

- A-1, A-2, A-3, etc. Initial Hyd. Pressures
- B, B-1, Initial Flow Pressures
- C, Initial Shut-In
- D-1, D-2, D-3, etc. Second Flow Pressures
- E, Second Shut-In
- F, F-1, F-2, Third Flow Pressures
- G, Final Shut-In
- M, Final Hyd. Pressures
- Z - Special pressure points such as pumping pressures recorded for formation breakdown.

FIELD
REPORT NO.

D 02619

REGARDER NO.

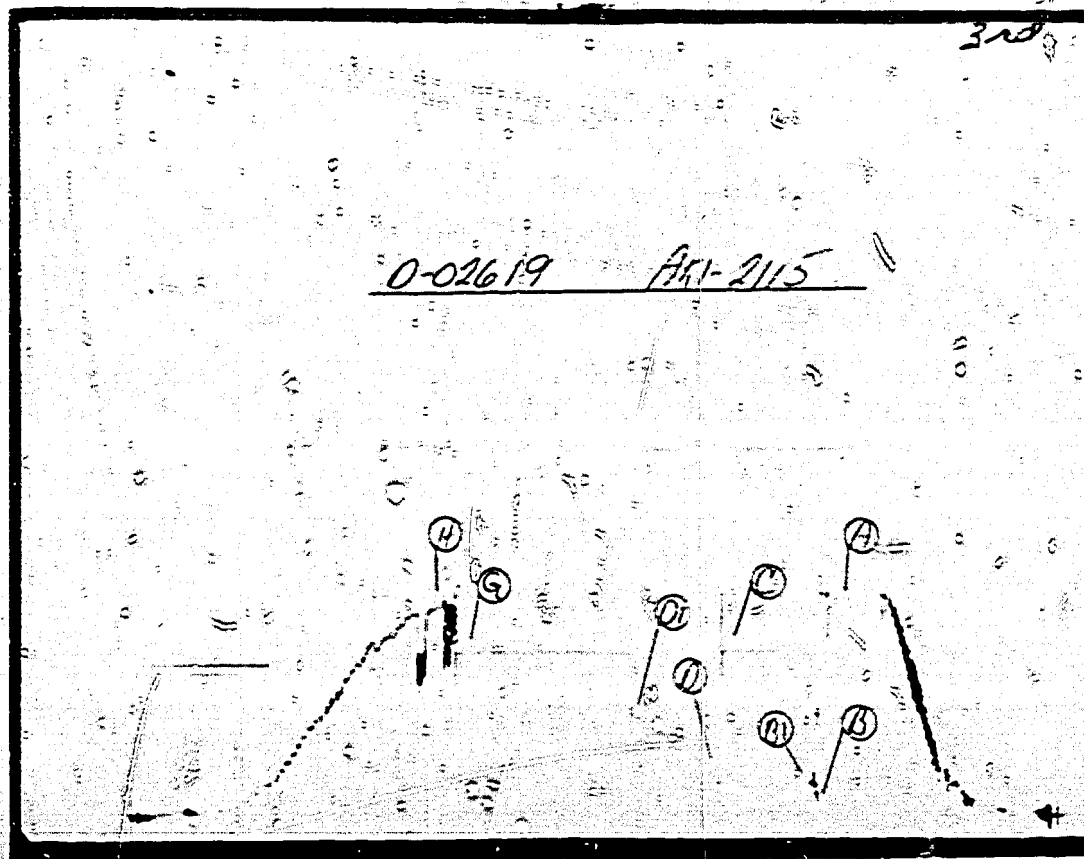
AK1-2115

CAPACITY

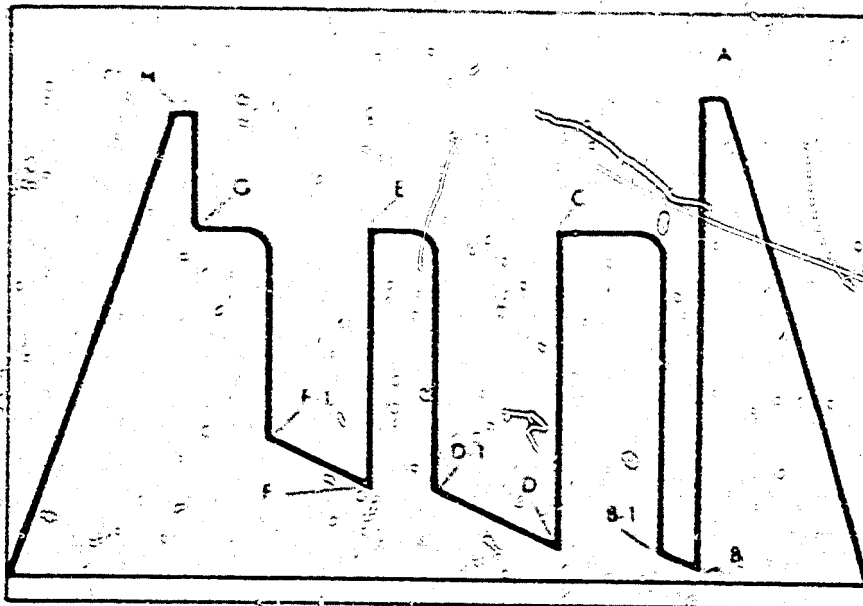
4600

REPORTS
REQUESTED

7



GUIDE TO IDENTIFICATION OF DRILL STEM TEST PRESSURE CHARTS



- A Initial Hyd. Mud
- B First Flow
- C Initial Shut-In
- D Second Flow
- E Second Shut-In
- F Third Flow
- G Final Shut-In
- H Final Hyd. Mud

The following points are either fluctuating pressures or points indicating other packer settings (testing different zones).

- A-1, A-2, A-3, etc. Initial Hyd. Pressures
- B-1, Initial Flow Pressures
- C Initial Shut-In
- D-1, D-2, D-3, etc. Second Flow Pressures
- E Second Shut-In
- F-1, F-2, Third Flow Pressures
- G Final Shut-In
- H Final Hyd. Pressures
- Z - Special pressure points such as pumping pressures recorded for formation breakdown.

JOHNSTON TESTERS

FIELD
REPORT NO

D 02619

RECORDER NO

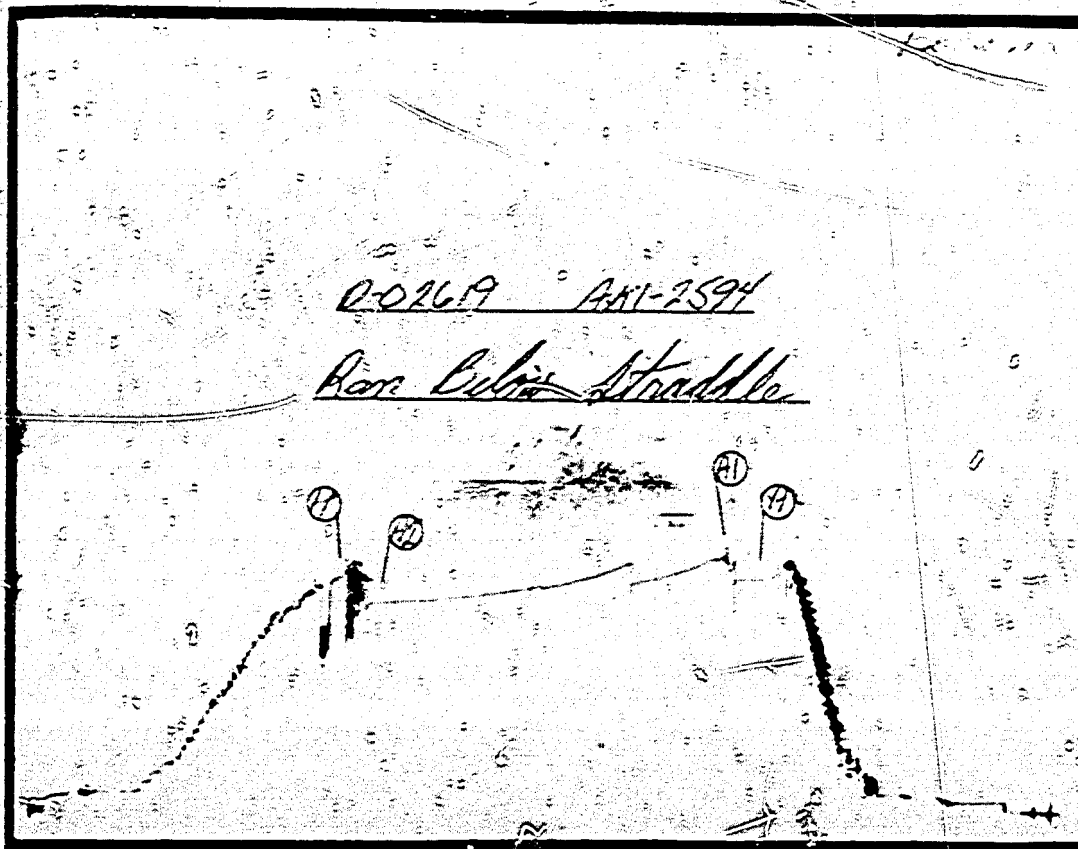
AK1-2594

CAPACITY

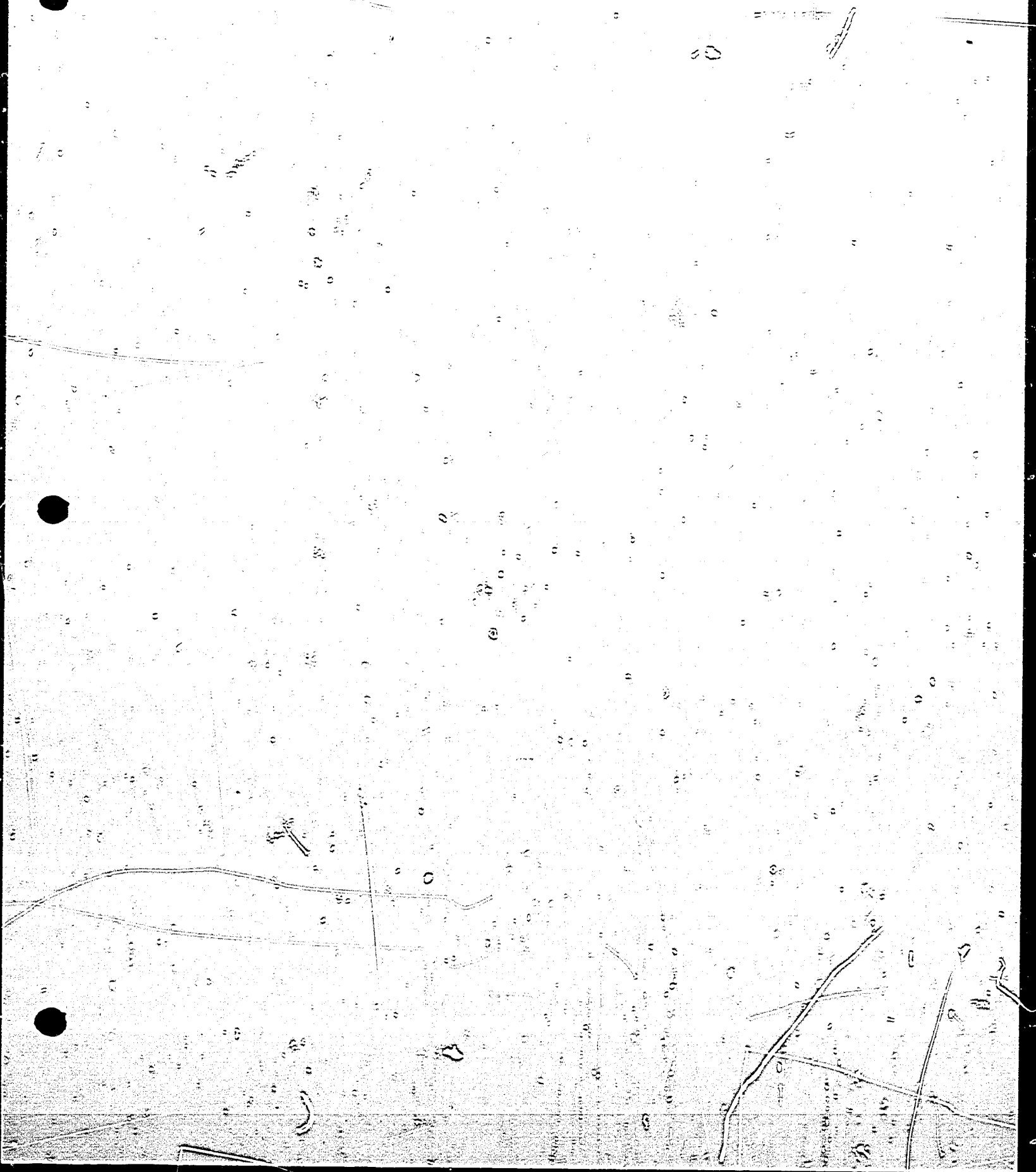
4-50

REPORTS
REQUESTED

7



(b) Casing Record



(c) Bit Record

#	Type	Size	Depth		Footage Drilled	On Bottom	Remarks
			In	Out			
1A		8-3/4	0	39	39	10-1/2	
2A	OSC-3	12-1/4	39	203	164	35	Reamed 39
3A	OSC-3	12-1/4	203	367	164	4-1/4	
1	XIG	7-7/8	367	1842	1475	30-1/4	
2	OSCIG	7-7/8	1842	2350	508	25-3/4	
1 Core	Diamond	7-13/16	2350	2370	20	3-1/4	Core #1
2 Core	Diamond	7-13/16	2370	2397	27	6-3/4	Core #2
3	X55R	7-7/8	2397	2804	407	30-1/2	
4	OSCIG	7-7/8	2804	2883	79	7-3/4	
5	X55R	7-7/8	2883	3590	707	69	FTD

(4) Mud Report

<u>Date</u>	<u>Gal</u>	<u>Caustic</u>	<u>Benex</u>	<u>Peltex</u>	<u>Soda Ash</u>
Dec. 12	2900	200			
Dec. 13	1400	150			
Dec. 14	3000	100			
Dec. 16	1000	50			
Dec. 17	4700		10		
Dec. 18	2100		8		
Dec. 19	500		2		
Dec. 20	1000		4		
Dec. 21	4400	200	4		
Dec. 22	6400	50		250	
Dec. 23	900	100		50	
Dec. 24	1300	100		100	
Dec. 25	1400	550		750	400
Dec. 26	1200	50		100	
TOTAL	32,200#	1550#	28#	1450#	400#

(c) Deviation Record

<u>Footage</u>	<u>Degrees Off</u>
110	1/4
172	1/4
264	3/4
367	3/4
1002	1
1189	1
1376	1
1590	2-1/4
1620	3
1685	3
1717	2-1/2
1780	2-3/4
1842	2-1/4
1873	2-1/4
1933	3
1994	2-1/4
2057	2
2118	2
2212	2
2305	2-1/4
2350	2-1/2
2429	2-1/2
2740	1-3/4
2883	2
3086	1-1/2
3425	2-1/2
3590	3

(f) Abandonment Plugs

<u>Number</u>	<u>Interval</u>	<u>Cement</u>	<u>Felt At</u>
1	3590-3490	50 sacks	
2	2520-2290	100 sacks + 27 CaCl ₂	2275
3	410-300	80 sacks	270
	Surface	5 sacks	

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

(g) Lost Circulation Zones - Nil

(h) Blowouts - Nil



LOCS

SECTION IV

<u>Date</u>	<u>Type</u>	<u>Interval</u>
Dec. 26/69	IES	359 - 3590
Dec. 26/69	SNP	2270 - 3590
Dec. 26/69	Por - Lfth	2220 - 3590
Dec. 27/69	BHCSGRC	0 - 3589
Dec. 27/69	FDC	2270 - 3590
Dec. 27/69	Velocity Survey	0 - 3589
Dec. 27/69	Continuous Dipmeter (Computed)	359 - 3588

ANALYSIS

SECTION V

(a) Core - Core not analyzed

(b) Water - DST #1

(c) Gas - Nil

(d) Oil - Nil



CORE LABORATORIES - CANADA LTD.
PETROLEUM RESERVOIR ENGINEERING
WATER ANALYSIS



File CAL-2-1483 Page 1 of 1

Company Imperial Oil Limited
Well IOE Sun Blackstone E-72 K.B. 1007 Grd. 993
Location 61 11' 27.00
122 14' 54.00 Field Camsell Bend Area Province N.W.T.
Formation Arrowhead Interval 2335' - 2475'
Sampled from DST #1 (Sample Chamber) by Johnston Testers
Date sampled Dec. 28/69 Date analysed Jan. 6/70 Analyst D.S.
Recovery: 180' Muddy Water, 800' Salt Water
Mud type _____ Water cushion _____

Resistivity 0.042 Ohm-meters @ 75 of

Specific gravity 1.1465 @ 60°F

pH 6.1 H₂S Absent

Refractive Index 1.371 @ 75°F

Total Solids:

Calculated 218.610 mg/liter

By evaporation @ 110°C - mg/liter

By evaporation @ 180°C - mg/liter

At ignition - mg/liter

MILLIGRAMS PER LITER

Na+K	Ca	Mg	Fe	Ba	Br	I	Cl	HCO ₃	SO ₄	CO ₃	OH
73,708	10,291	596	Pres.	Abs.	-	-	132,473	112	1,430	Nil	Nil

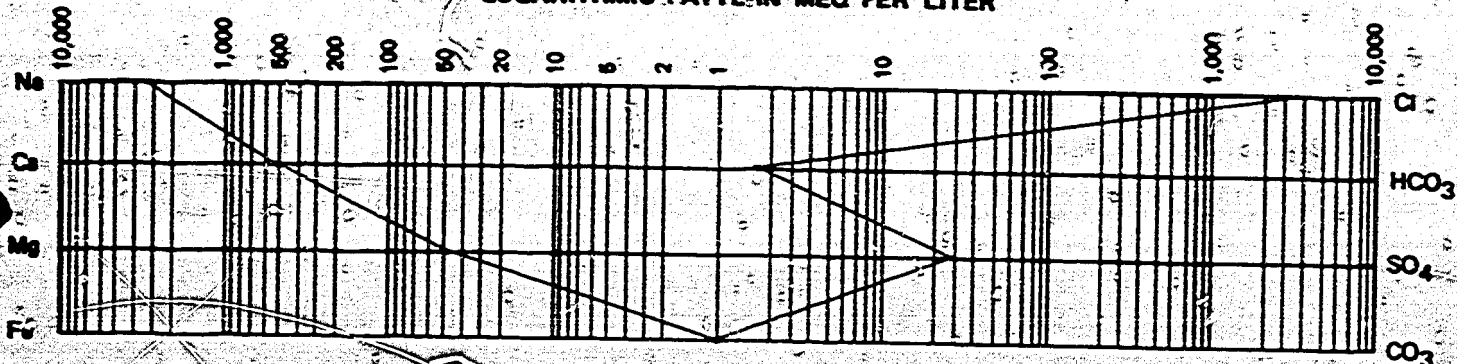
PER CENT CALCULATED SOLIDS

33.7	4.7	0.3	Pres.	Abs.	-	-	60.6	-	0.7	Nil	Nil
------	-----	-----	-------	------	---	---	------	---	-----	-----	-----

MEQ PER LITER

3204.7	513.5	49.0	Pres.	Abs.	-	-	3735.7	1.8	29.7	Nil	Nil
--------	-------	------	-------	------	---	---	--------	-----	------	-----	-----

LOGARITHMIC PATTERN MEQ PER LITER



COMPLETION SUMMARY

SECTION VI

(a) Tubing Record - Nil

(b) Perforation Record - Nil

(c) Cementation Record

<u>Date</u>	<u>#</u>	<u>Interval</u>	<u>Cement</u>	<u>Felt At</u>	<u>Zone</u>
Dec. 29	1	3590-3490	50 sacks		Precambrian
Dec. 29	2	2590-2290	100 sacks	2275	Arrowhead
Dec. 29	3	410-300	80 sacks	270	Shale
Dec. 30		Surface	5 sacks		

(d) Acidization and Fracturing Record - Nil

(e) Back Pressure and Production Tests - Nil

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT No. 19

WELL NAME IDE Blackstone E 72 Lsd. 61 Sec 26 Twn 22 Rge 00 W. Contractor S & T Kelly Month 12 Day 30 1969

1st Tour From: 12:00 Midnight To: 8:00 a.m.												2nd Tour From: 8:00 a.m. To: 4:00 p.m.												3rd Tour From: 4:00 p.m. To: 12:00 p.m.											
DEPTH		From	To	Hole Made	Bit Size	Formation						DEPTH		From	To	Hole Made	Bit Size	Formation						DEPTH		From	To	Hole Made	Bit Size	Formation					
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 Bit	Footage	WOB	RPM	Depth Pulled	Total Footage Drilled Reamed			No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage Drilled Reamed			No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage Drilled Reamed						
SURVEYS		Bit Serial No. Jet ☐ Conventional ☐										Bit Serial No. Jet ☐ Conventional ☐										Bit Serial No. Jet ☐ Conventional ☐													
SLUSH PUMP RECORD		Nozzle Size Bit Wear: T B G										Nozzle Size Bit Wear: T B G										Nozzle Size Bit Wear: T B G													
No. 1		Depth Deviation										Depth Deviation										Depth Deviation													
No. 2		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													
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								
		Top of Plug # 3										Cement Rat Hole Refuse Hole																							
		270 3' below ground level										10 gals cement																							
		Cut off 50' cement 5' sh										Weld Plate on 4' above																							
		10' old platform										Ground level																							
CORING		Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery					Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery					Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery								
		Py returned @ 10 AM ALL 30/69																																	
DETAIL OF OPERATIONS AND REMARKS		From To Hrs.										From To Hrs.										From To Hrs.													
		WOC 12 ⁰⁰ 6 ⁰⁰ 6										8 ⁰⁰ 10 ⁰⁰																							
		Fuel for Plug # 3 & 6 6 ⁰⁰ 6 ³⁰ 1/2																																	
		Lay down Pipe 6 ³⁰ 1/2																																	
		Lay down B.O.P.S.																																	
		Cut off 3' below ground level weld										Iron Out - 10 ⁰⁰ 4 ⁰⁰																							
		on Plate cement 3' sh										+ Load out 8 load of m.																							
		Cement refuse Hole																																	
		Rat Hole																																	
		Driller										Driller										Driller													

HEADING UP & DRLG. OUT:
DRILLING:
REAMING:CLASSES OF TIME BREAKDOWN
TOTCO:
FISHING:
CIRCULATING:
CONDITIONING MUD:
TRIPPING:
CORING:CASING:
W.O.C.
D.S. TESTING:LOGGING:
W.O. ORDERS:
RIG REPAIRS:RIG MAINTENANCE:
MISCELLANEOUS:
CONDITION HOLE:REAMING CLEANING:
WORKING PIPE:
LOST/CIRC:DID YOU CHECK BLOWOUT
PREVENTER EQUIPMENT TODAY?

YES NO

Total Contract Time hrs.

Total Company Time hrs.

Toolpusher

Approved by

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

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT No. 17

WELL NAME I.O.F. SUN BLACKSTONE E-72 Lsd 61° 20' N 122° 00' W Contractor S.T. Doyle Month 12 Day 28 1969

1st Tour From: 12:00 Midnight To: 8:00 a.m.																	2nd Tour From: 8:00 a.m. To: 4:00 p.m.																	3rd Tour From: 4:00 p.m. To: 12:00 p.m.																			
DEPTH		From	To	Hole Made	Bit Size	Formation											DEPTH		From	To	Hole Made	Bit Size	Formation											DEPTH		From	To	Hole Made	Bit Size	Formation													
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.															
	317593			36.91	373.16	508																																															
	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 12	6 1/4	2 3/4	373.16	DRILLING STRING DRILL COLLARS											COLLAR				DRILLING STRING DRILL COLLARS											COLLAR				DRILLING STRING DRILL COLLARS																		
DATA																	DATA																	DATA																			
BIT RECORD	No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage									No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage									No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage													
	RR 4	05.16		CIRC																																																	
	Bit Serial No.	2376											Jet	☐	Conventional	☒	Bit Serial No.												Jet	☐	Conventional	☐	Bit Serial No.												Jet	☐	Conventional	☐					
	Nozzle Size												Bit Wear: T		B		G		Nozzle Size												Bit Wear: T		B		G		Nozzle Size												Bit Wear: T		B		G
SURVEYS	Depth Deviation																	Depth Deviation																	Depth Deviation																		
	HOURS																	HOURS																	HOURS																		
	On Line	Circulating	Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size												On Line	Circulating	Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size												On Line	Circulating	Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size													
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															
	BOARD TALLY 3594.59																																																				
	STRAP OUT 3593.82																																																				
	DIFF 77																																																				
CORING	Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery											Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery											Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery															
DETAIL OF OPERATIONS AND REMARKS	From To Hrs.																	From To Hrs.																	From To Hrs.																		
	CIRC COND HOLE TO TEST 12:00 12:45 3/4																	FINISH IN W/D.S.T. #1 8:00 8:15 1/4																	BREAK & LAY DOWN TEST TOOLS 4:00 5:15 1 1/4																		
	TRIP OUT 10 STD & RUN 12:45																	Rig TO TEST 8:15 9:45 3/4																	LOAD OUT TEST TOOLS 5:15 6:15 1																		
	BACK IN BRIDGE @ 3300 1:45 1																	TESTING 9:00 1:00 4																	FINISH OUT W/D.S.T. #1 TAIL PIPE 6:15 7:00 3/4																		
CIRC 1:45 2:30 3/4																	BREAK DOWN TEST LINES 1:00																	LOAD OUT DRG. MUD 7:00 8:00 1																			
HOIST 2:30 4:15 1 3/4																	4 HOIST D.S.T. #1 4:00 3																	RUN IN W/D.S.T. & FLEX WT 8:01																			
RUN IN 12 STD TAIL PIPE 4:15 4:45 1/2																																		K LAY DOWN SAME 10:30 2 1/2																			
MAKE UP D.S.T. NO 1 4:45 7:15 2 1/2																																		RUN IN W/D RILL PIPE 10:30 11:30 1																			
RUN IN W/D.S.T. 7:15 8:00 3/4																	70 gal GAS TO JOHNSON TESTERS																	MEASURE & PICK UP SGLS																			
																																		TO REACH BOTTOM 11:30 12:00 1/2																			
Driller <u>D.A. Weber</u>																	Driller <u>Don Doyle</u>																	Driller <u>Don Doyle</u> <u>D.A. Weber</u>																			

HEADING UP & DRG. OUT:
DRILLING:
REAMING:

CLASSES OF TIME BREAKDOWN

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

YES NO

Total Contract Timehrs.

Total Company Timehrs.

Toolpusher

Approved by

Don Doyle

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT No. 16WELL NAME LOE SUN BLACKSTONE E-72 Lsd 61° Spc 20' N Ty 122° 00' W Contractor S&T Drilling Month 12 Day 27 1969

1st Tour From: 12:00 Midnight To: 8:00 a.m.																	2nd Tour From: 8:00 a.m. To: 4:00 p.m.																	3rd Tour From: 4:00 p.m. To: 12:00 p.m.																							
DEPTH		From	To	Hole Made	Bit Size	Formation											DEPTH		From	To	Hole Made	Bit Size	Formation											DEPTH		From	To	Hole Made	Bit Size	Formation																	
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 Bit	Footage	WOB	RPM	Depth Pulled	Total Footage											No.		Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage											No.		Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage										
SURVEYS		Bit Serial No. Jet ☐ Conventional ☐																Bit Serial No.		Jet ☐ Conventional ☐																Bit Serial No.		Jet ☐ Conventional ☐																			
PUSH PUMP RECORD		Nozzle Size Bit Wear: T _____ B _____ G _____																Nozzle Size		Bit Wear: T _____ B _____ G _____																Nozzle Size		Bit Wear: T _____ B _____ G _____																			
No. 1		Depth Deviation																Depth		Deviation																Depth		Deviation																			
No. 2		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																			
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		Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery											Core No.		Depth In	Footage	Hours Run	Depth Out	Recovery											Core No.		Depth In	Footage	Hours Run	Depth Out	Recovery																
DETAIL OF OPERATIONS AND REMARKS		From To Hrs.																From To Hrs.		From To Hrs.																																					
		Logging w/ SCHLUMBERGER 12 ⁰⁰ 8 ⁰⁰ 8																Logging w/ SCHLUMBERGER 8 ⁰⁰ 4 ⁰⁰ 8		CHECKED MOTOR SHUT OFFS OK Logging w/ SCHLUMBERGER 4 ⁴⁰ 8 ³⁰ 1 1/2 GET WATER & MUD CIRCULATING 8 ³⁰ AFTER SHUT DOWN FOR VELOCITY SURVEY 9 ⁰⁰ 1/2 RUN IN w/ BIT TO 9 ⁰⁰ CLEAN HOLE 10 ³⁰ 1 1/2 PICK UP 9 SINGLES & BREAK CIRC 10 ⁰⁰ 11 ¹⁵ 3/4 CIRC COMP HOLE TO TEST 11 ¹⁵ 12 ⁰⁰ 3/4																																					
Driller		<u>D. A. Walker</u>																Driller		<u>Don Doyle</u>																Driller		<u>Don Doyle</u> <u>D. A. Walker</u>																			

HEADING UP & DRLG. OUT:
DRILLING:
REAMING:

CLASSES OF TIME BREAKDOWN

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

YES _____ NO _____

Total Contract Time hrs.

Total Company Time hrs.

Toolpusher

Approved by Don Doyle

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT No. 14

WELL NAME I.O.F. SUN BLAKESTONE E-72 Lsd. 61° Sec 27' N Twn 122° 00' W Contractor S.T. Lutz Month 12 Day 25 1968

1st Tour From: 12:00 Midnight To: 8:00 a.m.										2nd Tour From: 8:00 a.m. To: 4:00 p.m.										3rd Tour From: 4:00 p.m. To: 12:00 p.m.										
From		To		Hole Made	Bit Size	Formation				From		To		Hole Made	Bit Size	Formation				From		To		Hole Made	Bit Size	Formation				
3290		3324		34	7 7/8					3324		3386		62	7 7/8					3386		3469		83	7 7/8					
Size-D.P.		Stands		Singles	Kelly	Drill. Collar Ft.		Core Bbl. Ft.		Size-D.P.		Stands		Singles	Kelly	Drill. Collar Ft.		Core Bbl. Ft.		Size-D.P.		Stands		Singles	Kelly	Drill. Collar Ft.		Core Bbl. Ft.		
4 1/2		2614.99			31.63	673.38		508		4 1/2		2614.99		60.63	93.00	673.38		508		4 1/2						673.38		508		
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		
22		6 1/4		2 7/8	673.38	DRILLING STRING		DRILL COLLARS		22		6 1/4		2 7/8	673.38	DRILLING STRING		DRILL COLLARS		22		6 1/4		2 7/8	673.38	DRILLING STRING		DRILL COLLARS		
DATA						108 M		58 M		DATA						108 M		58 M		DATA						110 M		58 M		
No.		Type		Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage Drilled	No.		Type		Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage Drilled	No.		Type		Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage Drilled	
5		X55R		48	441	45	55			5		X55R		53 1/4	503	45	55				5		X55R		60 1/2	586	45	55		
Bit Serial No. <u>15716</u> Jet ☒ Conventional ☐ Nozzle Size <u>2-14</u> <u>1-13</u> Bit Wear: T <u> </u> B <u> </u> G <u> </u>										Bit Serial No. <u>75716</u> Jet ☒ Conventional ☐ Nozzle Size <u>2-14</u> <u>1-13</u> Bit Wear: T <u> </u> B <u> </u> G <u> </u>										Bit Serial No. <u>15716</u> Jet ☒ Conventional ☐ Nozzle Size <u>2-14</u> <u>1-13</u> Bit Wear: T <u> </u> B <u> </u> G <u> </u>										
Depth <u> </u> Deviation <u> </u>										Depth <u> </u> Deviation <u> </u>										Depth <u>3425</u> Deviation <u>2 1/2</u>										
HOURS On Line <u> </u> Circulating <u> </u>										HOURS On Line <u> </u> Circulating <u> </u>										HOURS On Line <u> </u> Circulating <u> </u>										
Pump Press <u>1000</u> Length of Pump Stroke <u>15</u> Strokes Per Min. <u>54</u> Liner Size <u>5 1/2</u>										Pump Press <u>1050</u> Length of Pump Stroke <u>15</u> Strokes Per Min. <u>50</u> Liner Size <u>5 1/2</u>										Pump Press <u>1050</u> Length of Pump Stroke <u>15</u> Strokes Per Min. <u>50</u> Liner Size <u>5 1/2</u>										
Time <u>1:00</u> Visc. <u>115</u> Wt. <u>9.7</u> W L <u>7.2</u> pH <u>11.0</u> ADDITIVES — POUNDS <u>CAUSTIC</u> <u>400</u>										Time <u>12:00</u> Visc. <u>102</u> Wt. <u>9.8</u> W L <u>8.5</u> pH <u>11.0</u> ADDITIVES — POUNDS <u>CAUSTIC</u> <u>450</u>										Time <u>7:15</u> Visc. <u>89</u> Wt. <u>9.4</u> W L <u>12.0</u> pH <u>11.5</u> ADDITIVES — POUNDS <u>CAUSTIC</u> <u>1000</u>										
Time <u>1:00</u> Visc. <u>115</u> Wt. <u>9.7</u> W L <u>7.2</u> pH <u>11.0</u> ADDITIVES — POUNDS <u>CAUSTIC</u> <u>400</u>										Time <u>2:00</u> Visc. <u>100</u> Wt. <u>9.3</u> W L <u>8.5</u> pH <u>11.0</u> ADDITIVES — POUNDS <u>PELTEX</u> <u>550</u>										Time <u>8:30</u> Visc. <u>105</u> Wt. <u>9.4</u> W L <u>12.2</u> pH <u>11.5</u> ADDITIVES — POUNDS <u>PELTEX</u> <u>550</u>										
Time <u>7:00</u> Visc. <u>115</u> Wt. <u>9.4</u> W L <u>11.0</u> pH <u>11.0</u> ADDITIVES — POUNDS <u>SODA ASH</u> <u>400</u>										Time <u>3:30</u> Visc. <u>98</u> Wt. <u>9.13</u> W L <u>8.5</u> pH <u>11.0</u> ADDITIVES — POUNDS <u>WATER</u> <u> </u>										Time <u>11:00</u> Visc. <u>105</u> Wt. <u>9.4</u> W L <u>12.2</u> pH <u>11.5</u> ADDITIVES — POUNDS <u>WATER</u> <u> </u>										
Core No. <u> </u> Depth In <u> </u> Footage <u> </u> Hours Run <u> </u> Depth Out <u> </u> Recovery <u> </u>										Core No. <u> </u> Depth In <u> </u> Footage <u> </u> Hours Run <u> </u> Depth Out <u> </u> Recovery <u> </u>										Core No. <u> </u> Depth In <u> </u> Footage <u> </u> Hours Run <u> </u> Depth Out <u> </u> Recovery <u> </u>										
From <u> </u> To <u> </u> Hrs. <u> </u>										From <u> </u> To <u> </u> Hrs. <u> </u>										From <u> </u> To <u> </u> Hrs. <u> </u>										
RIG SERV <u>12:00</u> <u>12:15</u> <u>1/4</u>										RIG SERV <u>8:00</u> <u>8:45</u> <u>3/4</u>										RIG SERV <u>4:00</u> <u>4:15</u> <u>1/4</u>										
DREG PENETRATED ANHYDRITE <u>12:15</u>										RIG SERV V.B.O.P. & KELLY COCK <u>8:45</u> <u>9:00</u> <u>1/4</u>										DALG <u>4:15</u> <u>7:30</u> <u>3 1/2</u>										
MUD CLOARDED <u>145</u> <u>1 1/2</u>										RIG SERV COND. MUD <u>9:00</u> <u>11:30</u> <u>2 1/2</u>										SURVEY @ 3425' <u>7:30</u> <u>8:00</u> <u>1/2</u>										
CIRC COND MUD <u>145</u> <u>115</u> <u>2 1/2</u>										DREG <u>11:30</u> <u>4:00</u> <u>4 1/2</u>										DREG <u>8:00</u> <u>12:00</u> <u>4</u>										
DREG <u>4:15</u> <u>8:00</u> <u>3 1/4</u>																														
Driller <u>D. A. Whipple</u>										Driller <u>Don Doyle</u>										Driller <u>Don Doyle</u> <u>D. A. Whipple</u>										

DID YOU CHECK BLOWOUT PREVENTER EQUIPMENT TODAY

YES NO HEADING UP & DRLG. OUT:
DRILLING:
REAMING:CLASSES OF TIME BREAKDOWN
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:Total Contract Time hrs.Total Company Time hrs.Toolpusher Approved by

	1st Tour From: 12:00 Midnight To: 8:00 a.m.						2nd Tour From: 8:00 a.m. To: 4:00 p.m.						3rd Tour From: 4:00 p.m. To: 12:00 p.m.																			
DEPTH	From		To		Hole Made	Bit Size	Formation		From		To		Hole Made	Bit Size	Formation		From		To		Hole Made	Bit Size	Formation									
	3063		3130		67	7 7/8			3130		3208		78	7 7/8			3208		3290		82	7 7/8										
DRILLING STRING	Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.		Core Bbl. Ft.		Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.		Core Bbl. Ft.		Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.		Core Bbl. Ft.									
	4 1/2	2428.84		23.78	673.38		4.00		4 1/2	2428.84	60.53	41.46	673.38				4 1/2	2520.58	12.79	29.25	673.38		5.00									
	DRILL	Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL			DRILL	Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL			DRILL	Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL										
	COLLAR	22	6 1/4	2 7/8	173.38	DRILLING STRING		DRILL COLLARS		COLLAR	22	6 1/4	2 7/8	173.38	DRILLING STRING		DRILL COLLARS		COLLAR	22	6 1/4	2 7/8	173.38	DRILLING STRING		DRILL COLLARS						
	DATA				104	58M			DATA					105 M	58			DATA						58								
BIT RECORD	No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage Drilled Reamed		No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage Drilled Reamed		No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage Drilled Reamed						
	5	X55R	27 1/4	247	45	55				5	X55R	35	225	45	55		325		5	X55R	42 3/4	407	45	55								
	Bit Serial No.	15716						Jet	☒ Conventional									Bit Serial No.	15716							Jet	☒ Conventional					
	Nozzle Size	2-14	1-13					Bit Wear:	T	B	G		Nozzle Size	2-14	1-13			Bit Wear:	T	B	G		Nozzle Size	2-14	1-13			Bit Wear:	T	B	G	
SURVEYS	Depth	3086						Deviation	1 1/2"					Depth	3086									Deviation	1 1/2"							
	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													
	Time	Visc.	Wt.	W L	pH			ADDITIVES — POUNDS						Time	Visc.	Wt.	W L	pH							Time	Visc.	Wt.	W L	pH			ADDITIVES — POUNDS
MUD RECORD	2:00	125	9.6							8:15	120	9.6		10.3	62-L 500#					7:00	107	9.										

YES ☒ NO ☐

Total Contract Timehrs. Total Company Timehrs. Toolpusher Joe E. Lusk Approved by

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT No. 12

WELL NAME I.O.F. SUN BLACKSTONE E-72 Lsd. 61° S 20° N Twn. 122° Rge. 00 W Contractor S & T Drilling Month 12 Day 23 19 19

1st Tour From: 12:00 Midnight To: 8:00 a.m.															2nd Tour From: 8:00 a.m. To: 4:00 p.m.															3rd Tour From: 4:00 p.m. To: 12:00 p.m.														
DEPTH		From	To	Hole Made	Bit Size	Formation				DEPTH		From	To	Hole Made	Bit Size	Formation				DEPTH		From	To	Hole Made	Bit Size	Formation																		
		2883	2916	33	7 7/8							2916	2994	78	7 7/8							2994	3063	69	7 7/8																			
		Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.						Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.						Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.															
		4 1/2	214812	61.83	2867	673.38	4.08						4 1/2	2241.10	62.83	12.69	673.38							4 1/2	2335.42	31.71	98.49	673.38																
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	22	6 1/4	2 3/4	173.38	DRILLING STRING				DRILL COLLARS						COLLAR	22	6 1/4	2 3/4	173.38	DRILLING STRING				DRILL COLLARS																			
	DATA					98				58						DATA					58 M						DATA					102 M				58 M								
BIT RECORD	No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage Drilled Reamed				No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage Drilled Reamed				No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage Drilled Reamed														
	5	X55R	4 1/4		45	50						5	X55R	12	111	45	55		111				5	X55R	19 3/4	80	45	55																
Bit Serial No. 15716 Jet ☒ Conventional ☐															Bit Serial No. 15716 Jet ☒ Conventional ☐															Bit Serial No. 15716 Jet ☒ Conventional ☐														
Nozzle Size 2-14 1-13 Bit Wear: T B G															Nozzle Size 2-14 1-13 Bit Wear: T B G															Nozzle Size 2-14 1-13 Bit Wear: T B G														
Depth 2883 Deviation 2°															Depth 2883 Deviation 2°															Depth Deviation														
PUSH PUMP RECORD No. 1 No. 2	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																		
				950	15	5.0	5 1/2										15	50	5 1/2										900	15	5.0	5 1/2												
MUD RECORD	Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS						Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS						Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS																
						PEITEX 200						8:30	118	9.6		11.0	GEL — 500						5:00	118	9.6		11.0	GEL 300																
	6:00	245	9.7		10.5	CAUSTIC 100						11:00	115	9.6		11.0	PEITEX — 50						7:00	115	9.6		7.4	H.D.																
	7:30	320	9.7		11.0	GEL 100						3:00	120	9.6		11.0	WATER 4 STRENGTH											F.C. 3/2																
CORING	Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery						Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery						Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery																
DETAIL OF OPERATIONS AND REMARKS			From	To	Hrs.									From	To	Hrs.									From	To	Hrs.																	
	FINISH OUT W/ BIT		12:00	12:45	3/4	DRLG. 7 7/8" HOLE						8:00	9:00	1	Rig SERV.						4:00	4:15	1/4																					
	CHANGE BITS & BLIND RAMS		12:45	1:00	1/4	Rig SERV & PIPE RAMS +						9:00			DRLG.						4:15	12:00	7 3/4																					
	RIG SERV		1:00	1:15	1/4	KELLY COCK						9:15	1/4																															
	SLIP & CUT DRLG LINE		1:15	2:00	3/4	DRLG. 7 7/8" HOLE						9:15	4:00	6 3/4																														
	RUN IN W/ BIT NO 5		2:00	3:30	1 1/2																																							
BREAK CIRC & CLEAN BOTTOM		3:30	3:45	1/4																																								
DRLG		3:45	8:00	4 1/4																																								
Driller <u>D. R. Wilkerson</u>															Driller <u>Don Doyle</u>															Driller <u>Lo. Singh</u> <u>J. A. Wilkerson</u>														

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

Total Contract Time _____ hrs. Total Company Time _____ hrs. Toolpusher Don Doyle Approved by _____

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT No. 11

WELL NAME I.O.F. SUN BLACK STONE E-72

Lsd 11° Sec 20' N Twn 122° Rge 2 W W

Contractor S & T Drilling Month 12 Day 22 1969

1st Tour From: 12:00 Midnight To: 8:00 a.m.															2nd Tour From: 8:00 a.m. To: 4:00 p.m.															3rd Tour From: 4:00 p.m. To: 12:00 p.m.																	
DEPTH		From	To	Hole Made	Bit Size	Formation									DEPTH		From	To	Hole Made	Bit Size	Formation									DEPTH		From	To	Hole Made	Bit Size	Formation											
		2804	2804	0	7 7/8												2804	2816	12'	7 7/8												2816	2893	67	7 7/8												
DRILLING STRING		Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.								Size-D.P.		Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.								Size-D.P.		Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.												
		4 1/2													4 1/2		2053.38	62.80	22.24	673.38									4 1/2						673.38												
		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		22	6 1/4	2 3/4	673.38	DRILLING STRING								COLLAR		22	6 1/4	2 3/4	673.38	DRILLING STRING												
		DATA													DATA						162 M 58 M								DATA						58 M												
BIT RECORD		No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage							No.		Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage							No.		Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage								
		4	OSC-12													4		OSC-12	1	12'	45	110		12'								4		OSC-12	7 1/4	79	450	60	2883	79							
		Bit Serial No. 2376 Jet ☐ Conventional ☒														Bit Serial No. 2376 Jet ☐ Conventional ☒														Bit Serial No. 2376 Jet ☐ Conventional ☒																	
		Nozzle Size Bit Wear: T. B. G.														Nozzle Size Bit Wear: T. B. G.														Nozzle Size Bit Wear: T. B. G.																	
SURVEYS		Depth Deviation														Depth Deviation														Depth Deviation																	
PUMP RECORD		HOURS														HOURS														HOURS																	
		On Line	Circulating	Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size							On Line		Circulating	Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size							On Line		Circulating	Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size														
																					750 15 59 5 1/2														750 15 60 5 1/2												
MUD RECORD		Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS									Time		Visc.	Wt.	W L	pH	ADDITIVES — POUNDS									Time		Visc.	Wt.	W L	pH	ADDITIVES — POUNDS										
		6:00	235	9.6			GEL 1400									9:00		135	9.5		10.5	GEL 1000									5:00		241	9.6		11.0	GEL 1400										
		1:00	240	9.5			CAUSTIC 50									12:00		137	9.5		10.5										7:00		196	9.6		11.0											
		3:00	240	9.5			10.5									3:00		240	9.5		10.5										9:00		120	9.6		10.0											
CORING		Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery									Core No.		Depth In	Footage	Hours Run	Depth Out	Recovery									Core No.		Depth In	Footage	Hours Run	Depth Out	Recovery										
DETAIL OF OPERATIONS AND REMARKS		From To Hrs.														From To Hrs.														From To Hrs.																	
		CHANGE BITS & BLIND RAMS 12:00 12:15 1/4														Rig SERV. 8:00 8:15 1/4														DRLG. 7 7/8" HOLE 4:00 5:45 1 3/4																	
		RIG SERV. 12:15 12:30 1/4														CIRC. & REAM BRIDGE'S 8:15														RIG SERV. 5:45 6:00 1/4																	
		RUN IN TO BRIDGE @ 1450' 12:30 2:00 1 1/2														FROM 2350' TO 2804' 2:00 5:34 3 1/4														DRLG. 7 7/8" HOLE 6:00 11:00 5																	
		CIRC COND MUD BUILD VOL 2:00 5:00 3														CIRC TO COND. HOLE 2:00 3:00 1														DROP SURVEY 11:00 11:15 1/4																	
		CIRC & CLEAN IN W/ PIPE 5:00 8:00 3														DRLG. 7 7/8" HOLE 3:00 4:00 1														HOIST FOR BIT 11:15 12:00 3/4																	
Driller		D. A. Wither														Driller Don Doyle														Driller Don Doyle																	

HEADING UP & DRLG. OUT:
DRILLING:
REAMING:

CLASSES OF TIME BREAKDOWN

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

Total Contract Time hrs.

Total Company Time hrs.

Toolpusher

Geo. E. Winkham

Approved by

C. E. Winkham

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT No. 10

WELL NAME I.G.E. SUN BLACKSTONE 72 Lsd. 61° Sec 20' N. Twn. 122° Rge. 30' W. W. Contractor S.T. Dold Month 12 Day 21 19 69

1st Tour From: 12:00 Midnight To: 8:00 a.m.										2nd Tour From: 8:00 a.m. To: 4:00 p.m.										3rd Tour From: 4:00 p.m. To: 12:00 p.m.																					
From		To		Hole Made		Bit Size		Formation		From		To		Hole Made		Bit Size		Formation		From		To		Hole Made		Bit Size		Formation													
DEPTH		2567		2675		108		7 7/8				2675		2761		86'		7 7/8				2761		2804		43		7 7/8													
DRILLING STRING		Size-D.P.		Stands		Singles		Kelly		Drill. Collar Ft.		Core Bbl. Ft.		Size-D.P.		Stands		Singles		Kelly		Drill. Collar Ft.		Core Bbl. Ft.		Size-D.P.		Stands		Singles		Kelly		Drill. Collar Ft.		Core Bbl. Ft.					
		4 1/2		1928.01		31.31		38.30		173.35		4.00		4 1/2		2052.00		31.58		30.04		672.38				4 1/2		2053.58		31.58		41.46		673.38		4.00					
DRILL		Number		OD		ID		Length		INDICATOR WEIGHT OF TOTAL		DRILL		Number		OD		ID		Length		INDICATOR WEIGHT OF TOTAL		DRILL		Number		OD		ID		Length		INDICATOR WEIGHT OF TOTAL							
COLLAR		22		6 1/4		2 3/4		673.38		DRILLING STRING		DRILL COLLARS		COLLAR		22		6 1/4		2 3/4		673.38		DRILLING STRING		DRILL COLLARS		COLLAR		22		6 1/4		2 3/4		673.38		DRILLING STRING		DRILL COLLARS	
DATA								100 M		58		DATA										102 M		58 M		DATA								102		58 M					
BIT RECORD		No.		Type		Time On Bit		Footage		WOB		RPM		Depth Pulled		Total Footage Drilled		Reamed		No.		Type		Time On Bit		Footage		WOB		RPM		Depth Pulled		Total Footage Drilled		Reamed					
		3		X55R		20 3/4		278		40		50								3		X55R		27 3/4		364		45		60		364									
Bit Serial No.		16300		Jet		☒ Conventional		Nozzle Size		2-12		1-13		Bit Wear: T		B		G		Bit Serial No.		16300		Jet		☒ Conventional		Nozzle Size		2-12		1-13		Bit Wear: T		B		G			
SURVEYS		Depth		Deviation		Depth		Deviation		Depth		Deviation		Depth		Deviation		Depth		Deviation		Depth		Deviation		Depth		Deviation		Depth		Deviation		Depth		Deviation					
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	
						1050		15		59		5 1/2								1050		15		59		5 1/2								1050		15		59		5 1/2	
MUD RECORD		Time		Visc.		Wt.		W L		pH		ADDITIVES — POUNDS		Time		Visc.		Wt.		W L		pH		ADDITIVES — POUNDS		Time		Visc.		Wt.		W L		pH		ADDITIVES — POUNDS					
		12:30		60		9.4						GEL 1800		8:30		69		9.5						GEL 2600 M		5:00		58		9.5						GEL 2600 M					
		4:00		55		9.5						BENEX 4		11:30		70		9.5						PULTEX 250 M		7:00		51		9.5						PULTEX 250 M					
		6:30		55		9.5								3:30		68		9.5		11.0				CAUSTIC 300 M												CAUSTIC 300 M					
																																				WATER STREAM					
CORING		Core No.		Depth In		Footage		Hours Run		Depth Out		Recovery		Core No.		Depth In		Footage		Hours Run		Depth Out		Recovery		Core No.		Depth In		Footage		Hours Run		Depth Out		Recovery					
DETAIL OF OPERATIONS AND REMARKS		From		To		Hrs.		From		To		Hrs.		From		To		Hrs.		From		To		Hrs.		From		To		Hrs.		From		To		Hrs.					
		12:00		12:15		1/4		RIG SERV		12:15		5:30		5 1/4		RIG SERV		8:00		8:15		1/4		DRLG. 7 7/8" HOLE		4:00		5:00		1		DRLG. 7 7/8" HOLE		5:00		5:15		1/4			
		12:15		5:30		5 1/4		DRLG		8:15		8:30		1/4		RIG SERV		8:30		1:30		5		DRLG. 7 7/8" HOLE		5:15		7:30		2 1/4		DRLG. 7 7/8" HOLE		7:30		9:00		1 1/2			
		5:30		5:45		1/4		TRY SURVEY LINE TANGLED DRUM		1:30		2:00		1/2		CIRC. CONDITIONAL MUD		2:00		3:30		1 1/2		HOIST TO CHANGE BITS		9:00															
		5:45		8:00		2 1/4		DRLG		3:30		4:00		1/2		TIGHT 15 STANDS																									
								DRLG. 7 7/8" HOLE																																	
								CLEAN OUT PLUGGED FLOW LINE																																	
Driller		D. A. Weller		Driller		L. E. Doyle		Driller		L. E. Doyle		Driller		L. E. Doyle		Driller		L. E. Doyle		Driller		L. E. Doyle		Driller		L. E. Doyle		Driller		L. E. Doyle		Driller		L. E. Doyle		Driller		L. E. Doyle			

HEADING UP & DRLG. OUT:
DRILLING:
REAMING:

CLASSES OF TIME BREAKDOWN

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

Total Contract Timehrs.

Total Company Timehrs.

Toolpusher Joe Dinkelman Approved by E. J. K. K...

Total Contract Time hrs. Total Company Time hrs. Toolpusher Geo E. Williams Approved by E. J. F. Williams

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT No. 8

WELL NAME I.O.E. SUN. BLACKSTONE 1-72 Lsd. 61° Sec 20' N Twn 122° Rg 00' W Contractor S+T Ldr Month 12 Day 19 1962

1st Tour From: 12:00 Midnight To: 8:00 a.m.															2nd Tour From: 8:00 a.m. To: 4:00 p.m.															3rd Tour From: 4:00 p.m. To: 12:00 p.m.																	
DEPTH		From	To	Hole Made	Bit Size	Formation									DEPTH		From	To	Hole Made	Bit Size	Formation									DEPTH		From	To	Hole Made	Bit Size	Formation											
		2323	2350	27	7 7/8												2350	2370	20	7 1/2												2370	2383	13	7 1/2												
DRILLING STRING		Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.								Size-D.P.		Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.								Size-D.P.		Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.												
		4 1/2	1586.81	62.22	22.91	673.38	5013								4 1/2		1680.67		35.37	584.18	4.00								4 1/2		1680.67	31.43	16.94	584.18	4.00												
DRILL		Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL										DRILL		Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL										DRILL		Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL									
COLLAR DATA		22	6 1/4	2 7/8	673.38	88 58M										COLLAR		19	6 1/4	2 7/8	584.18	89										COLLAR		19	6 1/4	2 7/8	584.18	90									
BIT RECORD		No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage							No.		Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage							No.		Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage								
		2	OSC10T	25 3/4	508	15-20	54-60	2350	508							10		CHRE	3 1/4	20	16M	85	2370								20		CHRE	2 1/2	13	16M	90										
		Bit Serial No. 15664 Jet ☒ Conventional ☐														Bit Serial No. EC9810 Jet ☐ Conventional ☐														Bit Serial No. EC9810 Jet ☐ Conventional ☐																	
		Nozzle Size 2-11 1-12 Bit Wear: T 2 B 2 G 1														Nozzle Size Bit Wear: T B G														Nozzle Size Bit Wear: T B G																	
SURVEYS		Depth 2350 Deviation 2 1/2"														Depth Deviation														Depth Deviation																	
PUSH 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																	
		1150 15 58 5 1/2														1225 15 57 5 1/2														1225 15 57 5 1/2																	
MUD RECORD		Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS									Time		Visc.	Wt.	W L	pH	ADDITIVES — POUNDS									Time		Visc.	Wt.	W L	pH	ADDITIVES — POUNDS										
		100	65	9.2			CEL 500									1200		66	9.2												800		60	9.4													
		300	90	9.2			BENER 2									200		64	9.4												1000		60	9.4													
		135 GALS DIESEL FUEL TO ESSO TRUCKS																																													
CORING		Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery									Core No.		Depth In	Footage	Hours Run	Depth Out	Recovery									Core No.		Depth In	Footage	Hours Run	Depth Out	Recovery										
																1		2350	20	3 1/4	2370	20'									2		2370														
DETAIL OF OPERATIONS AND REMARKS		From To Hrs.														From To Hrs.														From To Hrs.																	
		RIG SERV 1200 1215 1/4														FINISH MAKE UP CORE BBL 8:00 8:30 1/2														TRIP OUT W/ CORE NO 1 1200 515 1 1/4																	
		DRLE 1215 230 2 1/4														RIG SERV 8:30 8:45 1/4														RECOVER CORE 515 600 3/4																	
		CIRC TO COND HOLE 230 300 1/2														SLIP 27' DRLE LINE 8:45 9:15 1/2														SERV CORE BBL 600 615 1/4																	
		MAKE 10 STAND DUMMY TRIP 300 415 1 1/4														TRIP IN W/ CORE BBL (FLOW BACK) 9:15 11:30 2 1/4														TRIP IN W/ CORE BBL 615 730 1 1/4																	
		CIRC COND HOLE TO CORE 415 500 3/4														PICK UP KELLY & CIRC TO BOTTOM 11:30 12:15 3/4														PICK UP KELLY & CIRC TO BTM 730 930 2																	
		DROP SURVEY 500 515 1/4														CUTTING CORE #1 12:15 330 3 1/4														CUT CORE NO 2 930 1200 2 1/2																	
		HOIST BIT NO 2 515 700 1 3/4														TRIP OUT W/ CORE #1 330 400 1/4																															
		PICK UP CORE BBL 700 800 1																																													
Driller		D. A. Wether														Driller D. A. Wether														Driller D. A. Wether																	

HEADING UP & DRLG. OUT:
DRILLING:
REAMING:

CLASSES OF TIME BREAKDOWN

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

Total Contract Timehrs.

Total Company Timehrs.

Toolpusher

Approved by E. J. K...

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT No. 7WELL NAME LOE SUN BLACKSTONE L-72 Lsd. 61° Sec. 20' Twn. 122° Rge. 00 W. Contractor S.T. DRLG Month 12 Day 18 1969

1st Tour From: 12:00 Midnight To: 8:00 a.m.															2nd Tour From: 8:00 a.m. To: 4:00 p.m.															3rd Tour From: 4:00 p.m. To: 12:00 p.m.																				
DEPTH		From	To	Hole Made	Bit Size	Formation										DEPTH		From	To	Hole Made	Bit Size	Formation										DEPTH		From	To	Hole Made	Bit Size	Formation												
		1900	2026	126	7 7/8													2026	2192	166	7 7/8													2192	2323	131	7 7/8													
DRILLING STRING		Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.										Size-D.P.		Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.										Size-D.P.		Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.											
		4 1/2	1307.38	1707.38	41.24	673.38	4.00										4 1/2		1894.02	20.90	673.38	548 4.00										4 1/2				673.38	548 4.00													
		DRILL	Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL										DRILL		Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL										DRILL		Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL											
		COLLAR	22	6 1/4	2 7/8	673.38	DRILLING STRING DRILL COLLARS										COLLAR		22	6 1/4	2 7/8	673.38	DRILLING STRING DRILL COLLARS										COLLAR		22	6 1/4	2 7/8	673.38	DRILLING STRING DRILL COLLARS											
		DATA	83 M 58 M													DATA		86 M 58 M													DATA		88 M 58 M																	
BIT RECORD		No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage Drilled		Reamed					No.		Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage Drilled		Reamed					No.		Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage Drilled		Reamed									
		2	OSC16T	9 1/4	184	15-20	60									2		OSC16T	16 1/2	350	15-20	50-60		350							2		OSC16T	23 1/2	481	15-30	50-60													
		Bit Serial No. 15664 Jet ☒ Conventional ☐															Bit Serial No. 15664 Jet ☒ Conventional ☐															Bit Serial No. 15664 Jet ☒ Conventional ☐																		
		Nozzle Size 2-11 1-12 Bit Wear: T B G															Nozzle Size 2-11 1-12 Bit Wear: T B G															Nozzle Size 2-11 1-12 Bit Wear: T B G																		
SURVEYS		Depth 1933 1994 Deviation 3° 2 1/4°															Depth 2057' 2118' Deviation 2° 2°															Depth 2212' 2305' Deviation 2° 2 1/4°																		
PUSH PUMP RECORD No. 1 No. 2		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																	
				1100	15	59	5 1/2												1125	15	59	5 1/2												1150	15	58	5 1/2													
MUD RECORD		Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS										Time		Visc.	Wt.	W L	pH	ADDITIVES — POUNDS										Time		Visc.	Wt.	W L	pH	ADDITIVES — POUNDS											
		12:30	33	9.0			GEL 1000										8:30		39	9.0			WATER 1/2 STAGRAM										6:30		40	9.2			GEL 1100											
		3:00	44	9.1			BENEX 4										10:30		39	9.0													10:30		40	9.2			BENEX 4											
		6:00	41	9.1													11:30		40	9.1			10.0										11:30		60	9.2														
																	2:30		40	9.1																														
																	4:00		41	9.1																														
CORING		Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery										Core No.		Depth In	Footage	Hours Run	Depth Out	Recovery										Core No.		Depth In	Footage	Hours Run	Depth Out	Recovery											
DETAIL OF OPERATIONS AND REMARKS				From	To	Hrs.													From	To	Hrs.													From	To	Hrs.														
		RIG SERV		12:00	12:15	1/4													RIG SERV		8:00	8:15	1/4													DRLG 7 7/8 HOLE		4:00	5:00	1										
		DRLG		12:15	1:30	1 1/4													DRLG 7 7/8 HOLE		8:15	9:45	1 1/2													SURVEY		5:00	5:15	1/4										
		SURVEY @ 1933		1:30	2:00	1/2													SURVEY		9:45	10:00	1/4													RIG SERV		5:15	5:30	1/4										
		DRLG		2:00	6:00	4													DRLG 7 7/8 HOLE		10:00	12:45	2 3/4													DRLG 7 7/8 HOLE		5:30	10:00	4 1/2										
		SURVEY @ 1994		6:00	6:15	1/4													SURVEY		12:45	1:00	1/4													SURVEY @ 2305		1:00	10:30	1/2										
		DRLG		6:15	8:00	1 3/4													DRLG 7 7/8 HOLE		1:00	4:00	3													DRLG		10:30	12:00	1 1/2										
		Driller <u>D. A. Weller</u>															Driller <u>Don Doyle</u>															Driller <u>Don Doyle D. A. Weller</u>																		

HEADING UP & DRLG. OUT:
DRILLING:
REAMING:

CLASSES OF TIME BREAKDOWN

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

YES NO

Total Contract Timehrs.

Total Company Timehrs.

Toolpusher Don Doyle

Approved by

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT No. 6WELL NAME I.O.F. SUN BLACKSTONE 1-72 Lsd. 60° Sec 20' Nwn 122° Rge 00' W Contractor STT Drilling Month 12 Day 17 1968

1st Tour From: 12:00 Midnight To: 8:00 a.m.										2nd Tour From: 8:00 a.m. To: 4:00 p.m.										3rd Tour From: 4:00 p.m. To: 12:00 p.m.																													
From		To		Hole Made		Bit Size		Formation		From		To		Hole Made		Bit Size		Formation		From		To		Hole Made		Bit Size		Formation																					
DEPTH		1460		1665		205		7 7/8		1665		1811		146'		7 7/8"		1811		1900		89		7 7/8"																									
DRILLING STRING		Size-P.P.		Stands		Singles		Kelly		Drill. Collar Ft.		Core Bbl. Ft.		Size-D.P.		Stands		Singles		Kelly		Drill. Collar Ft.		Core Bbl. Ft.		Size-D.P.		Stands		Singles		Kelly		Drill. Collar Ft.		Core Bbl. Ft.													
		4 1/2		937.32		31.60		18.70		173.38		4.00		4 1/2		1030.35		61.87		41.50		22.673		38		4 1/2		1122.19		62.74		673.38		4.00															
DRILL		Number		OD		ID		Length		INDICATOR WEIGHT OF TOTAL		DRILL		Number		OD		ID		Length		INDICATOR WEIGHT OF TOTAL		DRILL		Number		OD		ID		Length		INDICATOR WEIGHT OF TOTAL															
COLLAR		22		6 1/4		2 7/8		673.38		DRILLING STRING		DRILL COLLARS		COLLAR		22		6 1/4		2 7/8		673.38		DRILLING STRING		DRILL COLLARS		COLLAR		22		6 1/4		2 7/8		673.38		DRILLING STRING		DRILL COLLARS									
DATA								78 M						DATA								80 M				DATA								81 M		58 M													
BIT RECORD		No.		Type		Time On Bit		Footage		WOB		RPM		Depth Pulled		Total Footage Drilled		Reamed		No.		Type		Time On Bit		Footage		WOB		RPM		Depth Pulled		Total Footage Drilled		Reamed													
		1		X10		22		1298		30		65-80								1		X10		28 1/2		1444		10-20		45-55		1444																	
								5-10		45-50		HOLE DEVIATING																																					
SURVEYS		Bit Serial No.		18712		Jet		☒ Conventional		Nozzle Size		2-11 1-12		Bit Wear: T B G		Depth		1590 1620		Deviation		2 1/4 3°		Bit Serial No.		18712		Jet		☒ Conventional		Nozzle Size		2-11 1-12		Bit Wear: T B G		Depth		1685 1717 1780		Deviation		3° 2 1/4° 2 3/4°					
PUSH 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			
												1100		15		59		5 1/2																															
MUD RECORD		Time		Visc.		Wt.		W L		pH		ADDITIVES — POUNDS		Time		Visc.		Wt.		W L		pH		ADDITIVES — POUNDS		Time		Visc.		Wt.		W L		pH		ADDITIVES — POUNDS		Time		Visc.		Wt.		W L		pH		ADDITIVES — POUNDS	
		10°		28		8.5						FEL — 3700 #		8:30		34		8.9						10.0		WATER & STREAM		4:30		38		8.9						10.0											
		4°		30		8.7						BENEX — 6 #		11:30		34		8.9						10.0																									
		7°		38		8.9		105						2:00		34		8.8						10.0		6-F 1000 #		11:00		36		8.9																	
														4:00		36		8.8						10.0		BENEX 4 #																							
														2:30		2:45		1/4		SURVEY																													
CORING		Core No.		Depth In		Footage		Hours Run		Depth Out		Recovery		Core No.		Depth In		Footage		Hours Run		Depth Out		Recovery		Core No.		Depth In		Footage		Hours Run		Depth Out		Recovery													
														2:45				DRLG 7 7/8" HOLE																															
DETAIL OF OPERATIONS AND REMARKS		From		To		Hrs.		RIG SERV		12:00		12:15		1/4		DRLG 7 7/8" HOLE		8:00		8:45		3/4		RIG SERV		4:00		4:15		1/4		DRLG 7 7/8" HOLE		4:15		6:00		1 3/4											
		DRLG		12:15		2:45		2 1/2		SURVEY		2:45		3:00		1/4		RIG SERV		8:45		9:00		1/4		DRLG 7 7/8" HOLE		6:00																					
		SURVEY @ 1590		2:45		3:00		1/4		RIG SERV		3:00		4:15		1 1/4		DRLG 7 7/8" HOLE		9:00		9:15		1/4		DRLG 7 7/8" HOLE		8:00		2		STRAP OUT																	
		DRLG		3:00		4:15		1 1/4		SURVEY		4:15		4:45		1/2		SURVEY		9:15		10:45		1 1/2		STRAP OUT		8:00		9:30		1 1/2		RIG IN 8' FILL ON BOTTOM															
		SURVEY @ 1620		4:15		4:45		1/2		SURVEY		4:45		7:00		2 1/4		DRLG 7 7/8" HOLE		10:45		11:00		1/4		DRLG		9:30		10:45		1 1/4		SURVEY @ 1873															
		DRLG		7:00		7:15		1/4		SURVEY		7:15		8:00		3/4		ADJUST BRAKES + CHANGE SIVER SUB		12:30		12:45		1/4		DRLG		10:45		11:00		1/4		DRLG		11:00		12:00		1									
		SURVEY @ 1656		7:15		8:00		3/4		ADJUST BRAKES + CHANGE SIVER SUB		12:45		1:00		1/4		DRLG		1:00		2:30		1 1/2																									
		DRLG																																															
Driller		D. A. Wilber								Driller		Don Doyle								Driller		Don Doyle		D. A. Wilber																									

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

Total Contract Timehrs.

Total Company Timehrs.

Toolpusher Geo. Christman

Approved by

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT No. 5

WELL NAME ICE SUN BLACKSTONE L-72 Lsd. 61° Sec. 20' 14" Wn. 122° Rge. 00 W W Contractor S&T Stryker Month 12 Day 16 19 19

1st Tour From: 12:00 Midnight To: 8:00 a.m.															2nd Tour From: 8:00 a.m. To: 4:00 p.m.															3rd Tour From: 4:00 p.m. To: 12:00 p.m.																											
DEPTH		From	To	Hole Made	Bit Size	Formation									DEPTH		From	To	Hole Made	Bit Size	Formation									DEPTH		From	To	Hole Made	Bit Size	Formation																					
		367	505	138	7 7/8	SHALE											505	10002	497	7 7/8												1002	1460	458	7 7/8	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.																				
					41.66	459.94	505										4 1/2	279.48		41.50	674.48											4 1/2	751.68			673.38	400																				
DRILL		Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL									DRILL		Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL									DRILL		Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL																					
COLLAR		15	1 1/4	2 3/4	459.94	DRILLING STRING									COLLAR		22	1 1/4	2 3/4	674.48	DRILLING STRING									COLLAR		22	1 1/4	2 3/4	673.38	DRILLING STRING																					
DATA		50M													50M													DATA		66 M													DATA		74 M												
BIT RECORD		No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage						No.		Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage						No.		Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage																				
		1	XIC	13 1/4	138	20-25	65								1		XIC	8 1/2	635	20-25	65-80		635						1		XIC	15 1/2	1093	30	65-80																						
SURVEYS		Bit Serial No. 15712 Jet ☒ Conventional ☐														Bit Serial No. 18712 Jet ☒ Conventional ☐														Bit Serial No. 18712 Jet ☒ Conventional ☐																											
		Nozzle Size 2-11 1-12 Bit Wear: T. B. G.														Nozzle Size 2-11 1-12 Bit Wear: T. B. G.														Nozzle Size 2-11 1-12 Bit Wear: T. B. G.																											
		Depth 1002' Deviation 1°														Depth 1002' Deviation 1°														Depth 1189-1376 Deviation 1° 10'																											
PUSH PUMP RECORD		HOURS														HOURS														HOURS																											
		On Line	Circulating	Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size								On Line		Circulating	Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size								On Line		Circulating	Pump Press	Length of Pump Stroke	Strokes Per Min.	Liner Size																						
				950	15	59	5 1/2												975	15		5 1/2												1050	15	59	5 1/2																				
MUD RECORD		Time	Visc.	Wt.	W L	pH	ADDITIVES — POUNDS									Time		Visc.	Wt.	W L	pH	ADDITIVES — POUNDS									Time		Visc.	Wt.	W L	pH	ADDITIVES — POUNDS																				
																10:00		28	8.4				WATER									6:00		28	8.4				GEL 1000																		
																12:00		28	8.4													8:00		28	8.4				CAUSTIC 50																		
																2:00		28	8.4													10:00		28	8.4				10.5																		
																2:00		28	8.4																																						
CORING		Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery									Core No.		Depth In	Footage	Hours Run	Depth Out	Recovery									Core No.		Depth In	Footage	Hours Run	Depth Out	Recovery																				
		PRESS FORM TO 200 PSI BLID																																																							
		BACK TO 150 PSI																																																							
		DRLG																																																							
DETAIL OF OPERATIONS AND REMARKS		RIG SERV														RIG SERV																RIG SERV																									
		DRILL MUDS HOLE														DRILL 7 7/8" HOLE																SURVEY																									
		RUN TAGGED PIPE @ 342'														SURVEY @ 567'																DRILL 7 7/8" HOLE																									
		PRESS HYDRIL + PIPE PMS 1000 PSI OK														DRILL 7 7/8" HOLE																SURVEY																									
		CHECK MOTOR SHUT OFF 3 PRESS														ADJUST LINKAGE ON SANDLINE DRUM																DRILL 7 7/8" HOLE																									
		KELLY COCK OK														SURVEY																SURVEY @ 1376																									
		DRILL OUT BEN & SHOE														DRILL 7 7/8" HOLE																DRLG																									
		CLEAN SECTION TANK														SURVEY																																									
		DRLG 7 7/8" HOLE														DRILL 7 7/8" HOLE																																									
		Driller <u>D. G. Zeller</u>														Driller <u>Don Dwyer</u>																Driller <u>Don Dwyer</u>																									

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

Total Contract Timehrs.

Total Company Timehrs.

Toolpusher D. G. Zeller Approved by

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT No. 4WELL NAME IOE SUN BLACKSTONE L-72 Lsd 61° Sec 20' Hwn 122° Rge 00 W Contractor S&I Drilling Month 12 Day 15 1969

1st Tour From: 12:00 Midnight To: 8:00 a.m.												2nd Tour From: 8:00 a.m. To: 4:00 p.m.												3rd Tour From: 4:00 p.m. To: 12:00 p.m.													
From		To		Hole Made		Bit Size		Formation		From		To		Hole Made		Bit Size		Formation		From		To		Hole Made		Bit Size		Formation									
DEPTH		367																																			
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		DRILL COLLARS												DRILLING STRING		DRILL COLLARS									
DATA																																					
BIT RECORD		No.		Type		Time On Bit		Footage		WOB		RPM		Depth Pulled		Total Footage Drilled		Reamed		No.		Type		Time On Bit		Footage		WOB		RPM		Depth Pulled		Total Footage Drilled		Reamed	
Bit Serial No.																						Bit Serial No.															
Nozzle Size																						Nozzle Size															
Bit Wear: T				B				G														Bit Wear: T				B				G							
SURVEYS		Depth										Deviation										Depth															
PUSH PUMP RECORD		HOURS										Pump Press		Length of Pump Stroke		Strokes Per Min.		Liner Size		HOURS																	
No. 1		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	

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT No. 3WELL NAME I.O.E. SUN. BLACKSTONE L-72 Lsd. 61° Sec. 20'N Twn. 122° Rge. 00'W Contractor S&T DRLR Month 12 Day 14 1969

1st Tour From: 12:00 Midnight To: 8:00 a.m.												2nd Tour From: 8:00 a.m. To: 4:00 p.m.												3rd Tour From: 4:00 p.m. To: 12:00 p.m.													
DEPTH		From	To	Hole Made	Bit Size	Formation						DEPTH		From	To	Hole Made	Bit Size	Formation						DEPTH		From	To	Hole Made	Bit Size	Formation							
		203	367	164	12 1/4									367																							
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.										
		1 1/2		60.93	20.24	278.68	2.15																														
DRILL		Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL						DRILL	Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL						DRILL	Number	OD	ID	Length	INDICATOR WEIGHT OF TOTAL									
COLLAR		9	6 1/4	2 1/4	278.68	DRILLING STRING						COLLAR					DRILLING STRING						COLLAR					DRILLING STRING									
DATA		37M										36M	DATA										DATA														
BIT RECORD		No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage			No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage			No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage								
		3A	OSC-3	4 1/4	164	12-20	60																														
		Bit Serial No. 10292 Jet ☐ Conventional ☒										Bit Serial No. Jet ☐ Conventional ☐										Bit Serial No. Jet ☐ Conventional ☐															
		Nozzle Size Bit Wear: T. B. G.										Nozzle Size Bit Wear: T. B. G.										Nozzle Size Bit Wear: T. B. G.															
SURVEYS		Depth 264 Deviation 3 1/4										Depth 307 Deviation 3 1/4										Depth Deviation															
PUSH PUMP RECORD No. 1 No. 2		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																
				400	15	60	7 1/4													K.B. to ground level 13.10																	
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								
		2:00	40	8.9			3000 #						Ran 11 ft 8 5/8 x 2 1/4 HHC ST 4 1/2 MM.																								
		4:00	44	8.9			CAUSTIC 100 #						Circ. total 345.19 Lit @ 357.64																								
		6:00	55	8.9									Cemented by Houston w 800 lbs + 2870 Pdl Plug down @ 3 PM																								
		RUN IN 6 1/2 7:00 - 1/4										Circ. empty																									
CORING		Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery						Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery						Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery								
		STRAP OUT		357.13		DRILL 7:00 - 7:15	1/4																														
		BOARD TALLY		356.94		CIRC 7:15 - 8:00	3/4																														
		DIFF		.19																																	
DETAIL OF OPERATIONS		RIG SERV										TRIP OUT W/ BIT #3A										W.O.C.															
		DRLR										TRIP IN W/ BIT #3A																									
		MAKE CONN COULDN'T GET TO BIT										CIRC. TO RUN CASQ.																									
		CIRC COND MUD										SURVEY																									
		DRLR										TRIP OUT W/ BIT #3A																									
		SURVEY @ 264'										RUNNING CASQ.																									
		DRLR										CIRC. CASQ.																									
		HIST STRAP PIPE										CEMENT CASQ. PLUG DOWN @ 3 PM																									
		WORK ON SHALE SHAKER										W.O.C.																									
REMARKS		Driller: D.A. Wilber										Driller: Don Doyle										Driller: Don Doyle D.A. Wilber															

HEADING UP & DRLG. OUT:
DRILLING:
REAMING:

CLASSES OF TIME BREAKDOWN

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

Total Contract Time _____ hrs.

Total Company Time _____ hrs.

Toolpusher: Geo. P. JohnsonApproved by: D.A. Wilber

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT No. 2WELL NAME 10E SWH BLACKSTONE L-72 Lsd. 61° Sec. 20'N Twn. 122' Rge. 00'W Contractor SPT DRLR Month 12 Day 13 1968

1st Tour From: 12:00 Midnight To: 8:00 a.m.												2nd Tour From: 8:00 a.m. To: 4:00 p.m.												3rd Tour From: 4:00 p.m. To: 12:00 p.m.																							
DEPTH		From	To	Hole Made	Bit Size	Formation						DEPTH		From	To	Hole Made	Bit Size	Formation						DEPTH		From	To	Hole Made	Bit Size	Formation																	
		104	125	21'	12 1/4"									125'	159'	34'	12 1/4"									159'	203	44	12 1/4"																		
DRILLING STRING		Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.					Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.					Size-D.P.	Stands	Singles	Kelly	Drill. Collar Ft.	Core Bbl. Ft.																				
					25.35	92.60	7.15								28.22	123.63									40.92	154.93	7.15																				
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	6 1/4"	2 3/8"	92.60	DRILLING STRING DRILL COLLARS						COLLAR			6 1/4"	2 3/8"	123.63	DRILLING STRING DRILL COLLARS						COLLAR			6 1/4"	2 3/8"	DRILLING STRING DRILL COLLARS																		
DATA												DATA												DATA																							
BIT RECORD		No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage Drilled Reamed			No.		Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage Drilled Reamed			No.		Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage Drilled Reamed																
		2A	OSC-3	21 1/4"	125	5-11 M	45					2A		OSC-3	28 1/2"	159'	10 M	45					2A		OSC-3	35	203	10 M	45	203	164	39															
		Bit Serial No. <u>18339</u> Jet ☐ Conventional ☒												Bit Serial No. <u>18339</u> Jet ☐ Conventional ☒												Bit Serial No. <u>18339</u> Jet ☐ Conventional ☒																					
		Nozzle Size _____ Bit Wear: T _____ B _____ G _____												Nozzle Size _____ Bit Wear: T _____ B _____ G _____												Nozzle Size _____ Bit Wear: T <u>1</u> B <u>2</u> G <u>1</u>																					
SURVEYS		Depth <u>110'</u> Deviation <u>1/4"</u>												Depth <u>110'</u> Deviation <u>1/4"</u>												Depth <u>172'</u> Deviation <u>1/4"</u>																					
PUSH PUMP RECORD No. 1 No. 2		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																				
				300	15	60	7 1/4"										325	15	60	7 1/4"										350	15	60	7 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																
		2:00	40				OIL 1400						10:00		36	8.8				Caustic 800 #						8:00		30	8.9																		
		4:00	40				CAUSTIC 50						12:00		39	8.8																															
													2:00		37	8.9																															
CORING		Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery						Core No.		Depth In	Footage	Hours Run	Depth Out	Recovery						Core No.		Depth In	Footage	Hours Run	Depth Out	Recovery																
DETAIL OF OPERATIONS AND REMARKS				From	To	Hrs.											From	To	Hrs.											From	To	Hrs.															
		RIG SERV		12:00	12:15	1/4	Rig SERV.								8:00		8:15	1/4	Rig SERV.								4:00		4:15	1/4																	
		DRLG		12:15	3:00	2 3/4	DRLG. 12 1/4" HOLE								8:15		11:30	3 1/4	DRLG. 12 1/4" HOLE								4:15		6:30	2 1/2																	
		SURVEY @ 110'		3:00	3:15	1/4	RATHOLE KELLY pull up CHECK								11:30				PICK UP COLLAR & SURVEY @ 172'								6:30		7:00	1/2																	
		PULL UP & CHECK BIT OK		3:15	3:30	1/4	BIT O.K. PICK UP DRILL COLLAR								12:00		1/2	DRLG. 12 1/4" HOLE								7:00		11:00	4																		
		DRLG		3:30	8:00	4 1/2	DRLG. 12 1/4" HOLE								12:00		4:00	4	HOIST CHANGE RITS & RUN IN								11:00		12:00	1																	
Driller		<u>L.A. Walker</u>										Driller		<u>Don Doyle</u>										Driller		<u>Don Doyle</u>										Driller		<u>L.A. Walker</u>									

HEADING UP & DRLG. OUT: TOTCO: CONDITIONING MUD: CASING: LOGGING: RIG MAINTENANCE: REAMING CLEANING: DRILLING: FISHING: TRIPPING: W.O. ORDERS: MISCELLANEOUS: WORKING PIPE: REAMING: CIRCULATING: CORING: D.S. TESTING: RIG REPAIRS: CONDITION HOLE: LOST CIRC:

DID YOU CHECK BLOWOUT PREVENTER EQUIPMENT TODAY
YES _____ NO _____

Total Contract Time _____ hrs.

Total Company Time _____ hrs.

Toolpusher _____

Approved by _____

Approved by [Signature]

IMPERIAL OIL LIMITED

DAILY DRILLING REPORT No.

WELL NAME LOE. SUN. BLACKSTONE L-72 61° 12' N - 122° 15' WContractor S. I. Dr. West Month Dec Day 11 1969

1st Tour From: 12:00 Midnight To: 8:00 a.m.																	2nd Tour From: 8:00 a.m. To: 4:00 p.m.																	3rd Tour From: 4:00 p.m. To: 12:00 p.m.																				
DEPTH		From	To	Hole Made	Bit Size	Formation											DEPTH		From	To	Hole Made	Bit Size	Formation											DEPTH		From	To	Hole Made	Bit Size	Formation														
																																				0	39																	
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																	COLLAR																	COLLAR																			
	DATA																	DATA																	DATA																			
BIT RECORD	No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage											No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage											No.	Type	Time On Bit	Footage	WOB	RPM	Depth Pulled	Total Footage										
	Bit Serial No. Jet ☐ Conventional ☐																Bit Serial No. Jet ☐ Conventional ☐																Bit Serial No. Jet ☐ Conventional ☐																					
	Nozzle Size Bit Wear: T B G																Nozzle Size Bit Wear: T B G																Nozzle Size Bit Wear: T B G																					
SURVEYS	Depth Deviation																Depth Deviation																Depth Deviation																					
	HOURS																HOURS																HOURS																					
	On Line Circulating Pump Press Length of Pump Stroke Strokes Per Min. Liner Size																On Line Circulating Pump Press Length of Pump Stroke Strokes Per Min. Liner Size																On Line Circulating Pump Press Length of Pump Stroke Strokes Per Min. Liner Size																					
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	Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery											Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery											Core No.	Depth In	Footage	Hours Run	Depth Out	Recovery																
DETAIL OF OPERATIONS AND REMARKS	WAITING ON FUEL																WAIT ON FUEL																DRIF RAT HOLE																					
																	START PUMP MOTOR 1200																SPUD IN 2 3/4" HOLE 600																					
																	PUT PUMP TOGETHER 300 3																CHANGE BIT TO SPUD 600 630 1/2																					
																	DRIF RAT HOLE																SPUD IN w/ 8 3/4" BIT 630 1000 3 1/2																					
																																	DRIF RAT HOLE 1000 1200 2																					
Driller.....																Driller <u>Don Doyle</u>																Driller <u>Don Doyle</u> <u>D.A. Weber</u>																						

READING UP & DRG. OUT:
DRILLING:
REAMING:

CLASSES OF TIME BREAKDOWN

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

YES NO

Total Contract Timehrs.

Total Company Timehrs.

Toolpusher

Geo C. Wickham

approved by

DAILY DRILLING REPORT

REPORT NO.

DATE

OPERATOR

LEASE

WELL NO.

FIELD OR DIST.

COUNTY

STATE

IMP OIL ENT

61°20'N 122°00'W
TOE SUN BLACKSTONE E-72

BLACKSTONE CR

N.W.T.

CONTRACTOR

RIG NO.

DRILL PIPE

TOOL JOINT

O.D.

PUMPS

SIZE

MAKE

WT. & GR.

NO. JOINTS

FEET

RKB. TO

SET AT

REMARKS

S & T DRILLING (WESTERN) CO. LTD.

5

6"

O.D.

F.H.

NO.

MANUFACTURER

TYPE

STROKE

LENGTH

LAST

CASING

TUBING

OR LINER

2 1/2

H.M.

24

H-NO

11

345

13.10

357

200

SAX

CEM

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUMPER

1

7/10

C-250

15

2

7/10

C-150

12

3

TIME DISTRIBUTION-HOURS

MORN DAY EYE

RIG UP & TEAR DOWN

DRILLING ACTUAL

REAMING

CONDITIONING MUD & CIRCULATING

TRIPS

LUBRICATE RIG

DEVIATION SURVEY

TEST S.O.P.

CUT OFF DRILLING LINE

REAR RIG

WIRE LINE LOGGING

SHIMMING CASING

CEMENTING

MASTING ON CEMENT

DRILL TEST

OTHER

FISHING

A. PREPARED

B. TRIP TRIPS

C. TESTING

D. ADDITIONAL

E. OTHER

F. OTHER

G. OTHER

H. OTHER

I. OTHER

J. OTHER

K. OTHER

L. OTHER

M. OTHER

N. OTHER

O. OTHER

P. OTHER

Q. OTHER

R. OTHER

S. OTHER

T. OTHER

U. OTHER

V. OTHER

W. OTHER

X. OTHER

Y. OTHER

Z. OTHER

AA. OTHER

AB. OTHER

AC. OTHER

AD. OTHER

AE. OTHER

AF. OTHER

AG. OTHER

AH. OTHER

AI. OTHER

AJ. OTHER

AK. OTHER

AL. OTHER

AM. OTHER

AN. OTHER

AO. OTHER

AP. OTHER

AQ. OTHER

AR. OTHER

AS. OTHER

AT. OTHER

AU. OTHER

AV. OTHER

AW. OTHER

AX. OTHER

AY. OTHER

AZ. OTHER

BA. OTHER

BB. OTHER

BC. OTHER

BD. OTHER

BE. OTHER

NO.

DRILLING ASSEMBLY

AT END OF TOUR

STANDS D.P.

SINGLES D.P.

D.C.

I.D.

O.D.

FT.

STB.

BODY

O.D.

FT.

STB.

BODY

O.D.

FT.

RMR.

BODY

O.D.

FT.

SUBS.

O.D.

FT.

BIT OR C.B.

FT.

KELLY DOWN

FT.

TOTAL

FT.

WT. OF STRING

LBS.

NO.

DRILLING ASSEMBLY

AT END OF TOUR

STANDS D.P.

SINGLES D.P.

D.C.

I.D.

O.D.

FT.

STB.

BODY

O.D.

FT.

STB.

BODY

O.D.

FT.

RMR.

BODY

O.D.

FT.

SUBS.

O.D.

FT.

BIT OR C.B.

FT.

KELLY DOWN

FT.

TOTAL

FT.

WT. OF STRING

LBS.

NO.

DRILLING ASSEMBLY

AT END OF TOUR

STANDS D.P.

SINGLES D.P.

D.C.

I.D.

O.D.

FT.

STB.

BODY

O.D.

FT.

STB.

BIT NO.

RR 4

SIZE

7 7/8

MFG.

H.W.

TYPE

OSC-10

NO.

C-10

NOZZLE

SIZE

1 1/2

SER. NO.

2376

DEPTH OUT

110

DEPTH IN

110

TOTAL FTG.

TOTAL HR. RUN

COND. OF BIT

REAMER NO.

REAMER TYPE

DRILLER

D. A. Miller

NO.

DRILLING ASSEMBLY

AT END OF TOUR

STANDS D.P.

SINGLES D.P.

D.C.

I.D.

O.D.

FT.

STB.

BODY

O.D.

FT.

STB.

BODY

O.D.

FT.

RMR.

BODY

O.D.

FT.

SUBS.

O.D.

FT.

BIT OR C.B.

FT.

KELLY DOWN

FT.

TOTAL

FT.

WT. OF STRING

LBS.

NO.

DRILLING ASSEMBLY

AT END OF TOUR

STANDS D.P.

SINGLES D.P.

D.C.

I.D.

O.D.

FT.

STB.

BODY

O.D.

FT.

STB.

BODY

O.D.

FT.

RMR.

BODY

O.D.

FT.

MUD RECORD

TIME

WEIGHT

VISC. SEC

W.L. C.C.

FLTR. CK.

PH

SD. CONT. %

PRESSURE GRADIENT

MUD & CHEMICALS ADDED

TYPE

AMT.

TYPE

AMT.

COND. OF BIT

REAMER NO.

REAMER TYPE

DRILLER

D. A. Miller

NO.

DRILLING ASSEMBLY

AT END OF TOUR

STANDS D.P.

SINGLES D.P.

D.C.

I.D.

O.D.

FT.

STB.

BODY

O.D.

FT.

STB.

BODY

O.D.

FT.

RMR.

BODY

O.D.

FT.

SUBS.

O.D.

FT.

BIT OR C.B.

FT.

KELLY DOWN

FT.

TOTAL

FT.

WT. OF STRING

LBS.

NO.

DRILLING ASSEMBLY

AT END OF TOUR

STANDS D.P.

SINGLES D.P.

D.C.

I.D.

O.D.

FT.

STB.

BODY

O.D.

FT.

STB.

BODY

O.D.

FT.

RMR.

BODY

O.D.

FT.

SUBS.

O.D.

FT.

BIT OR C.B.

FT.

KELLY DOWN

FT.

TOTAL

FT.

WT. OF STRING

LBS.

NO.

DRILLING ASSEMBLY

AT END OF TOUR

STANDS D.P.

SINGLES D.P.

D.C.

I.D.

O.D.

FT.

STB.

BODY

O.D.

FT.

DAILY DRILLING REPORT										REPORT NO. 16 DATE Dec 27/69									
OPERATOR IMP OIL ENT										LEASE 61°20'N 122°00'W TOE 90N BLACKSTONE E-72									
CONTRACTOR S & T DRILLING (WESTERN) CO. LTD.										WELL NO. E-72 FIELD OR DIST. BLACKSTONE CR COUNTY STATE N.W.T.									
RIG NO. 5										DRILL PIPE STRING 6" O.D. TOOL JOINT 6" O.D. TYPE THD. FH									
SIGNATURE OF OPERATOR'S REPRESENTATIVE Geo C. Williams										SIGNATURE OF CONTRACTOR'S TOOL PUSHER Geo C. Williams									
PUMPS										LAST CASING TUBING OR LINER									
SIZE MAKE WT. & GR. NO. JOINTS FEET RKB. TO CSG. NO. SET AT REMARKS										8 3/4" M+M 2 1/4" 11 245 13.10 357 216 SAX CEM									
1. Nat C-250 15																			
2. Nat C-150 12																			
3.																			
TIME DISTRIBUTION - HOURS										NO. DRILLING ASSEMBLY AT END OF TOUR									
RIG UP & TEAR DOWN										STANDS D.P. FT.									
DRILLING ACTUAL										SINGLES D.P. FT.									
REAMING										D.C.									
CONDITIONING MUD & CIRCULATING										I.D. O.D. FT.									
TRIPS										D.C.									
LUBRICATE RIG										I.D. O.D. FT.									
DEVIATION SURVEY										STB. BODY O.D. FT.									
TEST S.O.P.										STB. BODY O.D. FT.									
CUT-OFF DRILLING LINE										RMR. BODY O.D. FT.									
DRILL RIG										SUBS O.D. FT.									
WIRE LINE LOGGING										BIT OR C.B. FT.									
RUNNING CASING & CEMENTING										KELLY DOWN FT.									
WAITING ON CEMENT										TOTAL FT.									
DRILL STEM TEST										WT. OF STRING LBS.									
OTHER										REAMER NO.									
FISHING										REAMER TYPE									
A. PERFORATING										DRILLER D.O. Wilfong									
B. STUBING TRIPS																			
C. SNABBING																			
D. TESTING																			
E. ADDITIONAL																			
TIME SUMMARY (OFFICE USE ONLY)																			
DAY WORK																			
HRS. W/DP																			
HRS. WO/DP																			
HRS. STANDBY																			
TOTAL DAY WORK																			
WIRE LINE RECORD																			
REEL NO.																			
NO. OF LINES SIZE																			
FEET SLIPPED																			
FEET CUT OFF																			
PRESENT LENGTH																			
TON ML OR TRIPS SINCE LAST CUT																			
CUMULATIVE TON ML OR TRIPS																			
NO. OF DAYS FROM SPUD																			
CUMULATIVE ROTATING HRS.																			
NO. DRILLING ASSEMBLY AT END OF TOUR										BIT RECORD									
STANDS D.P. FT.										BIT NO.									
SINGLES D.P. FT.										SIZE									
D.C.										MFG.									
I.D. O.D. FT.										TYPE									
D.C.										NO. NOZZLE									
I.D. O.D. FT.										SIZE									
STB. BODY O.D. FT.										SER. NO.									
STB. BODY O.D. FT.										DEPTH OUT									
RMR. BODY O.D. FT.										DEPTH IN									
SUBS O.D. FT.										TOTAL FTG.									
BIT OR C.B. FT.										TOTAL HR. RUN									
KELLY DOWN FT.										COND. OF BIT									
TOTAL FT.										REAMER NO.									
WT. OF STRING LBS.										REAMER TYPE									
DRILLER Don Doyle																			
NO. DRILLING ASSEMBLY AT END OF TOUR										BIT RECORD									
STANDS D.P. FT.										BIT NO.									
SINGLES D.P. FT.										SIZE									
D.C.										MFG.									
I.D. O.D. FT.										TYPE									
D.C.										NO. NOZZLE									
I.D. O.D. FT.										SIZE									
STB. BODY O.D. FT.										SER. NO.									
STB. BODY O.D. FT.										DEPTH OUT									
RMR. BODY O.D. FT.										DEPTH IN									
SUBS O.D. FT.										TOTAL FTG.									
BIT OR C.B. FT.										TOTAL HR. RUN									
KELLY DOWN FT.										COND. OF BIT									
TOTAL FT.										REAMER NO.									
WT. OF STRING LBS.										REAMER TYPE									
DRILLER Don Doyle																			
NO. DRILLING ASSEMBLY AT END OF TOUR										BIT RECORD									
STANDS D.P. FT.										BIT NO.									
SINGLES D.P. FT.										SIZE									
D.C.										MFG.									
I.D. O.D. FT.										TYPE									
D.C.										NO. NOZZLE									
I.D. O.D. FT.										SIZE									
STB. BODY O.D. FT.										SER. NO.									
STB. BODY O.D. FT.										DEPTH OUT									
RMR. BODY O.D. FT.										DEPTH IN									
SUBS O.D. FT.										TOTAL FTG.									
BIT OR C.B. FT.										TOTAL HR. RUN									
KELLY DOWN FT.										COND. OF BIT									
TOTAL FT.										REAMER NO.									
WT. OF STRING LBS.										REAMER TYPE									
DRILLER Don Doyle																			
FOOTAGE										FORMATION (SHOW CORE RECOVERY)									
FROM TO										4' 8"									
DEVIATION RECORD										DEPTH DEV. DIRECTION									
TIME LOG										ELAPSED TIME									
FROM TO										12:00 8:00 8									
DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS										LOGGING W/ SCHLUMBERGER									
FOOTAGE										FORMATION (SHOW CORE RECOVERY)									
FROM TO																			
DEVIATION RECORD										DEPTH DEV. DIRECTION									
TIME LOG										ELAPSED TIME									
FROM TO										8:00 4:00 8									
DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS										LOGGING W/ SCHLUMBERGER									
FOOTAGE										FORMATION (SHOW CORE RECOVERY)									
FROM TO																			
DEVIATION RECORD										DEPTH DEV. DIRECTION									
TIME LOG										ELAPSED TIME									
FROM TO										4:00 8:30 4 1/2									
DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS										LOGGING W/ SCHLUMBERGER V MOTOR SHUT OFF ON GET WATER & MUD CIRCULATING AFTER SHUT DOWN FOR VELOCITY SURVEY									
FOOTAGE										FORMATION (SHOW CORE RECOVERY)									
FROM TO										9:00 10:30 1 1/2									
DEVIATION RECORD										DEPTH DEV. DIRECTION									
TIME LOG										ELAPSED TIME									
FROM TO										10:30 11:15 3/4									
DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS										RUN IN W/ BIT TO CLEAN HOLE									
FOOTAGE										FORMATION (SHOW CORE RECOVERY)									
FROM TO										11:15 12:00 3/4									
DEVIATION RECORD										DEPTH DEV. DIRECTION									
TIME LOG										ELAPSED TIME									
FROM TO																			
DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS										PICK UP 9 SINGLES & BREAK PIPE									
FOOTAGE										FORMATION (SHOW CORE RECOVERY)									
FROM TO																			
DEVIATION RECORD										DEPTH DEV. DIRECTION									
TIME LOG										ELAPSED TIME									
FROM TO																			
DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS										CIRC COND HOLE TO TEST									

DAILY DRILLING REPORT										REPORT NO.	DATE																																																														
OPERATOR: IMP OIL ENT CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. SIGNATURE OF OPERATOR'S REPRESENTATIVE: <i>[Signature]</i>										LEASE: 61°20'N 122°45'W IOE SUN BLACKSTONE E-72 SIGNATURE OF CONTRACTOR'S TOOL PUSHER: <i>[Signature]</i>	WELL NO.: E-72 FIELD OR DIST.: BLACKSTONE CR COUNTY: NEW T																																																														
RIG NO.: 5 DRILL PIPE STRING: 6" O.D. TOOL JOINT: 6" O.D. TYPE: FM										PUMPS: <table border="1"> <thead> <tr> <th>NO.</th> <th>MANUFACTURER</th> <th>TYPE</th> <th>STROKE LENGTH</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Not</td> <td>C-250</td> <td>15</td> </tr> <tr> <td>2</td> <td>Not</td> <td>C-150</td> <td>12</td> </tr> </tbody> </table>		NO.	MANUFACTURER	TYPE	STROKE LENGTH	1	Not	C-250	15	2	Not	C-150	12																																																		
NO.	MANUFACTURER	TYPE	STROKE LENGTH																																																																						
1	Not	C-250	15																																																																						
2	Not	C-150	12																																																																						
SIZE: 8 1/2 MAKE: M+H WT. & GR.: 24 NO. JOINTS: 11 FEET: 345 RKB. TO CSG. HD.: 13.10 SET AT: 357 REMARKS: 200 S&T GEN																																																																									
TIME DISTRIBUTION—HOURS <table border="1"> <thead> <tr> <th></th> <th>MORN</th> <th>DAY</th> <th>EVE</th> </tr> </thead> <tbody> <tr> <td>RIG UP & TEAR DOWN</td> <td></td> <td></td> <td></td> </tr> <tr> <td>DRILLING ACTUAL</td> <td>1 1/4</td> <td></td> <td></td> </tr> <tr> <td>READING</td> <td></td> <td></td> <td></td> </tr> <tr> <td>CONDITIONING MUD & CIRCULATING</td> <td>3/4</td> <td></td> <td></td> </tr> <tr> <td>TRIPS</td> <td>1 1/4</td> <td></td> <td></td> </tr> <tr> <td>LUBRICATING</td> <td>1/4</td> <td></td> <td></td> </tr> <tr> <td>DEVIATION SURVEY</td> <td></td> <td></td> <td></td> </tr> <tr> <td>TEST B.O.P.</td> <td></td> <td></td> <td></td> </tr> <tr> <td>CUT OFF DRILLING LINE</td> <td></td> <td></td> <td></td> </tr> <tr> <td>REAR RIG</td> <td>1/4</td> <td></td> <td></td> </tr> <tr> <td>WIRE LINE</td> <td></td> <td></td> <td></td> </tr> <tr> <td>DRILLING CASING & CEMENTING</td> <td></td> <td></td> <td></td> </tr> <tr> <td>WAITING ON CEMENT</td> <td></td> <td></td> <td></td> </tr> <tr> <td>DRILL-STEIN TEST</td> <td></td> <td></td> <td></td> </tr> <tr> <td>OTHER</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>											MORN	DAY	EVE	RIG UP & TEAR DOWN				DRILLING ACTUAL	1 1/4			READING				CONDITIONING MUD & CIRCULATING	3/4			TRIPS	1 1/4			LUBRICATING	1/4			DEVIATION SURVEY				TEST B.O.P.				CUT OFF DRILLING LINE				REAR RIG	1/4			WIRE LINE				DRILLING CASING & CEMENTING				WAITING ON CEMENT				DRILL-STEIN TEST				OTHER			
	MORN	DAY	EVE																																																																						
RIG UP & TEAR DOWN																																																																									
DRILLING ACTUAL	1 1/4																																																																								
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DATE _____

DATE 11-15-63

OPERATOR IMP OIL ENT		LEASE TOE SUN BLACKSTONE E-92		WELL NO. E-72		FIELD OR DIST. BLACKSTONE CR		COUNTY		STATE N W T						
CONTRACTOR S & T DRILLING (WESTERN) CO. LTD.		RIG NO. 5	DRILL PIPE STRING 2 1/2	TOOL JOINT 6" O.D.	PUMPS			LAST CASING TUBING OR LINER	SIZE 3 1/8	MAKE M+M	WT. & GR. 24 H-40	NO. JOINTS 11	FEET 345	RKB. TO CSG. HD. 13.10	SET AT 357	REMARKS 200 SAX CEM
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>Geoff D. [Signature]</i>		SIGNATURE OF CONTRACTOR TOOL PUSHER <i>[Signature]</i>			NO.	MANUFACTURER	TYPE		STROKE LENGTH							
					1	<i>Not</i>	<i>C-250</i>		<i>15</i>							
					2	<i>Not</i>	<i>C-150</i>	<i>12</i>								

TIME DISTRIBUTION-HOURS				NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD		MUD RECORD			FOOTAGE		DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1		PUMP NO. 2		METHOD RUN SOL-S PAR-P COND-C	
MORN	DAY	EVE	BIT NO.			SIZE	TIME	WEIGHT	VISC-SEC	W.L.-CC.	FLTR. CK.	FROM							TO	LINER SIZE	S.P.M.	LINER SIZE		S.P.M.
RIG UP & TEAR DOWN				28	STANDS D.P. 2614.99 FT.	5	7 1/8	100	9.7	4 00	3 00	3290	3324	D		55	45	1000	5 1/2	5 1/2	5 1/2	S		
DRILLING ACTUAL: 5 1/4 5 1/4 7 1/4				22	D.C. 6 1/4 673.38 FT.	MFG. HW	115	ANNHYDRITE								55	45	1200	X	30	X			
REAMING					LD. O.D. 673.38 FT.	TYPE X55R	7.2								FUEL 5' 10"				15	12				
CONDITIONING MUD & CIRCULATING					D.C.	NO. 2 1	FLTR. CK. 432								DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
TRIPS					LD. O.D.	NOZZLE	SIZE 1 1/2 13	PH 11.0	11.0						TIME LOG	FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS					
LUBRICATE RIG					STB. BODY O.D.	SER. NO. 15716	SD. CONT. %								12 00	12 15	1/4	RIG SERV						
DEVIATION SURVEY					STB. BODY O.D.	DEPTH OUT	PRESSURE GRADIENT									12 15	1 45	1 1/4	DRLG-PENETRATED ANHYDRITE MUD CLOGGED					
TEST B.O.P.					RMR. BODY O.D.	DEPTH IN 2883										1 45	4 15	2 1/2	CIRC COND MUD					
CUT OFF DRILLING LINE					SUBS O.D. 4.00 FT.	TOTAL FTG. 441	MUD & CHEMICALS ADDED	TYPE	AMT.	TYPE	AMT.					4 15	8 00	3 1/4	DRLG					
REAR RIG					BIT OR C.B.	TOTAL HR. RUN 48	CE- 400	SPRASH 400																
WIRE LINE LOGGING					KELLY DOWN 31.63 FT.	COND. OF BIT RUN	CAUSTIC 100																	
REAMING, CASING & CEMENTING					TOTAL 3324 FT.	REAMER NO.	PENEX 208																	
HEATING ON CEMENT					WT. OF STRING 30811 LBS.	REAMER TYPE	DRILLER D.A. WILKER																	
DRILL STEEL TEST					NO.	5																		
TIME					STANDS D.P. 2614.99 FT.	NO. 5	7 1/8	12 00	9.4	3 00	3 00	3324	3386	D		55	45	1050	5 1/2	5 1/2	5 1/2	S		
REAMING					D.C. 6 1/4 673.38 FT.	MFG. HW	102	100	9 8															
A. PERFORATING					LD. O.D. 673.38 FT.	TYPE X55R	8.5																	
B. TUBING TRIP					D.C.	NO. 2 1	FLTR. CK. 432																	
C. GRABBING					LD. O.D.	NOZZLE	SIZE 1 1/2 13	PH 11.0	11.0															
D. TESTING					STB. BODY O.D.	SER. NO. 15716	SD. CONT. %																	
E. ADDITIONAL					STB. BODY O.D.	DEPTH OUT	PRESSURE GRADIENT																	
TIME SUMMARY (OFFICE USE ONLY)					RMR. BODY O.D.	DEPTH IN 2883																		
DAY WORK					SUBS O.D. 4.00 FT.	TOTAL FTG. 503	MUD & CHEMICALS ADDED	TYPE	AMT.	TYPE	AMT.													
HRS. W/D					BIT OR C.B.	TOTAL HR. RUN 53 1/2	CAUSTIC 450																	
HRS. W/O/D					KELLY DOWN 33.00 FT.	COND. OF BIT RUN	PENEX 550																	
HRS. STANDBY					TOTAL 3386 FT.	REAMER NO.	WATER																	
					WT. OF STRING 108 M LBS.	REAMER TYPE	DRILLER Don Doyle																	
TOTAL DAY WORK					NO.	5																		
WIRE LINE RECORD					STANDS D.P. 2706.68 FT.	NO. 5	7 1/8	7 15	8.30	12 00														
REEL NO.					SINGLES D.P. 63.14 FT.	SIZE 7 1/8	WEIGHT 9.4	9.4	9.4															
NO. OF LINES					D.C. 1 1/4 673.38 FT.	MFG. HW	VISC-SEC 89	105	105															
FEET SLIPPED					LD. O.D. 673.38 FT.	TYPE X55R	W.L.-CC. 12.2	12.2																
FEET CUT OFF					D.C.	NO. 2 1	FLTR. CK. 432																	
PRESENT LENGTH					LD. O.D.	NOZZLE	SIZE 1 1/2 13	PH 12.0	11.5	11.5														
TON. M. OR TRIPS SINCE LAST CUT					STB. BODY O.D.	SER. NO. 15716	SD. CONT. %																	
CUMULATIVE TON. M. OR TRIPS					STB. BODY O.D.	DEPTH OUT	PRESSURE GRADIENT																	
NO. OF DAYS FROM SPUD					RMR. BODY O.D.	DEPTH IN 2883																		
CUMULATIVE ROTATING HRS.					SUBS O.D. 4.00 FT.	TOTAL FTG. 586	MUD & CHEMICALS ADDED	TYPE	AMT.	TYPE	AMT.													
					BIT OR C.B.	TOTAL HR. RUN 60 1/2	GEL 1100																	
					KELLY DOWN 24.90 FT.	COND. OF BIT RUN																		
					TOTAL 34.69 FT.	REAMER NO.																		
					WT. OF STRING 110 M LBS.	REAMER TYPE	DRILLER Don Doyle D.O. Wilker																	

DATE _____

OPERATOR IMP OIL ENT		LEASE 61° 20' N 122° 00' W IOE SUN BLACKSTONE E-72		WELL NO. E-72	FIELD OR DIST. BLACK STONE CR	COUNTY	STATE NWT						
CONTRACTOR S & T DRILLING (WESTERN) CO. LTD.		RIG NO. 5	DRILL PIPE STRING NO. 1 SIZE 4 1/2 TYPE THD FH	TOOL JOINT 6" O.D.	PUMPS	SIZE 8 5/8	MAKE M+M	WT. & GR. 24 H-HL	NO. JOINTS 11	FEET 345	RKB. TO CSG. HD. 13.10	SET AT 357	REMARKS 200 SAE CEM
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER			LAST CASING TUBING OR LINER								

TIME DISTRIBUTION-HOURS				NO.	DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD			FOOTAGE		DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1		PUMP NO. 2		METH RUN SGL PAR-E COM
	MOTN	DAY	EVE		STANDS D.P.	FT.	BIT NO.	SIZE	TIME	WEIGHT	VISC-SEC	W.L.-C.C.	FROM							TO	LINER SIZE	S.P.M.	LINER SIZE	
RIG UP & TEAR DOWN				1	SINGLES D.P.	31.31	FT.	7 1/8	9.4	9.5	9.5	2567	2675	D			50	40	1050	5 1/2	59	5 1/2	5	
DRILLING ACTUAL	7 1/2	6 1/2	3 1/4	22	D.C.	6 1/4	FT.	H.W.	60	55	55									X	X			
REAMING					I.D. O.D.	673.38	FT.	X55R												15	12			
CONDITIONING MUD & CIRCULATING			1 1/2		D.C.		FT.	NO. 2 1																
TRIPS			3		I.D. O.D.		FT.	SIZE 12 13																
LUBRICATE RIG			1/4 1/4		STR. BODY O.D.		FT.	SER. NO. 16300																
DEVIATION SURVEY	1/2	1/2			STR. BODY O.D.		FT.	DEPTH OUT																
TEST B.O.P.					RMR. BODY O.D.		FT.	DEPTH IN	2397															
CUT OFF DRILLING LINE					SUBS	4.00	FT.	TOTAL FTG.	278															
PAIR RIG	1/4	1/4			BIT OR C.B.		FT.	TOTAL HR. RUN	20 1/2															
DRILLING							FT.	COND. OF BIT	RUN															
WIRE LINE LOGGING					KELLY DOWN	38.30	FT.																	
RUNNING CASING & CEMENTING					TOTAL	2675	FT.	REAMER NO.																
WAITING ON CEMENT					WT. OF STRING	100 M	LBS.	REAMER TYPE																
DRILL STEM TEST																								
OTHER																								
FISHING																								
A. PERFORATING																								
B. TUBING TRIPS																								
C. STABBING																								
D. TESTING																								
E. ADDITIONAL																								
TIME SUMMARY (OFFICE USE ONLY)																								
DAY WORK																								
HRS. W/DP																								
HRS. WO/DP																								
HRS. STANDBY																								
TOTAL DAY WORK																								
WIRE LINE RECORD																								
REEL NO.																								
NO. OF LINES																								
SIZE																								
FEET SLIPPED																								
FEET CUT OFF																								
PRESENT LENGTH																								
TON AL. OR TRIPS SINCE LAST CUT																								
CUMULATIVE TON AL. OR TRIPS																								
NO. OF DAYS FROM SPUD																								
CUMULATIVE ROTATING HRS.																								

DAILY DRILLING REPORT										REPORT NO. 9 DATE 12/20/67									
OPERATOR IMP OIL ENT										LEASE 61°20'N-122°00'W TOE SUN BLACKSTONE E-72									
CONTRACTOR S & J DRILLING (WESTERN) CO. LTD.										FIELD OR DIST. BLACKSTONE CR COUNTY STATE N.W.T.									
RIG NO. 5										PUMPS									
DRILL PIPE STRING NO. 2 1/2" O.D. 6" TYPE THD. F.H.										SIZE MAKE WT. & GR. NO. JOINTS FEET RKB. TO CSG. HD. SET AT REMARKS									
SIGNATURE OF OPERATOR'S REPRESENTATIVE										SIGNATURE OF CONTRACTOR'S TOOL PUSHER									
1. 7/16" C-250 15										LAST CASING TUBING OR LINER									
2. 7/16" C-150 12																			
3.																			
TIME DISTRIBUTION-HOURS										NO. DRILLING ASSEMBLY AT END OF TOUR									
MORN DAY EVE										STANDS D.P. FT. BIT NO. 2 C									
RIG UP & TEAR DOWN										SINGLES D.P. FT. SIZE 7 1/2									
DRILLING ACTUAL 5 3/4										D.C. 6 1/4 584.18 FT. MFG. CNRIS									
REAMING 1										D.C. 6 1/4 584.18 FT. TYPE 7									
CONDITIONING MUD & CIRCULATING										D.C. 6 1/4 584.18 FT. NOZZLE NO. 2									
TRIPS 2 1/4 1/2										D.C. 6 1/4 584.18 FT. NOZZLE SIZE 2 1/2									
LUBRICATE RIG 1/4 1/4										STB. BODY O.D. FT. SER. NO. ECP210									
DEVIATION SURVEY 1/4 1/4										STB. BODY O.D. FT. DEPTH OUT 2397									
TEST S.O.P. 1/4 1/4										RMR. BODY O.D. FT. DEPTH IN 2370									
CUT OFF DRILLING LINE 1/4 1/4										SUBS O.D. 4.00 FT. TOTAL FTG. 27									
REAR RIG 1/4 1/4										BIT OR C.B. 65.78 FT. TOTAL HR. RUN 6 3/4									
KELLY DOWN 1/4 1/4										COND. OF BIT 6010									
TOTAL 5 3/4										REAMER NO. DRILLER D.O. Walker									
REAR LINE LOGGING										REAMER TYPE									
RUNNING CASING & CEMENTING										MUD & CHEMICALS ADDED									
WAITING ON CEMENT										TYPE AMT. TYPE AMT.									
DRILL STEM TEST										FOOTAGE FROM TO									
OTHER 1/4 1/4										DR. D. RM. R. CORE. C. CORE. NO.									
FISHING										FORMATION (SHOW CORE RECOVERY)									
A. PERFORMING										ROTARY RPM									
B. TUBING TESTS										WT. ON BIT 1000#									
C. SWABBER										PUMP PRESS									
D. TESTING										PUMP NO. 1 PUMP NO. 2									
E. ADDITIONAL										METHOD RUN									
TIME SUMMARY (OFFICE USE ONLY)										SGL. 5 PAR. EL. P. COM. D.C.									
DAY WORK										NO. DRILLING ASSEMBLY AT END OF TOUR									
HRS. W/DP										STANDS D.P. 1746.25 FT. BIT NO. 3									
HRS. WO/DP										SINGLES D.P. 31.25 FT. SIZE 7 1/2									
HRS. STANDST.										D.C. 8 1/4 673.38 FT. MFG. H.W.									
										D.C. 8 1/4 673.38 FT. TYPE 755R									
										D.C. 8 1/4 673.38 FT. NOZZLE NO. 2									
										D.C. 8 1/4 673.38 FT. NOZZLE SIZE 2 1/2									
										STB. BODY O.D. FT. SER. NO. K300									
										STB. BODY O.D. FT. DEPTH OUT 2397									
										RMR. BODY O.D. FT. DEPTH IN 2397									
										SUBS O.D. 4.00 FT. TOTAL FTG. 76									
										BIT OR C.B. 17.35 FT. TOTAL HR. RUN 5 3/4									
										KELLY DOWN 17.35 FT. COND. OF BIT RUN									
										TOTAL 24.73 FT. REAMER NO. DRILLER Don Doyle									
										REAMER TYPE									
										MUD & CHEMICALS ADDED									
										TYPE AMT. TYPE AMT.									
										FOOTAGE FROM TO									
										DR. D. RM. R. CORE. C. CORE. NO.									
										FORMATION (SHOW CORE RECOVERY)									
										ROTARY RPM									
										WT. ON BIT 1000#									
										PUMP PRESS									
										PUMP NO. 1 PUMP NO. 2									
										METHOD RUN									
										SGL. 5 PAR. EL. P. COM. D.C.									
										NO. DRILLING ASSEMBLY AT END OF TOUR									
										STANDS D.P. 1884.19 FT. BIT NO. 7 1/2									
										SINGLES D.P. 31.57 FT. SIZE 7 1/2									
										D.C. 6 1/4 673.38 FT. MFG. H.W.									
										D.C. 6 1/4 673.38 FT. TYPE 755R									
										D.C. 6 1/4 673.38 FT. NOZZLE NO. 2									
										D.C. 6 1/4 673.38 FT. NOZZLE SIZE 2 1/2									
										STB. BODY O.D. FT. SER. NO. K300									
										STB. BODY O.D. FT. DEPTH OUT 2397									
										RMR. BODY O.D. FT. DEPTH IN 2397									
										SUBS O.D. 4.00 FT. TOTAL FTG. 170									
										BIT OR C.B. 17.35 FT. TOTAL HR. RUN 13 1/4									
										KELLY DOWN 17.35 FT. COND. OF BIT RUN									
										TOTAL 25.67 FT. REAMER NO. DRILLER Don Doyle									
										REAMER TYPE									
										MUD & CHEMICALS ADDED									
										TYPE AMT. TYPE AMT.									
										FOOTAGE FROM TO									
										DR. D. RM. R. CORE. C. CORE. NO.									
										FORMATION (SHOW CORE RECOVERY)									
										ROTARY RPM									
										WT. ON BIT 1000#									
										PUMP PRESS									
										PUMP NO. 1 PUMP NO. 2									
										METHOD RUN									
										SGL. 5 PAR. EL. P. COM. D.C.									
										NO. DRILLING ASSEMBLY AT END OF TOUR									
										STANDS D.P. 1884.19 FT. BIT NO. 7 1/2									
										SINGLES D.P. 31.57 FT. SIZE 7 1/2									
										D.C. 6 1/4 673.38 FT. MFG. H.W.									
										D.C. 6 1/4 673.38 FT. TYPE 755R									
										D.C. 6 1/4 673.38 FT. NOZZLE NO. 2									
										D.C. 6 1/4 673.38 FT. NOZZLE SIZE 2 1/2									
										STB. BODY O.D. FT. SER. NO. K300									
										STB. BODY O.D. FT. DEPTH OUT 2397									
										RMR. BODY O.D. FT. DEPTH IN 2397									
										SUBS O.D. 4.00 FT. TOTAL FTG. 170									
										BIT OR C.B. 17.35 FT. TOTAL HR. RUN 13 1/4									
										KELLY DOWN 17.35 FT. COND. OF BIT RUN									
										TOTAL 25.67 FT. REAMER NO. DRILLER Don Doyle									
										REAMER TYPE									
										MUD & CHEMICALS ADDED									
										TYPE AMT. TYPE AMT.									
										FOOTAGE FROM TO									
										DR. D. RM. R. CORE. C. CORE. NO.									
										FORMATION (SHOW CORE RECOVERY)									
										ROTARY RPM									
										WT. ON BIT 1000#									
										PUMP PRESS									
										PUMP NO. 1 PUMP NO. 2									
										METHOD RUN									
										SGL. 5 PAR. EL. P. COM. D.C.									

OPERATOR IMP OIL ENT		DAILY DRILLING REPORT		REPORT NO. 6		DATE 11/17/67			
CONTRACTOR S & T DRILLING (WESTERN) CO. LTD.		LEASE TOE SUN BLACKSTONE E-72		TOLL NO. 6-72		FIELD OR DIST. BLACKSTONE CR		COUNTY NEW T	
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>Joe E. Wulfran</i>		SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>Joe E. Wulfran</i>		PUMPS		LAST CASING TUBING OR LINER		STATE NWT	
TIME DISTRIBUTION - HOURS		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FORMATION (SHOW CORE RECOVERY)	
RIG UP & TEAR DOWN		STANDS D.P. 937.32 FT.		BIT NO. 1		TIME 10" 4" 7"		FOOTAGE FROM 1460 TO 1665	
DRILLING ACTUAL 24 1/2 H		SINGLES D.P. 31.60 FT.		SIZE 7 3/4		WEIGHT 8.5 8.7 8.9		ROTARY RPM 11	
REAMING		D.C. 6 1/4		MFG. H.W.		VISC. SEC 28 30 38		WT. ON BIT 1000	
CONDITIONING MUD & CIRCULATING		I.D. O.D. 673.38 FT.		TYPE X10		W.L. C.C. 2 1		PUMP PRESS 1500	
TRIPS		D.C. 6 1/4		NOZZLE 2 1		FLTR. CK. 10.5		PUMP NO. 1	
LUBRICATE RIG 1/4 1/4 1/4		I.D. O.D. 673.38 FT.		SER. NO. 18712		PH 10.5		PUMP NO. 2	
DEVIATION SURVEY 1 1 1/2		STR. BODY O.D. 673.38 FT.		DEPTH OUT 367		SD. CONT. % 10.5		METHOD RUN S	
TEST B.O.P.		STR. BODY O.D. 673.38 FT.		DEPTH IN 367		PRESSURE GRADIENT 10.5		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	
CUT OFF DRILLING LINE		RMR. BODY O.D. 673.38 FT.		TOTAL FTG. 1298		MUD & CHEMICALS ADDED		HOLE DEVIATING 65-80 30 100 5 1/2 5 1/2	
PAIR RIG 1/4		SUBS O.D. 4.00 FT.		TOTAL HR. RUN 92		TYPE CE L 3700		ROTARY RPM 11	
WIRELINE LOGGING		BIT OR C.B. 673.38 FT.		COND. OF BIT RUN		AMT. 6 E L 3700		WT. ON BIT 1000	
RUNNING CASING & CEMENTING		KELLY DOWN 18.70 FT.		REAMER NO. 18712		REAMER TYPE BENEX 6"		PUMP PRESS 1500	
WAITING ON CEMENT		TOTAL 1665 FT.		DRILLER H.A. Wulfran				PUMP NO. 1	
DRILL STEM TEST		WT. OF STRING 78 M LBS.						PUMP NO. 2	
FISHING		NO. 1		STANDS D.P. 1036.95 FT.		BIT NO. 1		FORMATION (SHOW CORE RECOVERY)	
A. PERFORMANCE		SINGLES D.P. 11.87 FT.		SIZE 7 3/4		TIME 9 3/4 10 3/4 10 3/4		ROTARY RPM 11	
B. TUBING TRIES		D.C. 6 1/4		MFG. H.W.		WEIGHT 8.9 8.9 8.9		WT. ON BIT 1000	
C. SPABBING		I.D. O.D. 673.38 FT.		TYPE X10		VISC. SEC 34 34 34		PUMP PRESS 1500	
D. TESTING		D.C. 6 1/4		NOZZLE 2 1		W.L. C.C. 2 1		PUMP NO. 1	
E. ADDITIONAL		I.D. O.D. 673.38 FT.		SER. NO. 18712		FLTR. CK. 10.5		PUMP NO. 2	
		STR. BODY O.D. 673.38 FT.		DEPTH OUT 367		PH 10.5		METHOD RUN S	
		STR. BODY O.D. 673.38 FT.		DEPTH IN 367		SD. CONT. % 10.5		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	
		RMR. BODY O.D. 673.38 FT.		TOTAL FTG. 1444		MUD & CHEMICALS ADDED		HOLE DEVIATING 65-80 30 100 5 1/2 5 1/2	
		SUBS O.D. 4.00 FT.		TOTAL HR. RUN 28 1/2		TYPE Water & Starch		ROTARY RPM 11	
		BIT OR C.B. 673.38 FT.		COND. OF BIT RUN		AMT. 1000		WT. ON BIT 1000	
		KELLY DOWN 41.50 FT.		REAMER NO. 18712		REAMER TYPE BENEX 4"		PUMP PRESS 1500	
		TOTAL 1811 FT.		DRILLER Don Doyle				PUMP NO. 1	
		WT. OF STRING 80 M LBS.						PUMP NO. 2	
		NO. 1		STANDS D.P. 1123.68 FT.		BIT NO. 1		FORMATION (SHOW CORE RECOVERY)	
		SINGLES D.P. 62.74 FT.		SIZE 7 3/4		TIME 4:30 11:00		ROTARY RPM 11	
		D.C. 6 1/4		MFG. H.W.		WEIGHT 8.9 8.9		WT. ON BIT 1000	
		I.D. O.D. 673.38 FT.		TYPE X10		VISC. SEC 38 38		PUMP PRESS 1500	
		D.C. 6 1/4		NOZZLE 2 1		W.L. C.C. 2 1		PUMP NO. 1	
		I.D. O.D. 673.38 FT.		SER. NO. 18712		FLTR. CK. 10.5		PUMP NO. 2	
		STR. BODY O.D. 673.38 FT.		DEPTH OUT 367		PH 10.5		METHOD RUN S	
		STR. BODY O.D. 673.38 FT.		DEPTH IN 367		SD. CONT. % 10.5		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	
		RMR. BODY O.D. 673.38 FT.		TOTAL FTG. 1425		MUD & CHEMICALS ADDED		HOLE DEVIATING 65-80 30 100 5 1/2 5 1/2	
		SUBS O.D. 4.00 FT.		TOTAL HR. RUN 30 1/2		TYPE Water & Starch		ROTARY RPM 11	
		BIT OR C.B. 673.38 FT.		COND. OF BIT RUN		AMT. 1000		WT. ON BIT 1000	
		KELLY DOWN 29.17 FT.		REAMER NO. 18712		REAMER TYPE BENEX 4"		PUMP PRESS 1500	
		TOTAL 1900 FT.		DRILLER Don Doyle				PUMP NO. 1	
		WT. OF STRING 81 M LBS.						PUMP NO. 2	
		NO. 1		STANDS D.P. 1123.68 FT.		BIT NO. 1		FORMATION (SHOW CORE RECOVERY)	
		SINGLES D.P. 62.74 FT.		SIZE 7 3/4		TIME 4:30 11:00		ROTARY RPM 11	
		D.C. 6 1/4		MFG. H.W.		WEIGHT 8.9 8.9		WT. ON BIT 1000	
		I.D. O.D. 673.38 FT.		TYPE X10		VISC. SEC 38 38		PUMP PRESS 1500	
		D.C. 6 1/4		NOZZLE 2 1		W.L. C.C. 2 1		PUMP NO. 1	
		I.D. O.D. 673.38 FT.		SER. NO. 18712		FLTR. CK. 10.5		PUMP NO. 2	
		STR. BODY O.D. 673.38 FT.		DEPTH OUT 367		PH 10.5		METHOD RUN S	
		STR. BODY O.D. 673.38 FT.		DEPTH IN 367		SD. CONT. % 10.5		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	
		RMR. BODY O.D. 673.38 FT.		TOTAL FTG. 1425		MUD & CHEMICALS ADDED		HOLE DEVIATING 65-80 30 100 5 1/2 5 1/2	
		SUBS O.D. 4.00 FT.		TOTAL HR. RUN 30 1/2		TYPE Water & Starch		ROTARY RPM 11	
		BIT OR C.B. 673.38 FT.		COND. OF BIT RUN		AMT. 1000		WT. ON BIT 1000	
		KELLY DOWN 29.17 FT.		REAMER NO. 18712		REAMER TYPE BENEX 4"		PUMP PRESS 1500	
		TOTAL 1900 FT.		DRILLER Don Doyle				PUMP NO. 1	
		WT. OF STRING 81 M LBS.						PUMP NO. 2	
		NO. 1		STANDS D.P. 1123.68 FT.		BIT NO. 1		FORMATION (SHOW CORE RECOVERY)	
		SINGLES D.P. 62.74 FT.		SIZE 7 3/4		TIME 4:30 11:00		ROTARY RPM 11	
		D.C. 6 1/4		MFG. H.W.		WEIGHT 8.9 8.9		WT. ON BIT 1000	
		I.D. O.D. 673.38 FT.		TYPE X10		VISC. SEC 38 38		PUMP PRESS 1500	
		D.C. 6 1/4		NOZZLE 2 1		W.L. C.C. 2 1		PUMP NO. 1	
		I.D. O.D. 673.38 FT.		SER. NO. 18712		FLTR. CK. 10.5		PUMP NO. 2	
		STR. BODY O.D. 673.38 FT.		DEPTH OUT 367		PH 10.5		METHOD RUN S	
		STR. BODY O.D. 673.38 FT.		DEPTH IN 367		SD. CONT. % 10.5		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	
		RMR. BODY O.D. 673.38 FT.		TOTAL FTG. 1425		MUD & CHEMICALS ADDED		HOLE DEVIATING 65-80 30 100 5 1/2 5 1/2	
		SUBS O.D. 4.00 FT.		TOTAL HR. RUN 30 1/2		TYPE Water & Starch		ROTARY RPM 11	
		BIT OR C.B. 673.38 FT.		COND. OF BIT RUN		AMT. 1000		WT. ON BIT 1000	
		KELLY DOWN 29.17 FT.		REAMER NO. 18712		REAMER TYPE BENEX 4"		PUMP PRESS 1500	
		TOTAL 1900 FT.		DRILLER Don Doyle				PUMP NO. 1	
		WT. OF STRING 81 M LBS.						PUMP NO. 2	
		NO. 1		STANDS D.P. 1123.68 FT.		BIT NO. 1		FORMATION (SHOW CORE RECOVERY)	
		SINGLES D.P. 62.74 FT.		SIZE 7 3/4		TIME 4:30 11:00		ROTARY RPM 11	
		D.C. 6 1/4		MFG. H.W.		WEIGHT 8.9 8.9		WT. ON BIT 1000	
		I.D. O.D. 673.38 FT.		TYPE X10		VISC. SEC 38 38		PUMP PRESS 1500	
		D.C. 6 1/4		NOZZLE 2 1		W.L. C.C. 2 1		PUMP NO. 1	
		I.D. O.D. 673.38 FT.		SER. NO. 18712		FLTR. CK. 10.5		PUMP NO. 2	
		STR. BODY O.D. 673.38 FT.		DEPTH OUT 367		PH 10.5		METHOD RUN S	
		STR. BODY O.D. 673.38 FT.		DEPTH IN 367		SD. CONT. % 10.5		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	
		RMR. BODY O.D. 673.38 FT.		TOTAL FTG. 1425		MUD & CHEMICALS ADDED		HOLE DEVIATING 65-80 30 100 5 1/2 5 1/2	
		SUBS O.D. 4.00 FT.		TOTAL HR. RUN 30 1/2		TYPE Water & Starch		ROTARY RPM 11	
		BIT OR C.B. 673.38 FT.		COND. OF BIT RUN		AMT. 1000		WT. ON BIT 1000	
		KELLY DOWN 29.17 FT.		REAMER NO. 18712		REAMER TYPE BENEX 4"		PUMP PRESS 1500	
		TOTAL 1900 FT.		DRILLER Don Doyle				PUMP NO. 1	
		WT. OF STRING 81 M LBS.						PUMP NO. 2	
		NO. 1		STANDS D.P. 1123.68 FT.		BIT NO. 1		FORMATION (SHOW CORE RECOVERY)	
		SINGLES D.P. 62.74 FT.		SIZE 7 3/4		TIME 4:30 11:00		ROTARY RPM 11	
		D.C. 6 1/4		MFG. H.W.		WEIGHT 8.9 8.9		WT. ON BIT 1000	
		I.D. O.D. 673.38 FT.		TYPE X10		VISC. SEC 38 38		PUMP PRESS 1500	
		D.C. 6 1/4		NOZZLE 2 1		W.L. C.C. 2 1		PUMP NO. 1	
		I.D. O.D. 673.38 FT.		SER. NO. 18712		FLTR. CK. 10.5		PUMP NO. 2	
		STR. BODY O.D. 673.38 FT.		DEPTH OUT 367		PH 10.5		METHOD RUN S	
		STR. BODY O.D. 673.38 FT.		DEPTH IN 367		SD. CONT. % 10.5		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	
		RMR. BODY O.D. 673.38 FT.		TOTAL FTG. 1425		MUD & CHEMICALS ADDED		HOLE DEVIATING 65-80 30 100 5 1/2 5 1/2	
		SUBS O.D. 4.00 FT.		TOTAL HR. RUN 30 1/2		TYPE Water & Starch		ROTARY RPM 11	
		BIT OR C.B. 673.38 FT.		COND. OF BIT RUN		AMT. 1000		WT. ON BIT 1000	
		KELLY DOWN 29.17 FT.		REAMER NO. 18712		REAMER TYPE BENEX 4"		PUMP PRESS 1500	
		TOTAL 1900 FT.		DRILLER Don Doyle				PUMP NO. 1	
		WT. OF STRING 81 M LBS.						PUMP NO. 2	
		NO. 1		STANDS D.P. 1123.68 FT.		BIT NO. 1		FORMATION (SHOW CORE RECOVERY)	
		SINGLES D.P. 62.74 FT.		SIZE 7 3/4		TIME 4:30 11:00		ROTARY RPM 11	
		D.C. 6 1/4		MFG. H.W.		WEIGHT 8.9 8.9		WT. ON BIT 1000	
		I.D. O.D. 673.38 FT.		TYPE X10		VISC. SEC 38 38		PUMP PRESS 1500	
		D.C. 6 1/4		NOZZLE 2 1		W.L. C.C. 2 1		PUMP NO. 1	
		I.D. O.D. 673.38 FT.		SER. NO. 18712		FLTR. CK. 10.5		PUMP NO. 2	
		STR. BODY O.D. 673.38 FT.		DEPTH OUT 367		PH 10.5		METHOD RUN S	
		STR. BODY O.D. 673.38 FT.		DEPTH IN 367		SD. CONT. % 10.5		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	
		RMR. BODY O.D. 673.38 FT.		TOTAL FTG. 1425		MUD & CHEMICALS ADDED		HOLE DEVIATING 65-80 30 100 5 1/2 5 1/2	
		SUBS O.D. 4.00 FT.		TOTAL HR. RUN 30 1/2		TYPE Water & Starch		ROTARY RPM 11	
		BIT OR C.B. 673.38 FT.		COND. OF BIT RUN		AMT. 1000		WT. ON BIT 1000	
		KELLY DOWN 29.17 FT.		REAMER NO. 18712		REAMER TYPE BENEX 4"		PUMP PRESS 1500	
		TOTAL 1900 FT.		DRILLER Don Doyle				PUMP NO. 1	
		WT. OF STRING 81 M LBS.						PUMP NO. 2	
		NO. 1		STANDS D.P. 1123.68 FT.		BIT NO. 1		FORMATION (SHOW CORE RECOVERY)	
		SINGLES D.P. 62.74 FT.		SIZE 7 3/4		TIME 4:30 11:00		ROTARY RPM 11	
		D.C. 6 1/4		MFG. H.W.		WEIGHT 8.9 8.9		WT. ON BIT 1000	
		I.D. O.D. 673.38 FT.		TYPE X10		VISC. SEC 38 38		PUMP PRESS 1500	
		D.C. 6 1/4		NOZZLE 2 1		W.L. C.C. 2 1		PUMP NO. 1	
		I.D. O.D. 673.38 FT.		SER. NO. 18712		FLTR. CK. 10.5		PUMP NO. 2	
		STR. BODY O.D. 673.38 FT.		DEPTH OUT 367		PH 10.5		METHOD RUN S	
		STR. BODY O.D. 673.38 FT.		DEPTH IN 367		SD. CONT. % 10.5		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	
		RMR. BODY O.D. 673.38 FT.		TOTAL FTG. 1425		MUD & CHEMICALS ADDED		HOLE DEVIATING 65-80 30 100 5 1/2 5 1/2	
		SUBS O.D. 4.00 FT.		TOTAL HR. RUN 30 1/2		TYPE Water & Starch		ROTARY RPM 11	
		BIT OR C.B. 673.38 FT.		COND. OF BIT RUN		AMT. 1000		WT. ON BIT 1000	
		KELLY DOWN 29.17 FT.		REAMER NO. 18712		REAMER TYPE BENEX 4"		PUMP PRESS 1500	
		TOTAL 1900 FT.		DRILLER Don Doyle				PUMP NO. 1	
		WT. OF STRING 81 M LBS.						PUMP NO. 2	
		NO. 1		STANDS D.P. 1123.68 FT.		BIT NO. 1		FORMATION (SHOW CORE RECOVERY)	
		SINGLES D.P. 62.74 FT.		SIZE 7 3/4		TIME 4:30 11:00		ROTARY RPM 11	

DAILY DRILLING REPORT										REPORT NO. 4		DATE Dec 15/6			
OPERATOR IMP OIL ENT				LEASE JOE SUN BLACKSTONE L-72				WELL NO. L-72		FIELD OR DIST. BLACKSTONE CR.		COUNTY		STATE N W T	
CONTRACTOR S & T DRILLING (WESTERN) CO. LTD.				RIG NO. 5		DRILL PIPE STRING NO. 2 SIZE 4 1/2 TYPE THD. FH		PUMPS		LAST CASING TUBING OR LINER		SIZE 8 7/8 MAKE M M WT. & GR. 24 H-40 NO. JOINTS 11 FEET 345 RKB. TO CSG. HD. 12-10 SET AT 357 REMARKS 200 Bar. Com			
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>[Signature]</i>				SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>[Signature]</i>				NO. MANUFACTURER TYPE STROKE LENGTH		1 Mat C-250 15		2 Mat C-250 12		3	

TIME DISTRIBUTION—HOURS				NO. DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		PUMP PRESS		PUMP NO.		METHOD RUN			
RIG UP & TEAR DOWN	MORN	DAY	EVE	STANDS D.P.	FT.	BIT NO.	TIME	WEIGHT	VISC.—SEC	W.L.—C.C.	FLTR. CK.	PH	SD. CONT. %	PRESSURE GRADIENT	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
DRILLING ACTUAL				D.C.		MFG.																	
REAMING				I.D. O.D.	FT.	TYPE																	
CONDITIONING MUD & CIRCULATING				D.C.		NO.																	
TRIPS				I.D. O.D.	FT.	NOZZLE																	
LUBRICATE RIG				STB. BODY O.D.	FT.	SER. NO.																	
DEVIATION SURVEY				STB. BODY O.D.	FT.	DEPTH OUT																	
TEST B.O.P.				RMR. BODY O.D.	FT.	DEPTH IN																	
CUT OFF DRILLING LINE				SUBS O.D.	FT.	TOTAL FTG.																	
DRILL RIG				BIT OR C.B.	FT.	TOTAL HR. RUN																	
WIRE LINE LOGGING				KELLY DOWN	FT.	COND. OF BIT																	
RUNNING CASING & CEMENTING				TOTAL	FT.	REAMER NO.																	
WAITING ON CEMENT				WT. OF STRING	LBS.	REAMER TYPE																	
DRILL STEM TEST				DRILLER D. O. Walker																			
OTHER																							
FISHING																							
COMPLETION WORK																							
A. PERFORATING																							
B. FISHING TRIPS																							
C. GRABBING																							
D. TESTING																							
E. ADDITIONAL																							
TIME SUMMARY (OFFICE USE ONLY)																							
DAY WORK																							
HRS. W/DP																							
HRS. WO/DP																							
HRS. STANDBY																							
TOTAL DAY WORK																							
WIRE LINE RECORD																							
REEL NO.																							
NO. OF LINES																							
FEET SLIPPED																							
FEET CUT OFF																							
PRESENT LENGTH																							
TON MI. OR TRIPS SINCE LAST CUT																							
CUMULATIVE TON MI. OR TRIPS																							
NO. OF DAYS FROM SPUD																							
CUMULATIVE ROTATING HRS.																							

TIME DISTRIBUTION—HOURS				NO. DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		PUMP PRESS		PUMP NO.		METHOD RUN			
RIG UP & TEAR DOWN	MORN	DAY	EVE	STANDS D.P.	FT.	BIT NO.	TIME	WEIGHT	VISC.—SEC	W.L.—C.C.	FLTR. CK.	PH	SD. CONT. %	PRESSURE GRADIENT	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
DRILLING ACTUAL				D.C.		MFG.																	
REAMING				I.D. O.D.	FT.	TYPE																	
CONDITIONING MUD & CIRCULATING				D.C.		NO.																	
TRIPS				I.D. O.D.	FT.	NOZZLE																	
LUBRICATE RIG				STB. BODY O.D.	FT.	SER. NO.																	
DEVIATION SURVEY				STB. BODY O.D.	FT.	DEPTH OUT																	
TEST B.O.P.				RMR. BODY O.D.	FT.	DEPTH IN																	
CUT OFF DRILLING LINE				SUBS O.D.	FT.	TOTAL FTG.																	
DRILL RIG				BIT OR C.B.	FT.	TOTAL HR. RUN																	
WIRE LINE LOGGING				KELLY DOWN	FT.	COND. OF BIT																	
RUNNING CASING & CEMENTING				TOTAL	FT.	REAMER NO.																	
WAITING ON CEMENT				WT. OF STRING	LBS.	REAMER TYPE																	
DRILL STEM TEST				DRILLER Don Doyle																			
OTHER																							
FISHING																							
COMPLETION WORK																							
A. PERFORATING																							
B. FISHING TRIPS																							
C. GRABBING																							
D. TESTING																							
E. ADDITIONAL																							
TIME SUMMARY (OFFICE USE ONLY)																							
DAY WORK																							
HRS. W/DP																							
HRS. WO/DP																							
HRS. STANDBY																							
TOTAL DAY WORK																							
WIRE LINE RECORD																							
REEL NO.																							
NO. OF LINES																							
FEET SLIPPED																							
FEET CUT OFF																							
PRESENT LENGTH																							
TON MI. OR TRIPS SINCE LAST CUT																							
CUMULATIVE TON MI. OR TRIPS																							
NO. OF DAYS FROM SPUD																							
CUMULATIVE ROTATING HRS.																							

TIME DISTRIBUTION—HOURS				NO. DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		PUMP PRESS		PUMP NO.		METHOD RUN			
RIG UP & TEAR DOWN	MORN	DAY	EVE	STANDS D.P.	FT.	BIT NO.	TIME	WEIGHT	VISC.—SEC	W.L.—C.C.	FLTR. CK.	PH	SD. CONT. %	PRESSURE GRADIENT	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
DRILLING ACTUAL				D.C.		MFG.																	
REAMING				I.D. O.D.	FT.	TYPE																	
CONDITIONING MUD & CIRCULATING				D.C.		NO.																	
TRIPS				I.D. O.D.	FT.	NOZZLE																	
LUBRICATE RIG				STB. BODY O.D.	FT.	SER. NO.																	
DEVIATION SURVEY				STB. BODY O.D.	FT.	DEPTH OUT																	
TEST B.O.P.				RMR. BODY O.D.	FT.	DEPTH IN																	
CUT OFF DRILLING LINE				SUBS O.D.	FT.	TOTAL FTG.																	
DRILL RIG				BIT OR C.B.	FT.	TOTAL HR. RUN																	
WIRE LINE LOGGING				KELLY DOWN	FT.	COND. OF BIT																	
RUNNING CASING & CEMENTING				TOTAL	FT.	REAMER NO.																	
WAITING ON CEMENT				WT. OF STRING	LBS.	REAMER TYPE																	
DRILL STEM TEST				DRILLER Don Doyle																			
OTHER																							
FISHING																							
COMPLETION WORK																							
A. PERFORATING																							
B. FISHING TRIPS																							
C. GRABBING																							
D. TESTING																							
E. ADDITIONAL																							
TIME SUMMARY (OFFICE USE ONLY)																							
DAY WORK																							
HRS. W/DP																							
HRS. WO/DP																							
HRS. STANDBY																							
TOTAL DAY WORK																							
WIRE LINE RECORD																							
REEL NO.																							
NO. OF LINES																							
FEET SLIPPED																							
FEET CUT OFF																							
PRESENT LENGTH																							
TON MI. OR TRIPS SINCE LAST CUT																							
CUMULATIVE TON MI. OR TRIPS																							
NO. OF DAYS FROM SPUD																							
CUMULATIVE ROTATING HRS.																							

DAILY DRILLING REPORT										REPORT NO. 3										DATE 12/24/69									
OPERATOR IMP 612 ENT										LEASE I O E SUN BLACKSTONE E-72										WELL NO. E-72									
CONTRACTOR S & T DRILLING (WESTERN) CO. LTD.										RIG NO. 5										FIELD OR DIST. BLACKSTONE CR									
SIGNATURE OF OPERATOR'S REPRESENTATIVE										SIGNATURE OF CONTRACTOR'S TOOL PUSHER										COUNTY STATE N W T									
TIME DISTRIBUTION-HOURS										PUMPS										LAST CASING TUBING OR LINER									
MORN DAY EVE										NO. MANUFACTURER TYPE STROKE LENGTH										SIZE WT. & GR. NO. JOINTS FEET RKB. TO CSG. HD. SET AT REMARKS									
RIG UP & TEAS DOWN										1. NAT C-250 15										2 1/2 H.M. 24.0 11 345 13.10 357 200 RKB. C.M.									
DRILLING ACTUAL 1/4										2. NAT C-150 12																			
REAMING										3.																			
CONDITIONING MUD & CIRCULATING 1/4																													
TRIPS 3/4																													
LUBRICATE RIG 1/4																													
DEVIATION SURVEY 1/2																													
TEST: S.O.P.																													
CUT OFF DRILLING LINE																													
PAIR RIG 3/4																													
DRILLING LOGGING																													
RUNNING CASING & CEMENTING																													
WAITING ON CEMENT																													
DRILL STEM TEST																													
OTHER 1/4																													
FISHING																													
A. PERFORATING																													
B. TUBING TRIPS																													
C. SWABBING																													
D. TESTING																													
E. ADDITION/L																													
TIME SUMMARY (OFFICE USE)																													
DAY WORK																													
HRS. W/D																													
HRS. W/O																													
HRS. STANDBY																													
TOTAL DAY WORK																													
WIRE LINE RECORD																													
REEL NO.																													
NO. OF LINES SIZE																													
FEET SLIPPED																													
FEET CUT OFF																													
PRESENT LENGTH																													
TON ML. OR TRIPS SINCE LAST CUT																													
CUMULATIVE TON ML. OR TRIPS																													
NO. OF DAYS FROM SPUD																													
CUMULATIVE ROTATING HRS.																													
NO. DRILLING ASSEMBLY AT END OF TOUR										BIT RECORD										MUD RECORD									
STANDS D.P. FT.										BIT NO. 3A										TIME 2:00 4:00 6:00									
SINGLES D.P. FT.										SIZE 12 1/4										WEIGHT 8.9 8.9 8.9									
D.C.										MFG. H.W.										VISC.-SEC 40 44 55									
I.D. O.D. 278.68 FT.										TYPE OSC-3										W.L.-C.C.									
D.C.										NOZZLE 1/4										FLTR. CK.									
STR. BODY O.D. FT.										SER. NO. 10292										PH									
STR. BODY O.D. FT.										DEPTH OUT										SO. CONT. %									
RMR. BODY O.D. FT.										DEPTH IN										PRESSURE GRADIENT									
SUBS O.D. 7.15 FT.										TOTAL FTG. 164										MUD & CHEMICALS ADDED									
BIT OR C.B. FT.										TOTAL HR. RUN 4 1/4										TYPE AMT. TYPE AMT.									
KELLY DOWN 20.24 FT.										COND. OF BIT 1A										DRILLER D. A. WILSON									
TOTAL 367 FT.										REAMER NO.																			
WT. OF STRING 37 M LBS.										REAMER TYPE																			
NO. DRILLING ASSEMBLY AT END OF TOUR										BIT RECORD										MUD RECORD									
STANDS D.P. FT.										BIT NO. 3A										TIME									
SINGLES D.P. FT.										SIZE 12 3/4										WEIGHT									
D.C.										MFG. H.W.										VISC.-SEC									
I.D. O.D. 278.68 FT.										TYPE OSC-3										W.L.-C.C.									
D.C.										NOZZLE 1/4										FLTR. CK.									
STR. BODY O.D. FT.										SER. NO. 10292										PH									
STR. BODY O.D. FT.										DEPTH OUT										SO. CONT. %									
RMR. BODY O.D. FT.										DEPTH IN										PRESSURE GRADIENT									
SUBS O.D. 7.15 FT.										TOTAL FTG. 164										MUD & CHEMICALS ADDED									
BIT OR C.B. FT.										TOTAL HR. RUN 4 1/4										TYPE AMT. TYPE AMT.									
KELLY DOWN 20.24 FT.										COND. OF BIT										DRILLER Don Doyle									
TOTAL 367.00 FT.										REAMER NO.																			
WT. OF STRING 37 M LBS.										REAMER TYPE																			
NO. DRILLING ASSEMBLY AT END OF TOUR										BIT RECORD										MUD RECORD									
STANDS D.P. FT.										BIT NO.										TIME									
SINGLES D.P. FT.										SIZE										WEIGHT									
D.C.										MFG.										VISC.-SEC									
I.D. O.D. FT.										TYPE										W.L.-C.C.									
D.C.										NOZZLE NO. SIZE										FLTR. CK.									
STR. BODY O.D. FT.										SER. NO.										PH									
STR. BODY O.D. FT.										DEPTH OUT										SO. CONT. %									
RMR. BODY O.D. FT.										DEPTH IN										PRESSURE GRADIENT									
SUBS O.D. FT.										TOTAL FTG.										MUD & CHEMICALS ADDED									
BIT OR C.B. FT.										TOTAL HR. RUN										TYPE AMT. TYPE AMT.									
KELLY DOWN FT.										COND. OF BIT										DRILLER									
TOTAL FT.										REAMER NO.																			
WT. OF STRING LBS.										REAMER TYPE																			
FOOTAGE										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM									
FROM TO										CORE NO.										WT. ON BIT 1000#									
DEVIATION RECORD										DEPTH DEV. DIRECTION										DEPTH DEV. DIRECTION									
TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS									
FROM TO										TIME																			
8:00 8:45 3/4										TRIP OUT WITH BIT # 3A										9:00 TO 4:00 W.O.C.									
8:45 9:30 3/4										TRIP IN WITH BIT # 3A																			
9:30 10:00 3/4										CIRC. TO RUN CASQ.																			
10:00 10:45 3/4										SURVEY																			
10:45 11:00 3/4										TRIP OUT W/ BIT # 3A																			
11:00 1:30 2 1/2										RUNNING CASQ. 12 JOINTS																			
1:30 2:00 1/2										CIRC. CASQ.																			
2:00 3:00 1										PERMIT CASQ. PLUG DOWN @ 3:00 P.M.																			
FOOTAGE										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM									
FROM TO										CORE NO.										WT. ON BIT 1000#									
DEVIATION RECORD										DEPTH DEV. DIRECTION										DEPTH DEV. DIRECTION									
TIME LOG										ELAPSED TIME										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS									
FROM TO										TIME																			
4:00 12:00 8										W.O.C.																			

RECEIVED AS
RECORDED OFFICE
DEC 24 1969

DAILY DRILLING REPORT										REPORT NO. 2		DATE Dec 13/59			
OPERATOR IMP OIL ENT				LEASE SUN BLACKSTONE L-72 122°00'W 61°20'N				WELL NO. L-72		FIELD OR DIST. BLACKSTONE CR.		COUNTY		STATE N W T	
CONTRACTOR S & T DRILLING (WESTERN) CO. LTD.				RIG NO. 5		DRILL PIPE STRING NO. SIZE		TOOL JOINT C.D. TYPE THD.		PUMPS NO. MANUFACTURER TYPE STROKE LENGTH		LAST CASING TUBING OR LINER		SIZE MAKE WT. & GR. NO. JOINTS FEET RKB. TO CSG. HD. SET AT REMARKS	
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>Geo C. [Signature]</i>				SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>Geo C. [Signature]</i>											
TIME DISTRIBUTION—HOURS				NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D. R. M. R. CORE NO.	
MORN DAY EVE						STANDS D.P. FT.		BIT NO. 2A		TIME 2:00 4:00 6:00		FROM TO		CORE NO.	
RIG UP & TEAR DOWN						SINGLES D.P. FT.		SIZE 12 1/4		WEIGHT 8.8 8.8 8.9		104 125		D	
DRILLING ACTUAL 7 1/4 7 1/4 6 1/4				3		D.C. 6 1/4 92.80 FT.		MFG. H.W.		VISC. SEC 40 40 35					
REAMING						I.D. O.D.		TYPE OSC-3		W.L. CC					
CONDITIONING MUD & CIRCULATING						D.C.		NO. 204		FLTR. CX					
TRIPS						I.D. O.D.		NOZZLE		PH					
LUBRICATE RIG 1/4 1/4 1/4						STB. BODY G.D. FT.		SER. NO. 18339		SD. CONT. %					
DEVIATION SURVEY 1/4 1/4 1/2						STB. BODY O.D. FT.		DEPTH OUT		PRESSURE GRADIENT					
TEST S.O.P.						RMR. BODY O.D. FT.		DEPTH IN 0							
CUT OFF DRILLING LINE						SUBS O.D. 7.15 FT.		TOTAL FTG. 125		MUD & CHEMICALS ADDED					
REPAIR RIG						BIT OR C.B. FT.		TOTAL HR. RUN 2 1/4		TYPE AMT. TYPE AMT.					
WIRE LINE LOGGING						KELLY DOWN 2535 FT.		COND. OF BIT RUN		CANT 50					
RUNNING CASING & CEMENTING						TOTAL 125 FT.		REAMER NO.							
WAITING ON CEMENT						WT. OF STRING 24M LBS.		REAMER TYPE		DRILLER D. B. Wilkins					
DELL STEEL TEST						NO.		DRILLING ASSEMBLY AT END OF TOUR		MUD RECORD		FOOTAGE		DR. D. R. M. R. CORE NO.	
OTHER 1/4 1/4 1/4						STANDS D.P. FT.		BIT NO. 2A		TIME 10:00 12:00 2:00		FROM TO		CORE NO.	
FISHING						SINGLES D.P. FT.		SIZE 12 1/4		WEIGHT 8.8 8.8 8.9		125 159		D	
A. PERSONATING						D.C. 12 1/4 123.63 FT.		MFG. H.W.		VISC. SEC 36 39 37					
B. TUBING TRIPS						I.D. O.D.		TYPE OSC-3		W.L. CC					
C. SWABBING						D.C.		NO. 204		FLTR. CX					
D. TESTING						I.D. O.D.		NOZZLE		PH					
E. ADDITIONAL						STB. BODY O.D. FT.		SER. NO. 18339		SD. CONT. %					
TOTALS 8 8 8						STB. BODY O.D. FT.		DEPTH OUT		PRESSURE GRADIENT					
TIME SUMMARY (OFFICE USE ONLY)						RMR. BODY O.D. FT.		DEPTH IN 0							
DAY WORK						SUBS O.D. 7.15 FT.		TOTAL FTG. 159		MUD & CHEMICALS ADDED					
HRS. W/DP						BIT OR C.B. FT.		TOTAL HR. RUN 2 3/4		TYPE AMT. TYPE AMT.					
HRS. W/O/DP						KELLY DOWN 29.22 FT.		COND. OF BIT							
HRS. STANDBY						TOTAL 159.00 FT.		REAMER NO.							
						WT. OF STRING 26 M. LBS.		REAMER TYPE		DRILLER Don Doyle					
TOTAL DAY WORK						NO.		DRILLING ASSEMBLY AT END OF TOUR		MUD RECORD		FOOTAGE		DR. D. R. M. R. CORE NO.	
WIRE LINE RECORD						STANDS D.P. FT.		BIT NO. 2A		TIME 8:00		FROM TO		CORE NO.	
REEL NO.						SINGLES D.P. FT.		SIZE 12 1/4		WEIGHT 8.9		159 203		D	
NO. OF LINES SIZE						D.C. 6 1/4 154.93 FT.		MFG. H.W.		VISC. SEC 30					
FEET SLIPPED						I.D. O.D.		TYPE OSC-3		W.L. CC					
FEET CUT OFF						D.C.		NO. 204		FLTR. CX					
PRESENT LENGTH						I.D. O.D.		NOZZLE		PH					
TON M. OR TRIPS SINCE LAST CUT						STB. BODY O.D. FT.		SER. NO. 18339		SD. CONT. %					
CUMULATIVE TON M. OR TRIPS						STB. BODY O.D. FT.		DEPTH OUT 203		PRESSURE GRADIENT					
NO. OF DAYS FROM SPUD						RMR. BODY O.D. FT.		DEPTH IN 0							
CUMULATIVE ROTATING HRS.						SUBS O.D. 7.15 FT.		TOTAL FTG. 203		MUD & CHEMICALS ADDED					
						BIT OR C.B. FT.		TOTAL HR. RUN 35		TYPE AMT. TYPE AMT.					
						KELLY DOWN 40.92 FT.		COND. OF BIT 1-2-1							
						TOTAL 203 FT.		REAMER NO.							
						WT. OF STRING 30 M. LBS.		REAMER TYPE		DRILLER Don Doyle					
						NO.		DRILLING ASSEMBLY AT END OF TOUR		MUD RECORD		FOOTAGE		DR. D. R. M. R. CORE NO.	
						STANDS D.P. FT.		BIT NO. 2A		TIME 8:00		FROM TO		CORE NO.	
						SINGLES D.P. FT.		SIZE 12 1/4		WEIGHT 8.9		159 203		D	
						D.C. 6 1/4 154.93 FT.		MFG. H.W.		VISC. SEC 30					
						I.D. O.D.		TYPE OSC-3		W.L. CC					
						D.C.		NO. 204		FLTR. CX					
						I.D. O.D.		NOZZLE		PH					
						STB. BODY O.D. FT.		SER. NO. 18339		SD. CONT. %					
						STB. BODY O.D. FT.		DEPTH OUT 203		PRESSURE GRADIENT					
						RMR. BODY O.D. FT.		DEPTH IN 0							
						SUBS O.D. 7.15 FT.		TOTAL FTG. 203		MUD & CHEMICALS ADDED					
						BIT OR C.B. FT.		TOTAL HR. RUN 35		TYPE AMT. TYPE AMT.					
						KELLY DOWN 40.92 FT.		COND. OF BIT 1-2-1							
						TOTAL 203 FT.		REAMER NO.							
						WT. OF STRING 30 M. LBS.		REAMER TYPE		DRILLER Don Doyle					

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DAILY DRILLING REPORT										REPORT NO.		DATE			
OPERATOR I. O. E.				LEASE SUN BLACKSTONE L. 72.				WELL NO.		FIELD OR DIST.		COUNTY		STATE	
CONTRACTOR S & T DRILLING (WESTERN) CO. LTD.				RIG NO. 5		DRILL PIPE STRING NO. SIZE		TOOL JOINT TYPE THD.		PUMPS NO. MANUFACTURER TYPE STROKE LENGTH		LAST CASING TUBING OR LINER		SIZE MAKE WT. & GR. NO. JOINTS FEET RKB TO CSG. HD. SET AT REMARKS	
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>[Signature]</i>				SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>[Signature]</i>											

TIME DISTRIBUTION—HOURS				NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D. R. CORE		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN	
RIG UP & TEAR DOWN						STANDS D.P.		FT.		BIT NO.		TIME		FROM		TO															
DRILLING ACTUAL						SINGLES D.P.		FT.		SIZE		WEIGHT																			
REAMING						D.C.				MFG.		VISC. SEC																			
CONDITIONING MUD & CIRCULATING						I.D. O.D.		FT.		TYPE		V.L. C.C.																			
TRIPS						I.D. O.D.		FT.		NOZZLE		NO.		FLTR. CK.																	
LUBRICATE RIG						STB. BODY O.D.		FT.		SER. NO.		SD. CONT. %																			
DEVIATION SURVEY						STB. BODY O.D.		FT.		DEPTH OUT		PRESSURE GRADIENT																			
TEST B.G.P.						RMR. BODY O.D.		FT.		DEPTH IN																					
CUT OFF DRILLING LINE						SUBS O.D.		FT.		TOTAL FTG.		MUD & CHEMICALS ADDED																			
REPAIR RIG						BIT OR C.B.		FT.		TOTAL HR. RUN		TYPE AMT. TYPE AMT.																			
WIRELINE LOGGING						KELLY DOWN		FT.		COND. OF BIT																					
RUNNING CASING & CEMENTING						TOTAL		FT.		REAMER NO.		DRILLER																			
WAITING ON CEMENT						WT. OF STRING		LBS.		REAMER TYPE																					

TIME LOG				ELAPSED TIME		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	
FROM		TO					
8:00		8:12		12		RIG TO SPUD WAIT FOR FUEL	

TIME LOG				ELAPSED TIME		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	
FROM		TO					
8:00		8:00		12		RIG TO SPUD WAIT FOR FUEL	

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