To: Department of Indian Affairs
and Northern Development
Oil and Mineral Division
112 - 11th Avenue, S. E.
Calgary 21, Alberta

WELL HISTORY REPORT

ON

MOBIL BELOT HILLS M-63

67° 02' 45" N. LAT.; 126° 27' 45" W. LONG.

NORTHWEST TERRITORIES

Approved By:

Drilling & Production Engineering Supervisor

Date: June 1, 1972
Edmonton, Alberta

C O N F I D E N T I A L

By: G. W. STUART
P. L. DEGROOT

I N D E X

SECTION II - GEOLOGICAL SUMMARY

(a) Formation Tops:

	Log Depth	Elevation
Bear Rock	Spud In	
Ronning	348'	+ 1167'
Cambrian - Saline River	2302	- 787
Cambrian - Salt Top	2604	- 1089
Mount Cap	3096	- 1581
Mount Clark	3431	- 1916
Proterozoic	3485	- 1970
Total Depth	4211	- 2696

(b) Cored Intervals:

		Formation	Recovery
Core #1	1840 - 1844.5	Ronning	2'
Core #2	2166 - 2171	Ronning	3 1/2
Core #3	2800 - 2808	Cambrian Salt	7
Sidewall	3380 - 3483	Mt. Cap - Mt. Clark	Sidewall Cores

3380	3397	3453	3469
3382	3399	3455	3473
3383	3401	3457	3475
3384	3403	3459	3477
3386	3405	3461	3479
3388	3407	3465	3481
3389	3409	3467	3483
3394			

(c) Sample Description:

Bear Rock

80 - 140	Shale, calcareous, fissile, micaceous with fossil fragments.
140 - 160	Limestone, dark grey brown, medium crystalline argillaceous with phosphatic pellets.
160 - 230	Limestone, grey to brown, fine to medium crystalline.
230 - 350	Limestone as above, partly bituminous with some vuggy porosity.
350 RONNING:	Fractured throughout.

350 - 710	Dolostone, medium to coarse crystalline, white to light grey to brown; chert, white, partly laminated; vuggy porosity. Spotty oil staining and oil cut.
710 - 820	Dolostone as above with less chert, only rare vuggy porosity, no stain.
820 - 1260	Dolostone as above, with no chert, porosity or stain; pyritic at the base.
1260 - 1440	Dolostone as above, pyritic and silty, slight fluorescence at the base.
1440 - 1590	Varicolored dolomite, mainly medium to coarse crystalline, varicolored.
1590 - 3250	Drilled Blind. No sample returns.
2302	SALINE RIVER
2604	SALINE RIVER SALT
3094	MOUNT CAP
3250 - 3380	Shale grey-green with some siltstone and dolomite.
3380 - 3425	Siltstone to very fine sandstone cream to buff, fair oil stain and cut.
3425 - 3431	Greenish shale.
3431	MOUNT CLARK
3431 - 3485	Sandstone, mainly very fine to fine white, partly clayey with fair to good porosity, good oil stain and cut.
3485	PROTEROZOIC
3485 - 3760	Dolostone, argillaceous with trace of anhydrite, fine to coarse crystalline, medium grey, red and brown.
3760 - 3860	Argillaceous dolostone as above without anhydrite.
3860 - 3950	Shale, dark grey, medium grey green, micaceous, partly silty, with some dolostone stringers.
3950 - 4010	Shale grey-green, black speckled, non calcareous, partly siliceous, some bentonite.
4010 - TD	Shale dark-grey - grey black, hard, partly siliceous, micromicaceous.

(d) Core description

Core #1 1840 - 1844.5 - dolomite, light - medium brown, with oblique and vertical fractures. Beds dip about 20°.

Core #2 2166 - 2171 - recovered 3.5 feet dolomite medium grey - light brown, fine to medium crystalline, oblique and vertical fractures with trace of spotty oil stain; minor green shale partings.

Core #3 2800 - 2808 - recovered seven feet dolomite grey crypto to fine crystalline thin bedded, finely interbedded with laminae and thin beds of shale, grey and green, non calcareous. Few anhydrite blebs in basal four feet. No fractures, porosity or oil stain.

(e) Sidewall core description.

3320	Shale, green, soft, pyritic, micaceous, non calcareous,
3382	Shale, medium grey, non calcareous; 10-15% silt.
3383	Siltstone-sandstone, fine - very fine, green, grey, soft with interbedded clay and/or shale.
3384	Sandstone very fine grained to siltstone, light green-grey, glauconitic, pyritic with some brown streaks.
3388	Sandstone, very fine to siltstone, very light grey, with subangular quartz, glauconite andpyrite; brown stained (not oil)
3389	Sandstone as above, alternating thin layers of silt and sandstone.
3394	Shale, splintery, green.
3397	Sandstone, fine grained, hard, light grey to white, with quartz, pyrite and some red grains.
3399	Limestone, brown to grey, sucrosic; slight dead oil stain, no cut or fluorescence.
3401	Limestone, medium crystalline, light brown to grey, hard, tight, no oil stain.
3403	Siltstone to sandstone very fine, light grey to green, glauconitic, soft.
3405	Siltstone to sandstone very fine, grey - green, calcareous with large black grains.
3407	Sandstone, fine (to siltstone), calcareous, glauconitic, argillaceous, with larger grains.
3409	Sandstone, fine (to siltstone), calcareous, cleaner, white, no glauconite, some black grains. Quartz subangular to angular with

3409 continued.....	overgrowths. Some porosity and permeability.
3453	Sandstone, very fine grained calcareous, clayey, tight; some pyrite; slight fluorescence, no stain, no cut.
3455	Sandstone very fine with floating larger grains, calcareous, tight, white with red larger grains; no oil stain, fluorescence or oil cut.
3457	Sandstone, fine with floating medium to coarse grains; with less matrix than above, probably some porosity and permeability; oil stain, pale yellow fluorescence, no oil cut.
3459	Sandstone, coarse with fine grained matrix and some clay, slightly calcareous; the larger grains are red; Some porosity and probably permeability; slight stain, streaking fluorescence, no cut.
3461	Sandstone quartzose, coarse with less fine grained material than above, chalky non calcareous matrix, white to very light brown, poor porosity andpermeability; slight stain, streaky fluorescence, no cut.
3465	Sandstone, medium grained with coarse grains and fine grained with clay matrix, white; secondary quartz overgrowths; little porosity; slight stain, very slight fluorescence, no cut.
3467	Sandstone quartzose, coarse grained with fine grains, less clay matrix, non calcareous, white to light green; some porosity; slight stain, very slight fluorescence, no cut.
3469	Sandstone, medium to fine grained, non calcareous less argillaceous than above, dark grey; some pyrite; good porosity; good stain, very slight fluorescence, streaming cut.
3473	Sandstone, fine grained quartzose, dark brown to black, well sorted subangular to angular friable, clay patches, fair to good porosity; good uneven stain, slight fluorescence, streaming cut.
3475	Sandstone, fine grained, slight argillaceous matrix, light grey; more uniform good stain, has odor, fluorescence, pale yellow cut.
3477	Sandstone, fine grained, clay matrix, non calcareous, porous; slight stain, fluorescence, good cut.

3479	Sandstone, medium grained, well sorted, friable, subangular to subrounded light brown; fair to good porosity; even light brown stain, fluorescence, good cut.
3481	Sandstone as above with a little more clay and more coarse grains, lighter colored; fair porosity; light stain, fluorescence, light yellow cut.
3483	Sandstone, medium to coarse grained, medium grey with a dark sheen around the grains, subrounded; light stain, slight fluorescence, very slight cut.

(f) Paleontological Determinations:

None.

SECTION III - ENGINEERING SUMMARY

(a) REPORT OF DRILL STEM TESTS

DST #1	Mar. 23/72	Mt. Clark	3399-3498	Bottomhole Test	Misrun
DST #2	Mar. 23/72	Mt. Clark	3408-3498	Bottomhole Test	Misrun
DST #3	Apr. 3/72	Mt. Clark	3234-4211	Bottomhole Test	Hookwall-Misrun
DST #4	Apr. 4/72	Mt. Clark	3230-4211	Bottomhole Test	Hookwall-Misrun
DST #5	Apr. 4/72	Mt. Clark	3236-4211	Bottomhole Test	Hookwall-Misrun
DST #6	Apr. 5/72	Mt. Clark	3187-4211	Bottomhole Test	Hookwall

IHH		1630 psi.
Preflow		
ISI	182	
IF		286 psi.
VO	45 mins.	
FF		957 psi.
FSI		1207 psi.
FHH		1630 psi.

Recovery: Pumped out 2000' of mud.

DST #7 Apr. 6/72 Mt. Clark 3450-3500 Straddle Test

IHH		1622 psi.
Preflow	4 mins.	101 psi.
ISI	35 mins.	1209 psi.
IF		151 psi.
VO	60 mins.	
FF		412 psi.
FSI	90 mins.	1187 psi.
FHH		1579 psi.

Recovery: 500' S.W. mud plus 400' murky salt water (167,000 ppm).
Fair to weak air blow on VO.

SECTION III - ENGINEERING SUMMARY, cont'd.

(b) CASING RECORD

(1) Conductor Pipe

Ran 2 joints of 13 3/8" 48.0 #/ft. J-55 casing and landed at 77' K.B.

Cemented with 200 sacks fondu from the top. No floating equipment was used.

(2) Surface Casing

Ran 16 joints of 9 5/8" 38.0 #/ft. K-55 casing and landed at 651' K.B.

Cemented with 425 sacks fondu at a slurry weight of 14.5 to 14.6 #/gal. Casing was equipped with guide shoe, float collar and centralizers at 630, 590 and 550'.

Mix Time	35 mins.
Pump Time	22 mins.
Pump Rate	1.1 bbl./min.
Final Pump Pressure	200 psi.
Bumped Plug	1000 psi.
Float Held	
Good Cement Returns	- Cement settled so ran 25 sacks fondu from surface.

(3) Intermediate Casing

Ran 71 joints of 7" 23.0 #/ft. J-55 casing and landed at 3241' K.B.

Cemented with 500 sacks of oilwell and construction cement at a slurry weight of 15 to 15.2 #/gal.

Casing was equipped with centralizers, float shoe, float collar and cement baskets at 2500' and 750'.

Mix Time	65 mins.
Pump Time	30 mins.
Pump Rate	4.5 bpm
Bumped Plug	1000 psi.
Float Held	
No Returns - Circulation never established.	

Mixed and pumped 200 sacks oilwell cement down surface casing bowl after setting 7" casing in slips. No pump pressure.

SECTION III - ENGINEERING SUMMARY, cont'd.

(c) BIT RECORD

No.	Make	Type	Size	Hrs.	Depth In	Depth Out	Footage	Condition
1B	HW	XIG	12 1/4	8 3/4	77	155	78	1-1-1
2B	HW	XIG	8 3/4	10 1/4	155	222	67	1-1-1
3B	HW	XIG	12 1/4	Reamed	222	223	1	1-1-1
4B	HW	XIG	8 3/4	18	223	351	128	3-1-1
5B	HW	XIG	12 1/4	Reamed	351	355	4	3-2-1
6B	HW	ODV	8 3/4	5	355	426	71	4-4-1
7B	HW	WD7	8 3/4	16	426	626	200	6-2-1
8B	HW	WD7	8 3/4	9	626	687	61	6-2-1
9B	Reamer	-	12 1/4	Reamed	-	-	-	2-1-1
10B	Reamer	-	12 1/4	Reamed	-	-	-	3-1-1
11B	Reamer	-	12 1/4	Reamed	-	-	-	3-1-1
12B	HW	XIG	12 1/4	Reamed	-	-	-	3-7-3
1A	HW	-	8 3/4	Drill Out Cement and Shoe				3-1-1
2A	HW	RG7	8 3/4	10 3/4	687	949	262	3-7-3
3A	HW	RG7	8 3/4	37 3/4	949	1408	459	3-4-1
4A	HW	RG7	8 3/4	30 3/4	1408	1840	432	2-3-1
5A	Chris	Diamond	6 3/16	1/2	1840	1844	4	Good
6A	HW	RG2BX	8 3/4	1 3/4	1844	1867	23	1-2-1
7A	HW	WD7R	8 3/4	20 1/2	1867	2166	299	5-7-1
8A	Chris	Diamond	6 3/16	3/4	2166	2171	5	Good
9A	HW	RG7	8 3/4	6	2171	2329	158	2-2-1
10A	HW	WD7	8 3/4	12 1/2	2329	2551	222	8-8-7
11A	HW	X55R	8 3/4	20 1/2	2551	2800	249	2-1-1
12A	Chris	Diamond	6 3/16	1 1/4	2800	2808	8	Good
13A	HW	WD7	8 3/4	4 1/4	2808	2861	61	2-8-1
14A	HW	RG7	8 3/4	18 3/4	2861	3224	363	1-5-1
15A	HW	WD7	8 3/4	1 1/2	3224	3258	34	1-1-1
1	HW	OWV	6 1/4	10 1/2	3258	3345	87	2-3-1
2	HW	J-55	6 1/4	3 1/4	3345	3355	10	1-1-1
3	HW	W7	6 1/4	13 1/4	3355	3452	97	5-4-1
4	HW	W7	6 1/4	6 1/2	3452	3498	46	3-2-1
5	HW	J-55	6 1/4	38 3/4	3498	3728	230	1-1-1
6	HW	J-55	6 1/4	41	3728	3996	268	2-1-1
7	HW	W7	6 1/4	22 1/4	3996	4136	140	5-7-1
8	HW	W7	6 1/4	16 3/4	4136	4211	75	5-5-4

SECTION III - ENGINEERING SUMMARY, cont'd.

(d) MUD REPORT - MUD USAGE

Item	Surface Hole	Intermediate Hole	6 1/4" Hole	Total
Gel	31,300#	158,300#	13,700#	203,300#
Sawdust	140 Sacks	640 Sacks	-	780 Sacks
Fibreseal	120 Sacks	65 Sacks	-	185 Sacks
Celloseal	40 Sacks	157 Sacks	-	197 Sacks
Kwikseal		812 Sacks	-	812 Sacks
Cotton Hulls		86 Sacks	-	86 Sacks
Starch		650#	600#	1,250#
Caustic		1,100#	150#	1,250#
Bran		10 Sacks	-	10 Sacks
Kelzan AL		300#	-	300#
Spersene			500#	500#
Corrosion Inhibitor			5 Gals.	5 Gals.
Defoamer			2 Gals.	2 Gals.
Sodium Chloride			70,400#	70,400#

SECTION III - ENGINEERING SUMMARY, cont'd.

(e) DEVIATION REPORT

Surface Hole

Date	Depth (ft.)	Totco Deviation (Degrees)
February 5/72	65	1/4
	95	5/8
	125	3/4
	155	3/4
February 6/72	184	7/8
	205	1 1/4
February 7/72	245	1 1/4
	275	1 1/4
	305	1 1/4
	340	1 1/2
February 8/72	350	1 5/8
	380	2
	410	2 1/8
	440	2 1/8
	470	1 7/8
	500	2
February 9/72	528	2
	590	2

6 1/4" Hole
7" - 23 #/ft. Casing set @ 3240' KB.

Date	Depth (ft.)	Totco Deviation (Degrees)
March 21/72	3335	1 1/4
22	3430	1 7/8
26	3720	6
	3800	6 1/2
27	3890	Greater than 7
28	3980	Greater than 7
29	4080	Greater than 7
30	4190	Greater than 7

Intermediate Hole

Date	Depth (ft.)	Single Shot Deviation (Degrees)	Direction
February 17/72	780	2 3/4	S57E
18	940	4 1/8	S57E
19	1000	4 1/2	S57E
	1055	4 1/2	S58E
20	1158	4 1/4	S58E
21	1380	3 1/4	S65E
22	1475	3 1/8	S65E
23	1560	2 5/8	S63E
26	1710	1 1/2	S78E
27	1825	1/2	N4E
March 1/72	1970	1 1/2	N27W
3	2090	1 5/8	N23W
4	2195	1 1/4	N4W
8	2355	1 1/2	N58E
9	2555	2 3/4	S81E
11	2800	2 3/4	S74E
13	2930	1 1/2	N78E
	3000	1 1/4	N12E

SECTION III - ENGINEERING SUMMARY, cont'd.

(f) ABANDONMENT PLUGS

April 7, 1972	Plug No. 1	4211-4000	60 sacks oilwell cement No feel.
April 7, 1972	Plug No. 2	3450-3050	140 sacks oilwell cement Felt at 2970' at 6:30 a.m. April 8, 1972.
April 8, 1972	Plug No. 3	Surface	5 sacks. Cut off casing 2' below ground. Weld on 1/2" steel plate and identification sign.

(g) LOST CIRCULATION ZONES

Surface Hole

- Lost circulation at 554' and at 620' to 626'.
- Regained circulation by pumping lost circulation material -

  31,300# Gel
  120 Sacks Fibreseal
  40 Sacks Celloseal
  140 Sacks Sawdust

- Set 9 5/8" casing at 651' and cemented to surface.

Intermediate Hole

- Lost circulation at 945' to 949'. Pumped 75 barrels in 1 3/4 hrs. and regained circulation.
- Lost circulation at 1,020' to 1,022'. Mixed and pumped L.C. material for 6 1/4 hours -

  2,000# Gel
  40 Sacks Fibreseal
  20 Sacks Sawdust

- Lost circulation at 1,391' to 1,400'. Mixed and pumped L.C. material. Regained partial returns and commenced drilling ahead with partial returns.
- Lost circulation completely at 1,517'.
- Continued pumping L.C. material and occasionally got partial returns.

SECTION III - ENGINEERING SUMMARY, cont'd.

(g) LOST CIRCULATION ZONES

Intermediate Hole, cont'd.

- Lost circulation completely at 1,617' and drilled ahead blind to 2,329'. Water trucks could not keep up so drilled only a limited number of hours per day.

- Mixed and pumped diesel oil-gel-cement plug over interval 840' to 1,585'. Plug made up from -

  60 Bbls. Diesel
  110 Sacks Gel
  65 Sacks Cement

- Drilled out plug from 840' to 1,585'. Lost circulation at 1,585'.

- Continued drilling ahead with water with no returns to 3,204'.

- On March 13, 1972, got stuck in the hole on a connection at 3,192'.

- Pulled pipe free on March 15, but could not get to bottom.

- Reamed down to 3,204' and drilled to 3,254'with no returns by March 17 using gel and lost circulation material.

- Logged and ran 7" protective casing at 3,241' K.B. to cover up the lost circulation zones.

6 1/4" Hole

- No Lost Circulation.

(h) Report of Blowouts

None.

SECTION VI - COMPLETION SUMMARY

(a) Tubing Record

None.

(b) Perforation Record

None.

(c) Cementation Record

April 7, 1972	Plug No. 1	4211-4000	In 6¼" hole. 60 sacks - no feel.
	Plug No. 2	3450-3050	Across 7" intermediate casing shoe. 140 sacks. Felt at 2970' KB after 8 hrs.
April 8, 1972	Plug No. 3	Surface	5 sacks. Cut off casing and install identification marker.

(d) Acidizing and Fracturing Record

None.

(e) Back Pressure and Production Tests

None.

A P P E N D I X

A1	C & G LABS	C72-4713	DST #7	WATER ANALYSIS
A2	C & G LABS	C72-4714	DST #6	WATER ANALYSIS
A3	DST #1	REPORT	BJ TESTERS	
A4	DST #2	REPORT	BJ TESTERS	
A5	DST #3	REPORT	BJ TESTERS	
A6	DST #4	REPORT	BJ TESTERS	
A7	DST #5	REPORT	BJ TESTERS	
A8	DST #6	REPORT	BJ TESTERS	
A9	DST #7	REPORT	LYNES TESTERS	

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

WATER ANALYSIS

Lab No. C72-4715

Received: April 14,1972 Reported: April 19, 1972

Well: Location: Mobil Balot Hills M-63-N.W.T.

Operator: MOBIL OIL CANADA, LTD.

Field or Area: Balot Hills

Elev.: K.B. 1515' Grd. 1500' Zone/Formation: Cambrian (Mount Clarke)

Sample Interval: 3450' - 3500'

Method of Production: D.S.T. 7

Sampled from: LUS No. 8 Bottom Hole Sampler

Sampled by: Lynes United Services Ltd. Date April 6,1972

OTHER PERTINENT DATA

(Signed)

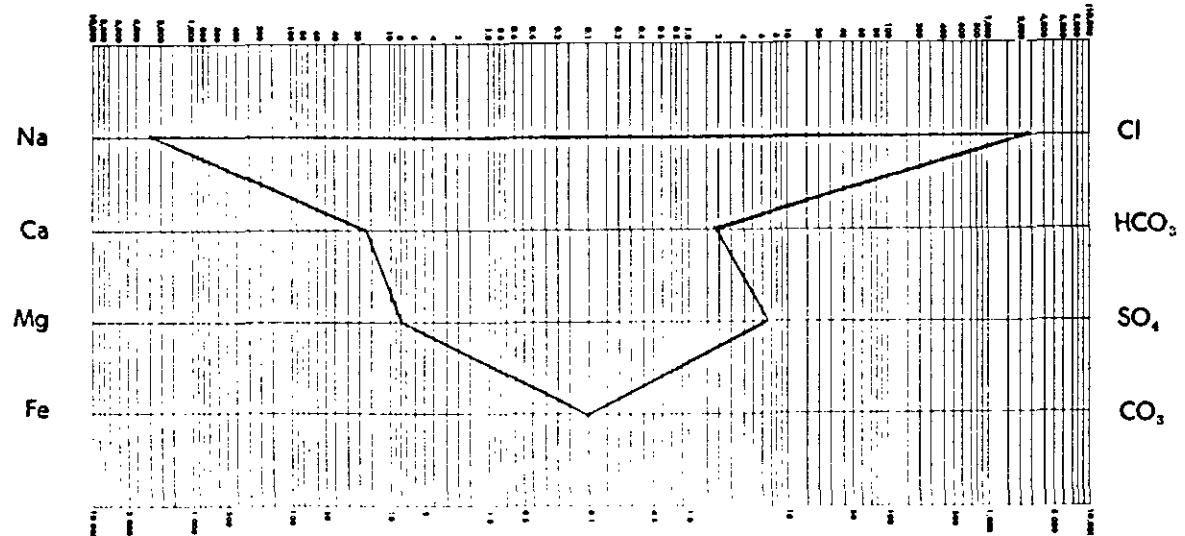
	Na & K		Ca	Mg					SO_4	Cl			CO_3	HCO_3		
Mg./L	65,755		330	97					316	102,000				110		
Meq./L	2860.33		16.47	7.97					6.57	2876.40				1.80		
Meq. %	49.58		0.29	0.13					0.11	49.86				0.03		

ATTACHMENT A1

Total Solids Mg/L: By Evaporation 171,830 Fe Nil Specific Gravity 1.113 @60°F Observed pH 8.1 @ 74°F

Calculated 168,608 After Ignition 165,080 H_2S Nil Refractive Index 1.3594 @25°C Resistivity 0.060 ohm meters @ 68°F (20°C)

Pattern Unit Meq./L



Remarks and Conclusions

Analysis determined on pale yellow filtrate recovered from water containing a thin layer of sediment. Organic matter detected in evaporated total dissolved solids.

CHEMICAL & GEOLOGICAL LABORATORIES LTD. WATER ANALYSIS Lab No. C72-4714

Received: Apr.14,1972 Reported: April 19,1972 Well: Location: Mobil Balot Hills M-63-N.W.T.

Operator: MOBIL OIL CANADA, LTD. Field or Area: Balot Hills

Elev.: K.B. 1515' Grd. 1500' Zone/Formation: Mount Clark (Cambrian Sand) Sample Interval: 3187' - 4211'

Method of Production: D.S.T. 6 Sampled from: Bottom Hole Sampler Sampled by: B.J. Service Ltd. Date: April 5,1972

OTHER PERTINENT DATA Recovery: 2100' mud.

(Signed)

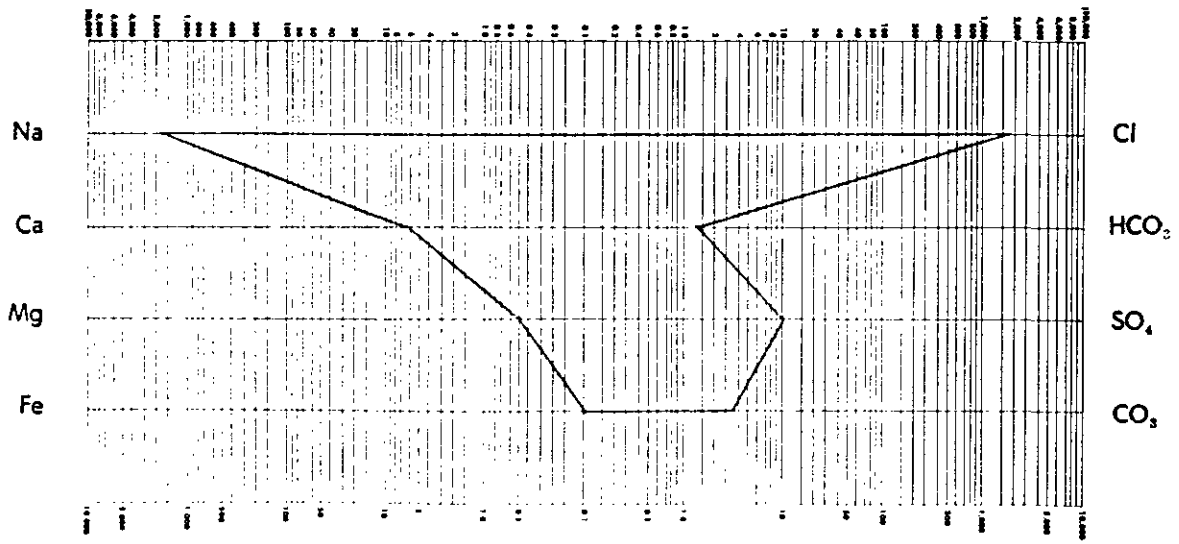
	Na & K		Ca	Mg					SO_4	Cl			CO_3	HCO_3		
Mg./L	40,846		126	6					517	62,700			99	85		
Meq./L	1776.80		6.29	0.49					10.75	1768.14			3.30	1.39		
Meq. %	49.81		0.18	0.01					0.30	49.57			0.09	0.04		

ATTACHMENT A2

Total Solids Mg/L: By Evaporation 109,270 Fe Nil Specific Gravity 1.075 @60°F Observed pH 9.4 @ 74°F

Calculated 104,379 After Ignition 103,380 H_2S Nil Refractive Index 1.3502 @25°C Resistivity 0.080 ohm meters @ 68°F

Pattern Unit Meq./L



Remarks and Conclusions

Analysis determined on yellow filtrate from water containing approximately 60% sediment. Much organic matter detected in evaporated total dissolved solids.

ATTACHMENT A3

TESTING REPORT

DRILL-STEM TEST DATA

Well Name	MOBIL BELOT HILLS	Test No.	1
Well Number	M63	Zone Tested	
Company	MOBIL OIL CANADA LTD.	Interval	3399.0 TO 3498.0
Comp. Rep.	KEITH BAXTER	Tester MEL MOSCRIP	Date MARCH 23, 1972

Type of Test DUAL BOTTOM HOLE RFS Tool No. 106, 124

Preflow 5.0 mins. ISI mins. Flow mins. FSI mins.

	OUT REC. No. 3852	OUT REC. No. 3689	REC. No.
	5800 RANGE 12 HR. CLOCK	5700 RANGE 24 HR. CLOCK	RANGE HR. CLOCK
DEPTH	3431.0	3436.0	
Initial Hydro Mud Press	1514.9	1516.3	
Initial Shut-In Press			
Initial Flow Press			
Final Flow Press			
Final Shut-In Press			
Final Hydro Mud Press	1514.9	1516.3	

Mud Drop YES Fluid Loss Mud Weight 8.4

Viscosity 34.0 Temperature °F Net Pay Tested

Top Packer Depth 3393.0 Bottom Packer Depth 3399.0 Total Depth 3498.0

Drill Pipe Size 3.5 IF Wt. Drill Collar I.D. 2.125 Ft. Run 456.00

Surface Choke Size CLOSED Bottom Choke Size 0.5 Main Hole Size 6.250

Anchor Size 4.75 Rat Hole Size Feet of Rat Hole

Cushion Amount Type Rubber Size 5.5 X 2

Fluid Recovery Total Feet 1368.0

Recovered 1368 Feet of MUD

Recovered Feet of

Recovered Feet of

Recovered Feet of

Recovered Feet of

Gas Recovery How Measured Riser size:

mins	Temp. °F	Press Rdg	psi	Orifice Size	=	MCF Day
mins	Temp. °F	Press Rdg.	psi	Orifice Size	=	MCF/Day
mins	Temp °F	Press Rdg	psi	Orifice Size	=	MCF/Day
mins	Temp. °F	Press Rdg	psi	Orifice Size	=	MCF/Day
mins	Temp °F	Press Rdg	psi	Orifice Size	=	MCF/Day
mins	Temp °F	Press Rdg.	psi	Orifice Size	=	MCF/Day

Bleed Off Time for Drill Pipe

REMARKS: MISRUN DUE TO PACKER SEAT FAILURE. MUD SEEPED AWAY FOR 11 MINUTES AND THEN TOOK OFF.

A Core Lab Gas Cont. No Chem - Geo Lab Gas Cont. No

BJ BORG WARNER

TESTING REPORT

WEIGHT INDICATER READING

PRIOR TO SETTING PACKERS

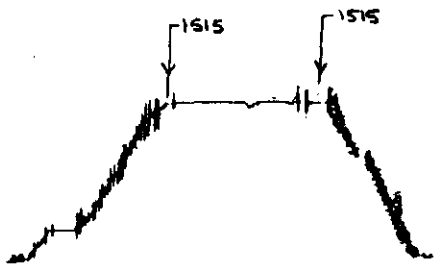
AFTER PULL PACKERS LOOSE

	ID	OD	LENGTH	
45 LANDING SUB				
45 CHAMBER				
45 TOOL OR P.O. SUB			1.00	
CO SUB				
SHUT IN TOOL		4¾	5.20	
R.F.S. No. 124	2¼	4¾	3.30	
R.F.S. No. 106	2¼	4¾	3.30	
HYDRAULIC TOOL		4¾	7.20	
JARS	1	4¾	6.00	
RECORDER No.	2¼	4¾		DEPTH
RECORDER No.	2¼	4¾		DEPTH
SAFETY JOINT	2 11/16	4¾	1.75	
BY PASS SUB	1 6/32	4¾		
1. PACKER DEPTH 3393 — PACKER	1 OR ⅞		6.00	
2. PACKER DEPTH 3399 — PACKER	1 or ⅞		5.00	TOOL ABOVE INTERVAL 38.75
ANCHOR—SPECIFY	2½		1.00	
PERF			29.00	
BLANK OFF OR BY PASS SUB	1 6/32	4¾		
RECORDER No.	2¼	4¾	5.00	DEPTH 3431
RECORDER			5.00	DEPTH 3436
3. PACKER DEPTH — PACKER	1 OR ⅞			TOTAL INTERVAL
4. PACKER DEPTH — PACKER	1 OR ⅞			
ANCHOR—SPECIFY	2½			
DRILL COLLARS			56.70	
RECORDER No	2¼	4¾		DEPTH
TOTAL DEPTH 3498 — BULLNOSE	2¾	4¾	2.50	TOTAL TAIL PIPE 99.20
				TOTAL TEST TOOL 81.25

DST CHARTS FOR COMPARATIVE VISUAL ANALYSIS

HIGH PERMEABILITY STRONG DAMAGE EFFECT | HIGH PERMEABILITY NO DAMAGE EFFECT | MEDIUM PERMEABILITY STRONG DAMAGE EFFECT | MEDIUM PERMEABILITY NO DAMAGE EFFECT | LOW PERMEABILITY STRONG DAMAGE EFFECT | LOW PERMEABILITY NO DAMAGE EFFECT

MOBIL BELOT HILLS M63
INTERVAL 3399 - 3498
DST NO. 1 REC. NO. 3852



DST RECORDER CHARTS

MOBIL BELOT HILLS M63
INTERVAL 3399 - 3498
DST NO. 1 REC. NO. 3689

ATTACHMENT A4

BJ BORG WARNER

TESTING REPORT

DRILL-STEM TEST DATA

Well Name MOBIL BELOT HILLS — Test No. 2

Well Number M63 — Zone Tested

Company MOBIL OIL CANADA LTD. — Interval 3408.0 TO 3498.0

Comp. Rep. KEITH BAXTER — Tester MEL MOSCRIP — Date MARCH 23, 1972

Type of Test DUAL BOTTOM HOLE — RFS Tool No. 106, 124

Preflow 5.0 mins. ISI mins. Flow mins. FSI mins.

	OUT REC. No 3852	OUT REC. No. 3689	REC. No.
	5800 RANGE 12 HR. CLOCK	5700 RANGE 24 HR. CLOCK	RANGE HR CLOCK
DEPTH	3430.0	3435.0	
Initial Hydro Mud Press	1500.0	1502.8	
Initial Shut-In Press			
Initial Flow Press			
Final Flow Press			
Final Shut In Press			
Final Hydro Mud Press	1500.0	1502.8	

Mud Drop YES — Fluid Loss — Mud Weight 8.4

Viscosity 34.0 — Temperature °F — Net Pay Tested

Top Packer Depth 3402.0 — Bottom Packer Depth 3408.0 — Total Depth 3498.0

Drill Pipe Size 3.5 IF — Wt 13.3 — Drill Collar I.D. 2.125 — Ft. Run 456.00

Surface Choke Size CLOSED — Bottom Choke Size 0.5 — Main Hole Size 6.250

Anchor Size 4.75 — Rat Hole Size — Feet of Rat Hole

Cushion Amount — Type — Rubber Size 5.5 X 2

Fluid Recovery Total Feet 600.0

Recovered 600 Feet of MUD

Recovered Feet of

Recovered Feet of

Recovered Feet of

Recovered Feet of

Gas Recovery — How Measured — Riser size:

mins	Temp. °F	Press Rdg.	psi	Orifice Size	=	MCF/Day
mins	Temp. °F	Press Rdg	psi	Orifice Size	=	MCF/Day
mins	Temp °F	Press Rdg	psi	Orifice Size	=	MCF/Day
mins	Temp. °F	Press Rdg	psi	Orifice Size	=	MCF/Day
mins	Temp °F	Press Rdg	psi	Orifice Size	=	MCF/Day
mins	Temp. °F	Press Rdg.	psi	Orifice Size	=	MCF/Day

Bleed Off Time for Drill Pipe

REMARKS MISRUN DUE TO PACKER SEAT FAILURE. MUD SEEPED SLOWLY AWAY, THEN INCREASED DURING PREFLOW.

A ... Gas Cont. No — Chem - Geo. Lab Gas Cont. No

BJ BORG WARNER

TESTING REPORT

WEIGHT INDICATER READING

PRIOR TO SETTING PACKERS

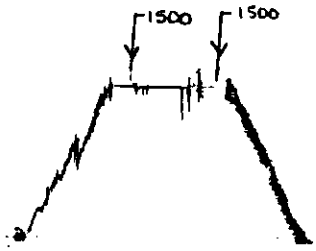
AFTER PULL PACKERS LOOSE

		ID	OD	LENGTH	
	4S LANDING SUB				
	4S CHAMBER				
	4S TOOL OR P.O. SUB			1.00	
	CO SUB				
	SHUT IN TOOL		4¾	5.20	
	R.F.S. No. 124	2¼	4¾	3.30	
	R.F.S. No. 106	2¼	4¾	3.30	
	HYDRAULIC TOOL		4¾	7.20	
	JARS	1	4¾	6.00	
	RECORDER No.	2¼	4¾		DEPTH
	RECORDER No.	2¼	4¾		DEPTH
	SAFETY JOINT	2 11/16	4¾	1.75	
	BY PASS SUB	1 5/32	4¾		
1. PACKER DEPTH 3402	PACKER	1 OR ⅛		6.00	
2. PACKER DEPTH 3408	PACKER	1 or ⅛		5.00	TOOL ABOVE INTERVAL 38.75
	ANCHOR—SPECIFY	2½		1.00	
	PERF			20.00	
	BLANK OFF OR BY PASS SUB	1 5/32	4¾		
	RECORDER No. 3852	2¼	4¾	5.00	DEPTH 3430
	RECORDER NO. 3689			5.00	DEPTH 3435
3. PACKER DEPTH	PACKER	1 OR ⅛			TOTAL INTERVAL
4. PACKER DEPTH	PACKER	1 OR ⅛			
	ANCHOR—SPECIFY	2½			
	DRILL COLLARS			56.70	
	RECORDER No	2¼	4¾		DEPTH
TOTAL DEPTH 3498	BULLNOSE	2¾	4¾	2.50	TOTAL TAIL PIPE 90.20
					TOTAL TEST TOOL 72.25

DST CHARTS FOR COMPARATIVE VISUAL ANALYSIS

HIGH PERMEABILITY STRONG DAMAGE EFFECT | HIGH PERMEABILITY NO DAMAGE EFFECT | MEDIUM PERMEABILITY STRONG DAMAGE EFFECT | MEDIUM PERMEABILITY NO DAMAGE EFFECT | LOW PERMEABILITY STRONG DAMAGE EFFECT | LOW PERMEABILITY NO DAMAGE EFFECT

MOBIL BELOT HILLS M63
INTERVAL 3408 - 3498
DST NO. 2 REC. NO. 3852



DST RECORDER CHARTS

MOBIL BELOT HILLS M63
INTERVAL 3408 - 3498
DST NO. 2 REC. NO. 3689

ATTACHMENT A5

BJ BORG WARNER

TESTING REPORT

DRILL-STEM TEST DATA

Well Name MOBIL BELOT HILLS M63 — Test No. 3

Well Number M63 — Zone Tested CAMBRIAN SANDS

Company MOBIL OIL CANADA LTD. — Interval 3234.0 TO 4211.0

Comp Rep KEITH BAXTER — Tester MEL MOSCRIP — Date APRIL 3,1972

Type of Test LANE WELLS PACKER TEST — RFS Tool No. 106 , 124

Preflow	mins	ISI	mins.	Flow	mins.	FSI	mins.
		OUT REC No. 3689		OUT REC. No. 3852		REC. No.	
		5700 RANGE 12 HR. CLOCK		5800 RANGE 24 HR. CLOCK		RANGE	HR. CLOCK
DEPTH		3453.0		3458.0			
Initial Hydro Mud Press							
Initial Shut-In Press							
Initial Flow Press							
Final Flow Press							
Final Shut-In Press							
Final Hydro Mud Press							

Mud Drop NO — Fluid Loss — Mud Weight 9.2

Viscosity 32.0 — Temperature °F 72.0 — Net Pay Tested

Top Packer Depth 3234.0 — Bottom Packer Depth — Total Depth 4211.0

Drill Pipe Size 3.5 IF — Wt. 13.3 — Drill Collar I.D. 2.000 — Ft. Run 438.00

Surface Choke Size CLOSED — Bottom Choke Size 0.5 — Main Hole Size 7.000

Anchor Size 4.75 — Rat Hole Size 6.250 — Feet of Rat Hole

Cushion Amount — Type — Rubber Size 5.75

Fluid Recovery Total Feet

Recovered Feet of

Recovered Feet of

Recovered Feet of

Recovered Feet of

Recovered Feet of

Gas Recovery — How Measured — Riser size:

mins	Temp °F	Press Rdg.	psi	Orifice Size	=	MCF/Day
mins	Temp °F	Press Rdg.	psi	Orifice Size	=	MCF/Day
mins	Temp. °F	Press Rdg.	psi	Orifice Size	=	MCF/Day
mins	Temp °F	Press Rdg	psi	Orifice Size	=	MCF/Day
mins	Temp °F	Press Rdg	psi	Orifice Size	=	MCF/Day
mins	Temp °F	Press Rdg	psi	Orifice Size	=	MCF/Day

Bleed Off Time for Drill Pipe

REMARKS: MISRUN - HMV CHECKED OUT, OPERATING O.K.

A — Geo Lab Gas Cont No — Chem Geo Lab Gas Cont No

BJ BORG WARNER

TESTING REPORT

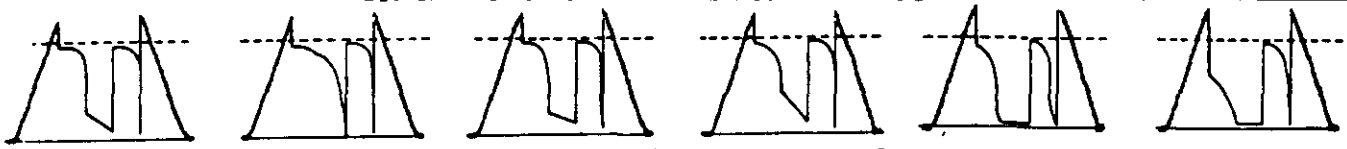
		ID	OD	LENGTH
	4S LANDING SUB			1.00
	4S CHAMBER			
	4S TOOL OR P.O. SUB			5.00
	CO SUB			
WEIGHT INDICATER READING	SHUT IN TOOL		4¾	5.20
PRIOR TO SETTING PACKERS	R.F.S. No. 106	2¼	4¾	3.30
AFTER PULL PACKERS LOOSE	R.F.S. No. 124	2¼	4¾	3.30
	HYDRAULIC TOOL		4¾	
	JARS	1	4¾	6.00
	RECORDER No.	2¼	4¾	DEPTH
	RECORDER No.	2¼	4¾	DEPTH
	SAFETY JOINT	2 11/16	4¾	1.75
	BY PASS SUB	1 5/32	4¾	
1. PACKER DEPTH	PACKER	1 OR ⅞		
PACKER DEPTH 3234	PACKER	1 or ⅞		7.10 TOOL ABOVE INTERVAL 32.75
	ANCHOR—SPECIFY	2½		
	2 STANDS PIPE			188.54
	BLANK OFF OR BY PASS SUB	1 5/32	4¾	
	RECORDER No.	2¼	4¾	DEPTH
	PERF			28.00
3. PACKER DEPTH	PACKER	1 OR ⅞		TOTAL INTERVAL
4. PACKER DEPTH	PACKER	1 OR ⅞		
	ANCHOR—SPECIFY	2½		
	RECORDER NO. 3689			5.00 DEPTH 3453
	RECORDER No 3852	2¼	4¾	5.00 DEPTH 3458
TOTAL DEPTH 4211 HOLE	BULLNOSE	2¾	4¾	2.50 TOTAL TAIL PIPE 229.04
				TOTAL TEST TOOL 73.25

BOTTOM OF CASING 3240'

BOTTOM OF TEST TOOL 3464'

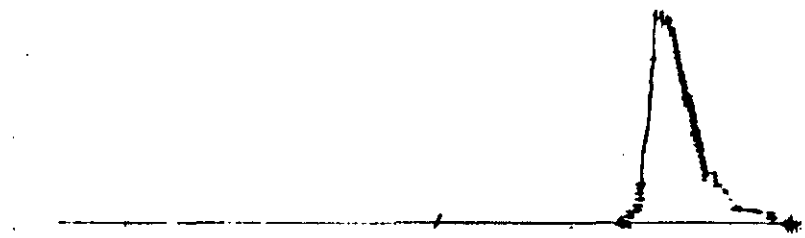
TOTAL DEPTH OF HOLE 4211'

DST CHARTS FOR COMPARATIVE VISUAL ANALYSIS



HIGH PERMEABILITY STRONG DAMAGE EFFECT | HIGH PERMEABILITY NO DAMAGE EFFECT | MEDIUM PERMEABILITY STRONG DAMAGE EFFECT | MEDIUM PERMEABILITY NO DAMAGE EFFECT | LOW PERMEABILITY STRONG DAMAGE EFFECT | LOW PERMEABILITY NO DAMAGE EFFECT

MOBIL BELOT HILLS M63
INTERVAL 3234 - 4211
DST NO. 3 REC. NO. 3689



DST RECORDER CHARTS

MOBIL BELOT HILLS M63
INTERVAL 3234 - 4211
DST NO. 3 REC. NO. 3852

ATTACHMENT A6

TESTING REPORT

DRILL-STEM TEST DATA

Well Name MOBIL BELOT HILLS M63 — Test No. 4

Well Number M63 — Zone Tested CAMBRIAN SANDS

Company MOBIL OIL CANADA LTD. — Interval 3230.0 TO 4211.0

Comp. Rep. KEITH BAXTER — Tester MEL MOSCRIP — Date APRIL 4,1972

Type of Test LANE WELLS PACKER TEST — RFS Tool No. 106,124

Preflow mins. ISI mins. Flow mins. FSI mins

	OUT REC. No. 3689 5700 RANGE 12 HR. CLOCK	OUT REC. No. 3852 RANGE 24 HR. CLOCK	REC. No. RANGE HR. CLOCK
DEPTH	3448.0	3453.0	
Initial Hydro Mud Press	1653.5		
Initial Shut-In Press			
Initial Flow Press			
Final Flow Press			
Final Shut-In Press			
Final Hydro Mud Press	1653.5		

Mud Drop YES — Fluid Loss — Mud Weight 9.2

Viscosity 32.0 — Temperature °F 72.0 — Net Pay Tested

Top Packer Depth 3230.0 — Bottom Packer Depth — Total Depth 4211.0

Drill Pipe Size 3.5 IF — Wt 13.3 — Drill Collar I.D. 2.000 — Ft. Run 438.00

Surface Choke Size CLOSED — Bottom Choke Size 0.5 — Main Hole Size 7.000

Anchor Size 4.75 — Rat Hole Size 6.250 — Feet of Rat Hole

Cushion Amount — Type — Rubber Size 5.75

Fluid Recovery Total Feet

Recovered Feet of

Recovered Feet of

Recovered Feet of

Recovered Feet of

Recovered Feet of

Gas Recovery — How Measured — Riser size:

mins	Temp. °F	Press Rdg.	psi	Orifice Size	=	MCF/Day
mins	Temp. °F	Press Rdg.	psi	Orifice Size	=	MCF/Day
mins	Temp. °F	Press Rdg.	psi	Orifice Size	=	MCF/Day
mins	Temp. °F	Press Rdg.	psi	Orifice Size	=	MCF/Day
mins	Temp. °F	Press Rdg.	psi	Orifice Size	=	MCF/Day
mins	Temp. °F	Press Rdg.	psi	Orifice Size	=	MCF/Day

Bleed Off Time for Drill Pipe

REMARKS: MISRUN - PACKER SEAT FAILED.

A Core Lab Gas Cont. No — Chem - Geo. Lab Gas Cont. No

BJ BORG WARNER

TESTING REPORT

	ID	OD	LENGTH	
4S LANDING SUB			1.00	BOTTOM OF CASING 3240'
4S CHAMBER				BOTTOM OF TEST TOOL 3460'
4S TOOL OR P.O. SUB			5.00	
CO SUB				TOTAL DEPTH OF HOLE 4211'
SHUT IN TOOL		4¾	5.20	
R.F.S. No. 106	2¼	4¾	3.30	
R.F.S. No. 124	2¼	4¾	3.30	
HYDRAULIC TOOL		4¾		
JARS	1	4¾	6.00	
RECORDER No.	2¼	4¾		DEPTH
RECORDER No.	2¼	4¾		DEPTH
SAFETY JOINT	2 11/16	4¾	1.75	
BY PASS SUB	1 5/32	4¾		
PACKER	1 OR ⅞			
PACKER	1 or ⅞		7.10	TOOL ABOVE INTERVAL 32.75
ANCHOR—SPECIFY	2½			
2 STANDS PIPE			188.54	
BLANK OFF OR BY PASS SUB	1 5/32	4¾		
RECORDER No.	2¼	4¾		DEPTH
PERF			28.00	
PACKER	1 OR ⅞			TOTAL INTERVAL
PACKER	1 OR ⅞			
ANCHOR—SPECIFY	2½			
RECORDER NO. 3689			5.00	DEPTH 3448
RECORDER No 3852	2¼	4¾	5.00	DEPTH 3453
BULLNOSE	2¼	4¾	2.50	TOTAL TAIL PIPE 229.04

WEIGHT INDICATER READING

PRIOR TO SETTING PACKERS

AFTER PULL PACKERS LOOSE

1. PACKER DEPTH

PACKER DEPTH 3230

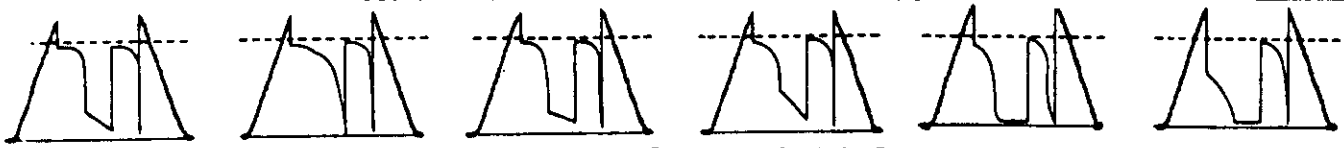
3. PACKER DEPTH

4. PACKER DEPTH

TOTAL DEPTH 4211 HOLE

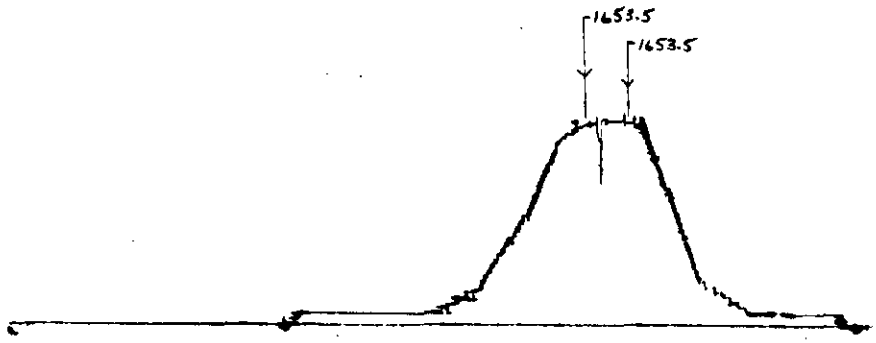
TOTAL TEST TOOL 73.25

DST CHARTS FOR COMPARATIVE VISUAL ANALYSIS



HIGH PERMEABILITY STRONG DAMAGE EFFECT | HIGH PERMEABILITY NO DAMAGE EFFECT | MEDIUM PERMEABILITY STRONG DAMAGE EFFECT | MEDIUM PERMEABILITY NO DAMAGE EFFECT | LOW PERMEABILITY STRONG DAMAGE EFFECT | LOW PERMEABILITY NO DAMAGE EFFECT

MOBIL BELOT HILLS M63
INTERVAL 3230 - 4211
DST NO. 4 REC. NO. 3689



DST RECORDER CHARTS

MOBIL BELOT HILLS M63
INTERVAL 3230 - 4211
DST NO. 4 REC. NO. 3852

ATTACHMENT A7

TESTING REPORT

DRILL-STEM TEST DATA

Well Name MOBIL BELOT HILLS M63 — Test No. 5

Well Number M63 — Zone Tested CAMBRIAN SAND S

Company MOBIL OIL CANADA LTD. — Interval 3226.0 TO 4211.0

Comp. Rep. KEITH BAXTER — Tester MEL MOSCRIP — Date APRIL 4,1972

Type of Test LANE WELLS PACKER TEST — RFS Tool No. 106,124

Preflow ____ mins. ISI ____ mins. Flow ____ mins. FSI ____ mins.

	OUT REC. No. 3689 5700 RANGE 12 HR. CLOCK	OUT REC. No. 3852 5800 RANGE 24 HR. CLOCK	REC. No. RANGE HR. CLOCK
DEPTH	3445.0	3450.0	
Initial Hydro Mud Press	1639.4	1642.9	
Initial Shut-In Press			
Initial Flow Press			
Final Flow Press			
Final Shut-In Press			
Final Hydro Mud Press	1639.4	1642.9	

Mud Drop YES — Fluid Loss — Mud Weight 9.2

Viscosity 32.0 — Temperature °F 72.0 — Net Pay Tested

Top Packer Depth 3226.0 — Bottom Packer Depth — Total Depth 4211.0

Drill Pipe Size 4.75 — Wt. 16.6 — Drill Collar I.D. 2.000 — Ft. Run 438.00

Surface Choke Size CLOSED — Bottom Choke Size 0.5 — Main Hole Size 7.000

Anchor Size 4.75 — Rat Hole Size 6.250 — Feet of Rat Hole

Cushion Amount — Type — Rubber Size 5.75

Fluid Recovery Total Feet

Recovered Feet of

Recovered Feet of

Recovered Feet of

Recovered Feet of

Recovered Feet of

Gas Recovery — How Measured — Riser size:

mins	Temp. °F	Press Rdg.	psi	Orifice Size	=	MCF/Day
mins	Temp. °F	Press Rdg.	psi	Orifice Size	=	MCF/Day
mins.	Temp. °F	Press Rdg	psi	Orifice Size	=	MCF/Day
mins	Temp °F	Press Rdg	psi	Orifice Size	=	MCF/Day
mins	Temp. °F	Press Rdg.	psi	Orifice Size	=	MCF/Day
mins	Temp. °F	Press Rdg.	psi	Orifice Size	=	MCF/Day

Bleed Off Time for Drill Pipe

REMARKS: MISRUN - PACKER SEAT FAILED

A Core Lab Gas Cont. No. — Chem - Geo Lab Gas Cont. No.

BJ BORG WARNER

TESTING REPORT

BOTTOM OF CASING 3240'

BOTTOM OF TEST TOOL 3456'

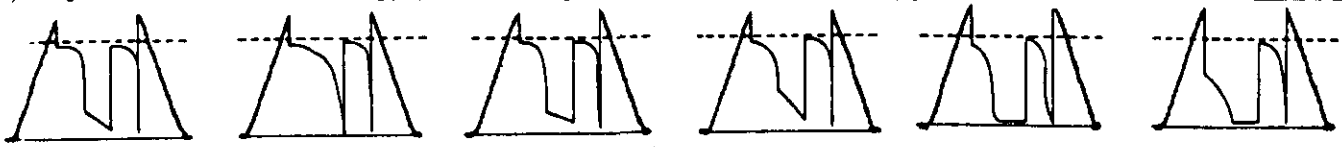
WEIGHT INDICATER READING

PRIOR TO SETTING PACKERS

AFTER PULL PACKERS LOOSE

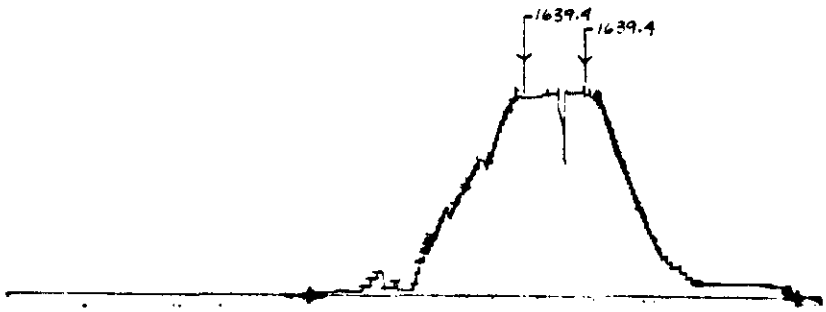
	ID	OD	LENGTH	
4S LANDING SUB			1.00	
4S CHAMBER				
4S TOOL OR P.O. SUB			5.00	
CO SUB				
SHUT IN TOOL		4¾	5.20	
R.F.S. No. 106	2¼	4¾	3.30	
R.F.S. No. 124	2¼	4¾	3.30	
HYDRAULIC TOOL		4¾	7.20	
JARS	1	4¾	6.00	
RECORDER No.	2¼	4¾		DEPTH
RECORDER No.	2¼	4¾		DEPTH
SAFETY JOINT	2 11/16	4¾	1.75	
BY PASS SUB	1 5/32	4¾		
1. PACKER DEPTH — PACKER	1 OR ⅞			
PACKER DEPTH 3226 — PACKER	1 or ⅞		7.10	TOOL ABOVE INTERVAL 39.85
ANCHOR—SPECIFY	2½			
2 STANDS PIPE			188.54	
BLANK OFF OR BY PASS SUB	1 5/32	4¾		
RECORDER No.	2¼	4¾		DEPTH
PERF			28.00	
3. PACKER DEPTH — PACKER	1 OR ⅞			TOTAL INTERVAL
4. PACKER DEPTH — PACKER	1 OR ⅞			
ANCHOR—SPECIFY	2½			
RECORDER NO. 3689			5.00	DEPTH 3445
RECORDER No 3852	2¼	4¾	5.00	DEPTH 3450
TOTAL DEPTH 4211 OF HOLE — BULLNOSE	2¼	4¾		TOTAL TAIL PIPE 229.04
				TOTAL TEST TOOL 80.35

DST CHARTS FOR COMPARATIVE VISUAL ANALYSIS



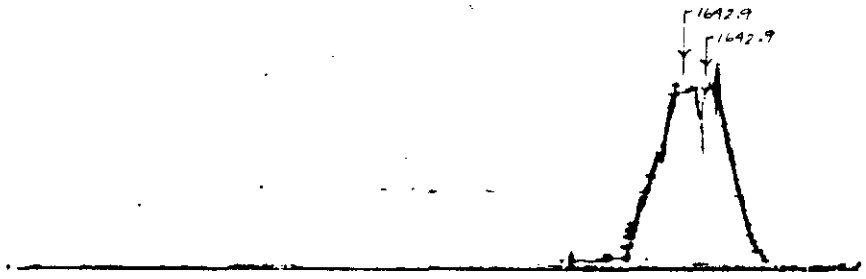
HIGH PERMEABILITY STRONG DAMAGE EFFECT | HIGH PERMEABILITY NO DAMAGE EFFECT | MEDIUM PERMEABILITY STRONG DAMAGE EFFECT | MEDIUM PERMEABILITY NO DAMAGE EFFECT | LOW PERMEABILITY STRONG DAMAGE EFFECT | LOW PERMEABILITY NO DAMAGE EFFECT

MOBIL BELOT HILLS M63
INTERVAL 3226 - 4211
DST NO. 5 REC. NO. 3689



DST RECORDER CHARTS

MOBIL BELOT HILLS M63
INTERVAL 3226 - 4211
DST NO. 5 REC. NO. 3852



ATTACHMENT A8

TESTING REPORT

DRILL-STEM TEST DATA

Well Name MOBIL BELOT HILLS — Test No. 6

Well Number M63 — Zone Tested CAMBRIAN SANDS

Company MOBIL OIL CANADA LTD. — Interval 3187.0 TO 4211.0

Comp. Rep. KEITH BAXTER — Tester MEL MOSCRIP — Date APRIL 5, 1972

Type of Test LANE WELLS PACKER TEST — RFS Tool No. 105 , 124

Preflow 45.0 mins. ISI 102.0 mins. Flow mins. FSI mins.

	OUT REC. No. 3629 5700 RANGE 12 HR. CLOCK	OUT REC. No. 3352 5800 RANGE 24 HR. CLOCK	REC. No RANGE HR. CLOCK
DEPTH	3407.0	3412.0	
Initial Hydro Mud Press	1629.6	1631.5	
Initial Shut-In Press			
Initial Flow Press	285.7	287.9	
Final Flow Press	957.1	960.6	
Final Shut-In Press	1207.0	1210.0	
Final Hydro Mud Press	1629.6	1631.5	

Mud Drop NC — Fluid Loss — Mud Weight 9.2

Viscosity 32.0 — Temperature °F 72.0 — Net Pay Tested 10.0

Top Packer Depth 3187.0 — Bottom Packer Depth — Total Depth 4211.0

Drill Pipe Size 3.5 IF — Wt. 13.3 — Drill Collar I.D. 2.000 — Ft. Run 438.00

Surface Choke Size CLOSED — Bottom Choke Size 0.5 — Main Hole Size 7.000

Anchor Size 4.75 — Rat Hole Size 6.250 — Feet of Rat Hole

Cushion Amount — Type — Rubber Size 5.75

Fluid Recovery Total Feet 2000.0

Recovered 2000 Feet of MUD (PUMPED OUT)

Recovered Feet of

Recovered Feet of

Recovered Feet of

Recovered Feet of

Gas Recovery — How Measured — Riser size:

mins	Temp. °F	Press Rdg	psi	Orifice Size	=	MCF/Day
mins.	Temp °F	Press Rdg.	psi	Orifice Size	=	MCF/Day
mins.	Temp. °F	Press Rdg.	psi	Orifice Size	=	MCF/Day
mins.	Temp. °F	Press Rdg.	psi	Orifice Size	=	MCF/Day
mins	Temp. °F	Press Rdg.	psi	Orifice Size	=	MCF/Day
mins	Temp. °F	Press Rdg.	psi	Orifice Size	=	MCF/Day

Bleed Off Time for Drill Pipe

REMARKS: TIGHT HOLE.

RFS TOOL - 2700 CC OF WATERY MUD.

A Core Lab Gas Cont. No — Chem - Geo. Lab Gas Cont. No

BJ BORG WARNER

TESTING REPORT

	ID	OD	LENGTH
4S LANDING SUB			1.00
4S CHAMBER			
4S TOOL OR P.O. SUB			5.00
CO SUB			
SHUT IN TOOL		4¾	5.20
R.F.S. No. 106	2¼	4¾	3.30
R.F.S. No. 124	2¼	4¾	3.30
HYDRAULIC TOOL		4¾	
JARS	1	4¾	6.00
RECORDER No.	2¼	4¾	DEPTH
RECORDER No.	2¼	4¾	DEPTH
SAFETY JOINT	2 11/16	4¾	1.75
BY PASS SUB	1 5/32	4¾	
PACKER	1 OR ⅞		
PACKER	1 or ⅞		7.10
ANCHOR—SPECIFY	2½		
2 STANDS PIPE			188.54
BLANK OFF OR BY PASS SUB	1 5/32	4¾	
RECORDER No.	2¼	4¾	DEPTH
PERF			28.00
PACKER	1 OR ⅞		
PACKER	1 OR ⅞		
ANCHOR—SPECIFY	2½		
RECORDER NO. 3689			5.00
RECORDER No 3852	2¼	4¾	5.00
BULLNOSE	2¾	4¾	2.50

WEIGHT INDICATER READING

PRIOR TO SETTING PACKERS

AFTER PULL PACKERS LOOSE

BOTTOM OF CASING 3240'

BOTTOM OF TOOL 3417'

TOTAL DEPTH OF HOLE 4211'

1. PACKER DEPTH

2 PACKER DEPTH 3187

3. PACKER DEPTH

4. PACKER DEPTH

TOOL ABOVE INTERVAL 32.75

TOTAL INTERVAL

DEPTH 3407

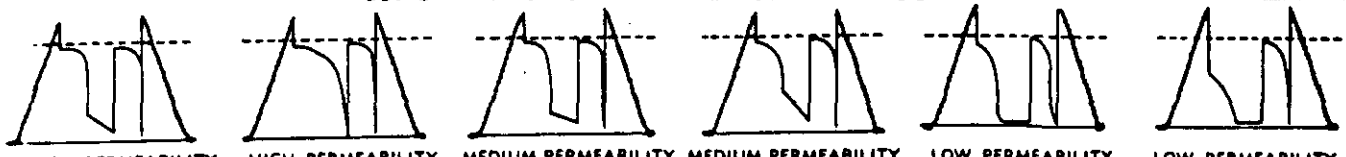
DEPTH 3412

TOTAL DEPTH HOLE 4211

TOTAL TAIL PIPE 299.04

TOTAL TEST TOOL 73.25

DST CHARTS FOR COMPARATIVE VISUAL ANALYSIS



HIGH PERMEABILITY STRONG DAMAGE EFFECT | HIGH PERMEABILITY NO DAMAGE EFFECT | MEDIUM PERMEABILITY STRONG DAMAGE EFFECT | MEDIUM PERMEABILITY NO DAMAGE EFFECT | LOW PERMEABILITY STRONG DAMAGE EFFECT | LOW PERMEABILITY NO DAMAGE EFFECT

WELL NAME MOBIL BELOT HILLS DST. NO. 6

LOCATION M63 REC. NO. 3689 DEPTH 3407.

MEASURED PRESSURES

	POINT NUMBER	TIME MIN	PRESSURE PSIG
RUN IN HOLE	1	0.0	0.0
	2	134.0	1629.6
INITIAL HYDRO PRESSURE	3	158.0	1629.6
INITIAL FLOW PRESSURE	4	158.0	285.7
	5	163.0	451.4
	6	168.0	565.7
	7	173.0	658.6
	8	178.0	731.4
	9	183.0	794.3
	10	188.0	847.1
	11	193.0	891.4
	12	198.0	928.6
FINAL FLOWING PRESSURE	13	203.0	957.1
START SHUT-IN	14	203.0	957.1
	15	208.0	1160.6
	16	213.0	1183.1
	17	218.0	1191.5
	18	223.0	1195.6
	19	228.0	1198.6
	20	233.0	1200.0
	21	238.0	1201.4
	22	243.0	1202.8
	23	248.0	1204.2
	24	253.0	1204.2
	25	258.0	1204.2
	26	263.0	1204.2
	27	268.0	1205.6
	28	273.0	1205.6
	29	278.0	1205.6
	30	283.0	1205.6
	31	288.0	1205.6
	32	293.0	1205.6
	33	298.0	1207.0
	34	303.0	1207.0
	35	313.0	1207.0
	36	323.0	1207.0
	37	333.0	1207.0
	38	343.0	1207.0

WELL NAME MOBIL BELOT HILLS DST. NO. 6

LOCATION M63 REC. NO. 3689 DEPTH 3407.

MEASURED PRESSURES

	POINT NUMBER	TIME MIN	PRESSURE PSIG
	39	353.0	1207.0
	40	363.0	1207.0
	41	373.0	1207.0
	42	383.0	1207.0
SHUT-IN PRESSURE	43	385.0	1207.0
START PUMPING OUT	44	385.0	1207.0
	45	386.0	1628.2
FINISH PUMPING OUT	46	409.0	1628.2
FINAL HYDRO PRESSURE	47	410.0	1629.6
	48	435.0	1629.6
OUT OF HOLE	49	589.0	0.0

WELL NAME MOBIL BELOT HILLS DST. NO. 6

LOCATION M63 REC. NO. 3689 DEPTH 3407.

CALCULATIONS FOR LIQUID RECOVERY (FIRST SHUT-IN)

(A) EXTRAPOLATED RESERVOIR PRESSURE	1211.0
NO. OF POINTS CONSIDERED IN BUILD-UP	29
NO. OF POINTS USED IN EXTRAPOLATION	27
ROOT MEAN SQUARE DEVIATION OF BEST-FIT LINE (PSI).....	0.90
EFFECTIVE PRODUCING TIME (MIN)	45.0

WELL NAME MOBIL BELOT HILLS DST. NO. 6

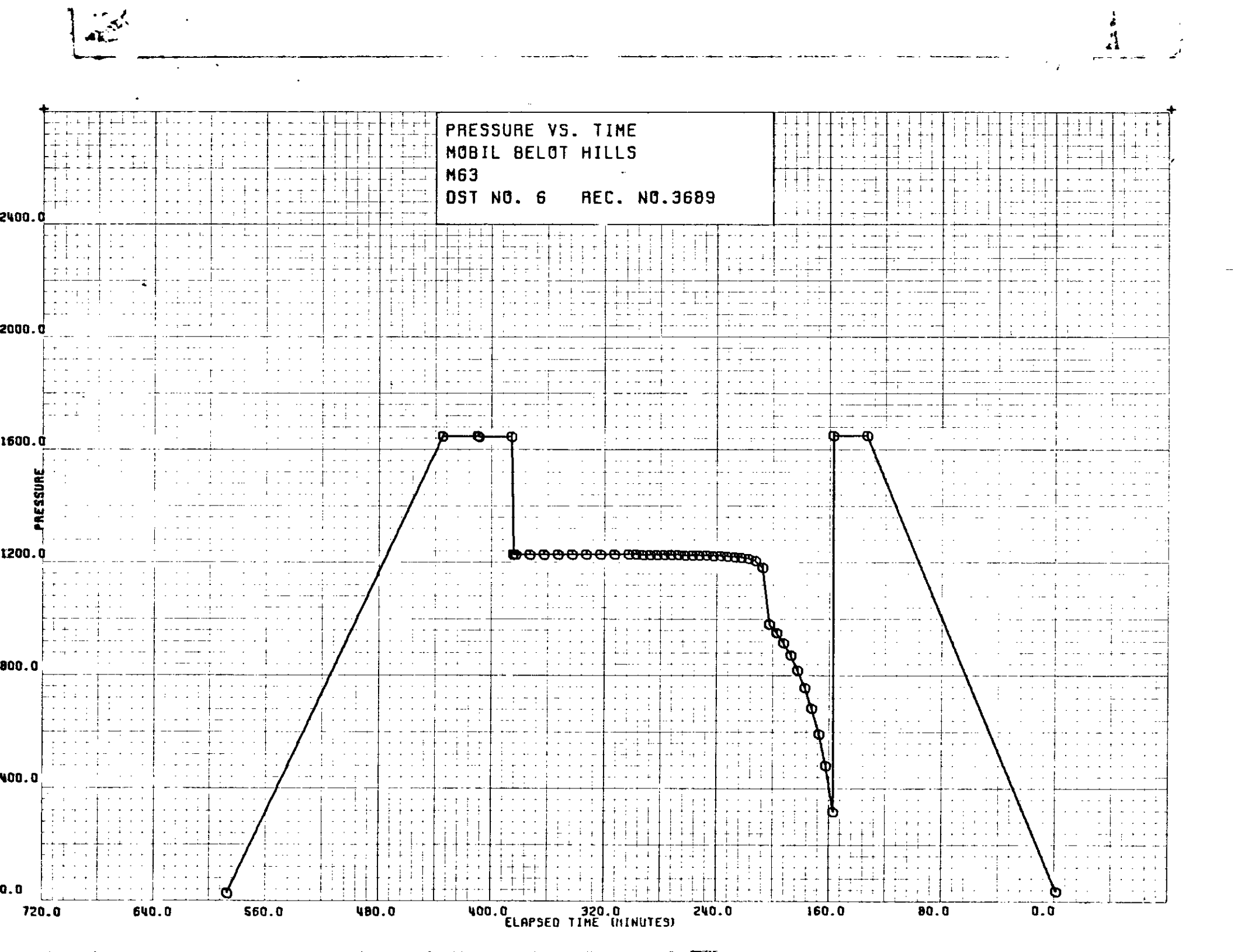
LOCATION M63 REC. NO. 3689 DEPTH 3407.

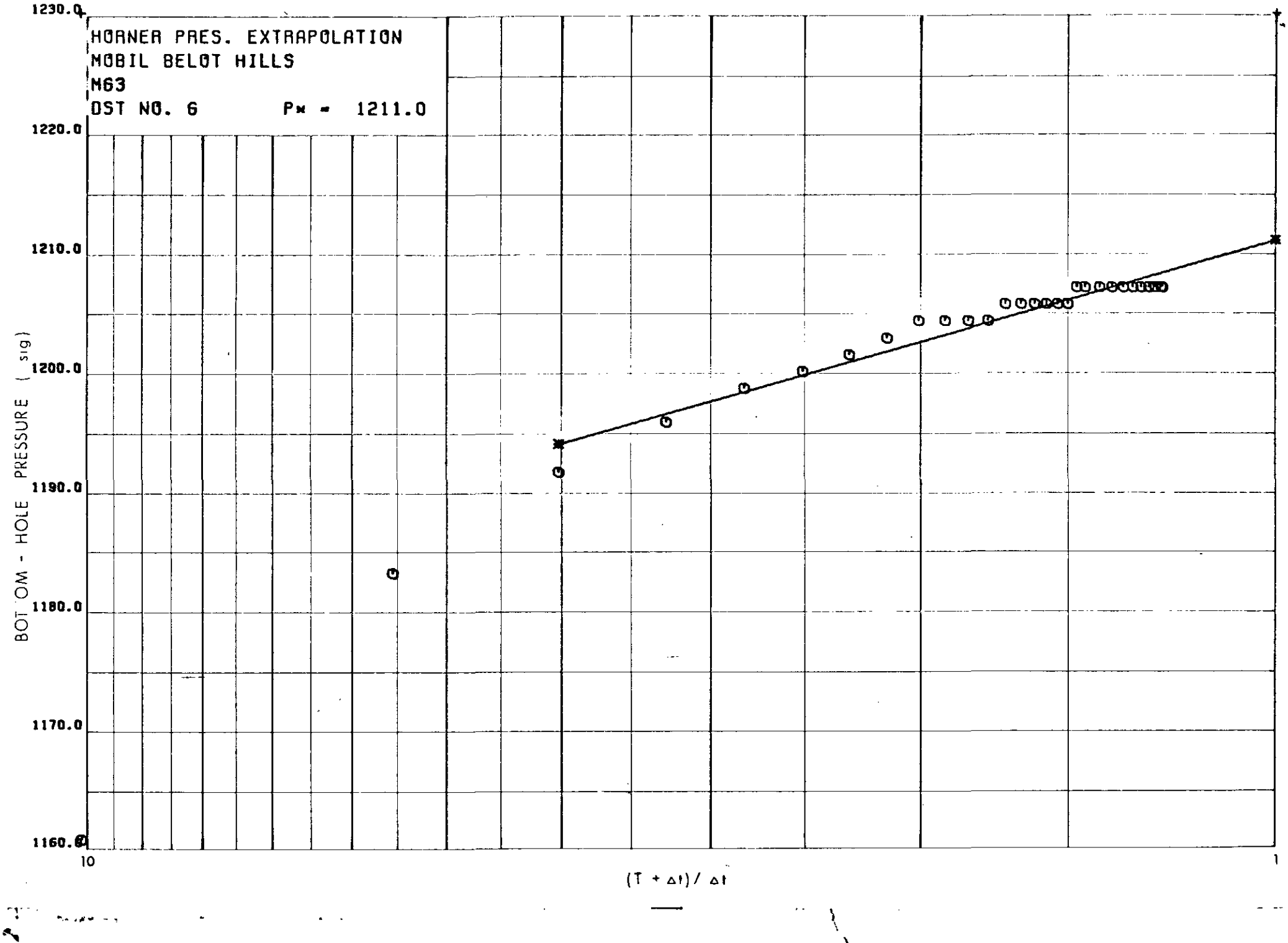
DATA FOR BUILD-UP PLOT (FIRST SHUT-IN)

POINT NUMBER	TIME MIN	PRESSURE PSIG	PRESSURE CALC FROM BEST FIT LINE	PRESSURE DIFFERENCE CALC - OBSERVED	T+DELTA(T)/ DELTA(T)
PORTION OF BUILD-UP CURVE NOT USED IN EXTRAPOLATION					
15	5.0	1160.6			10.00
16	10.0	1183.1			5.50
POINTS USED IN EXTRAPOLATION					
17	15.0	1191.5	1194.0	2.4	4.00
18	20.0	1195.8	1196.5	0.7	3.25
19	25.0	1198.6	1198.3	-0.2	2.80
20	30.0	1200.0	1199.7	-0.3	2.50
21	35.0	1201.4	1200.8	-0.6	2.29
22	40.0	1202.8	1201.7	-1.1	2.13
23	45.0	1204.2	1202.5	-1.7	2.00
24	50.0	1204.2	1203.1	-1.1	1.90
25	55.0	1204.2	1203.7	-0.6	1.82
26	60.0	1204.2	1204.1	-0.1	1.75
27	65.0	1205.6	1204.5	-1.1	1.69
28	70.0	1205.6	1204.9	-0.7	1.64
29	75.0	1205.6	1205.2	-0.4	1.60
30	80.0	1205.6	1205.5	-0.1	1.56
31	85.0	1205.6	1205.8	0.1	1.53
32	90.0	1205.6	1206.0	0.4	1.50
33	95.0	1207.0	1206.2	-0.8	1.47
34	100.0	1207.0	1206.4	-0.6	1.45
35	110.0	1207.0	1206.8	-0.3	1.41
36	120.0	1207.0	1207.1	0.0	1.38
37	130.0	1207.0	1207.3	0.3	1.35
38	140.0	1207.0	1207.6	0.5	1.32
39	150.0	1207.0	1207.7	0.7	1.30
40	160.0	1207.0	1208.0	0.9	1.28
41	170.0	1207.0	1208.1	1.1	1.26
42	180.0	1207.0	1208.3	1.2	1.25
43	182.0	1207.0	1208.3	1.2	1.25

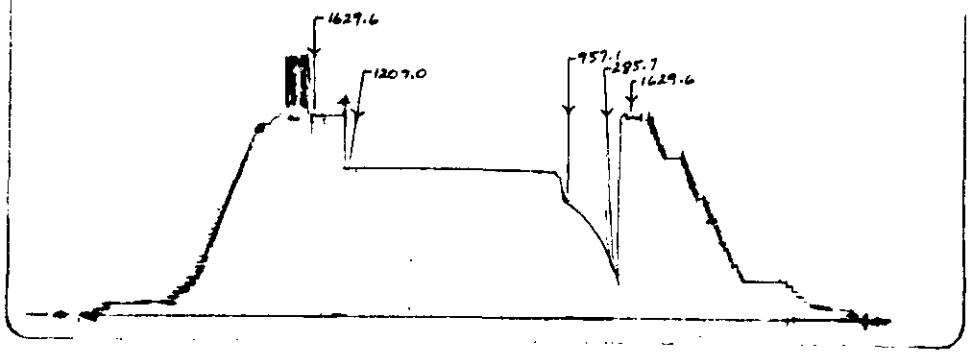
ASSUMPTIONS AND LIMITATIONS

THE ENCLOSED DST INTERPRETATION CALCULATIONS REQUIRE SEVERAL NECESSARY ASSUMPTIONS TO PROVIDE A QUICK ESTIMATE OF MANY OF THE FACTORS INVOLVED. AS A RESULT THE INFORMATION GAINED SHOULD BE USED TO FORM AN OPINION OR ESTIMATE ONLY, UNTIL THE ASSUMPTIONS OF RESERVOIR AND FLUID PROPERTIES CAN BE WHOLLY OR PARTIALLY CLARIFIED BY MORE COMPLETE ANALYSIS AND TESTING.


PRESSURE VS. TIME
MOBIL BELOT HILLS
M63
DST NO. 6 REC. NO.3689
2400.0
2000.0
1600.0
1200.0
800.0
400.0
0.0
PRESSURE
720.0
640.0
560.0
480.0
400.0
320.0
240.0
160.0
80.0
0.0
ELAPSED TIME (MINUTES)

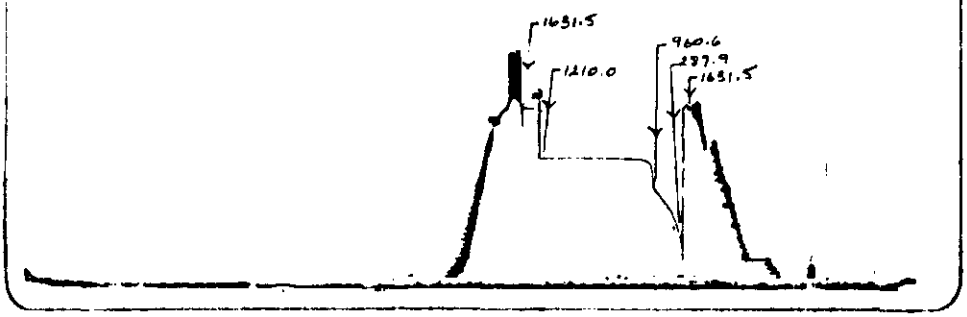

HORNER PRES. EXTRAPOLATION
MOBIL BELOT HILLS
M63
DST NO. 6 Pm = 1211.0
1230.0
1220.0
1210.0
1200.0
1190.0
1180.0
1170.0
1160.0
BOTTOM - HOLE PRESSURE (sig)
10
1
(T + Δt)/ Δt

MOBIL BELOT HILLS M63
INTERVAL 3187 - 4211
DST NO. 6 REC. NO. 3689



DST RECORDER CHARTS

MOBIL BELOT HILLS M63
INTERVAL 3187 - 4211
DST NO. 6 REC NO. 3852



ATTACHMENT A9

LYNES UNITED SERVICES LTD.

WELL NAME - MOBIL BELOT HILLS

LOCATION - M-63

DST NUMBER - 7

INTERVAL TESTED - 0 TO 0

RECORDER NO. - 6614

DEPTH - 0

INITIAL SHUT IN PRESSURE

TIME(MIN) Φ	$\frac{T + \Phi}{\Phi}$	PSIG
0	0.0000	101
5	1.8000	1150
10	1.4000	1183
15	1.2667	1195
20	1.2000	1200
25	1.1600	1202
30	1.1333	1206
35	1.1143	1209

EXTRAPOLATION OF INITIAL SHUT-IN = 1222.09

LYNES UNITED SERVICES LTD.

WELL NAME - MOBIL BELOT HILLS

LOCATION - M-63

DST NUMBER - 7

INTERVAL TESTED - 0 TO 0

RECORDER NO. - 6614

DEPTH - 0

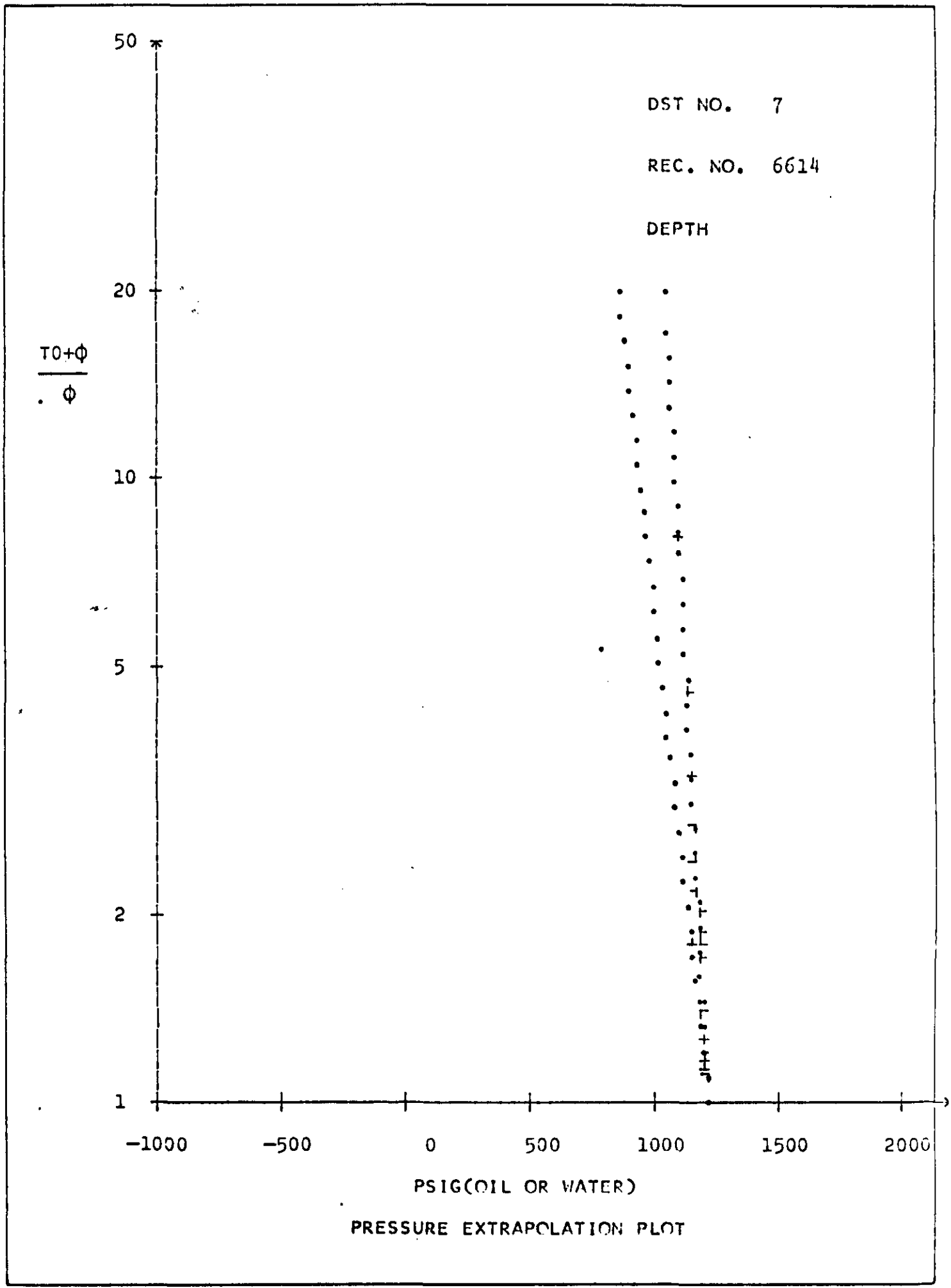
SECOND SHUT IN PRESSURE

TIME(MIN) Φ	$\frac{T + \Phi}{\Phi}$	PSIG
0	0.0000	411
9	8.1111	1105
18	4.5556	1135
27	3.3704	1150
36	2.7778	1160
45	2.4222	1165
54	2.1852	1173
63	2.0159	1178
72	1.8889	1181
81	1.7901	1184
90	1.7111	1187

EQU. FITTED LINE IS LOG((TO+Φ)/Φ)= -0.00777 PSIG + 9.45656

EXTRAPOLATION OF SECOND SHUT-IN = 1217.02 M= 128.70

LYNES UNITED SERVICES LTD.



LYNES UNITED SERVICES LTD.

TEST DATA				GENERAL INFORMATION	
Test No. 7	Lynes Test 7			Company	Mobil Oil Canada Ltd.
Formation	Tight Hole	T.D.	Ft.	Address	
Interval Tested	tight hole Ft. to	tight hole.	Ft.		
Feet of Net Pay Tested	50		Ft.		
Type of Test	Inflatable Straddle				
Cushion	Amount		Ft.	Well Name	Mobil Belot Hills
Started in Hole at	6:30 Hrs.	Tool Open at	9:26 Hrs.	Well Number	M-63
Pre-Flow	4 Mins.	Initial Shut-in	35 Mins.	K.B. Elevation	Sub-Sea Elevation
2nd Flow	Mins.	Second Shut-in	Mins.	Area	NWT Province NWT
Final Flow	60 Mins.	Final Shut-in	90 Mins.	Company Rep.	K. Baxter
Remarks:				Tester	D. Baillie
				Contractor	Nabors Rig No. 8
				Ticket No.	3798 Date April 6/72
Blow:	Fair air blow on preflow.			Service Reports To:	
	Fair to weak air blow throughout				7 - above address
	the final flow.				

GAS BLOW MEASUREMENTS			
Measured with	no gas to surface.		
Time	Surface Choke	Reading Inches	Cubic Feet/Day

MUD AND HOLE DATA			
Mud Type	salt and water and gel		
Weight	9.2 Viscosity 32	Water Loss	
Filter Cake	2/32"	Bottom Hole Temperature	
Drill Pipe Size	3 1/2" IF	Weight	13.3
Drill Collars	4 3/4" I.D. 2"	Feet Run	491.75
Main Hole or Casing Size	6 1/4"		
Rathole or Liner Size		No. of Feet	
Bottom Hole Choke Size	1"		
Surface Choke Size			
Packer Rubber Size	5 5/8"		

REMARKS

Shut-in pressures suggest average permeability within the interval tested.

RECOVERY

TOTAL FLUID RECOVERED 900 Ft. Consisting of:

900 Ft. of formation fluid.

Ft. of

Ft. of

Ft. of

Test was/was not Reverse Circulated

Oil Recovery A.P.I. Water Specific Gravity

Salinity

PRESSURE READINGS

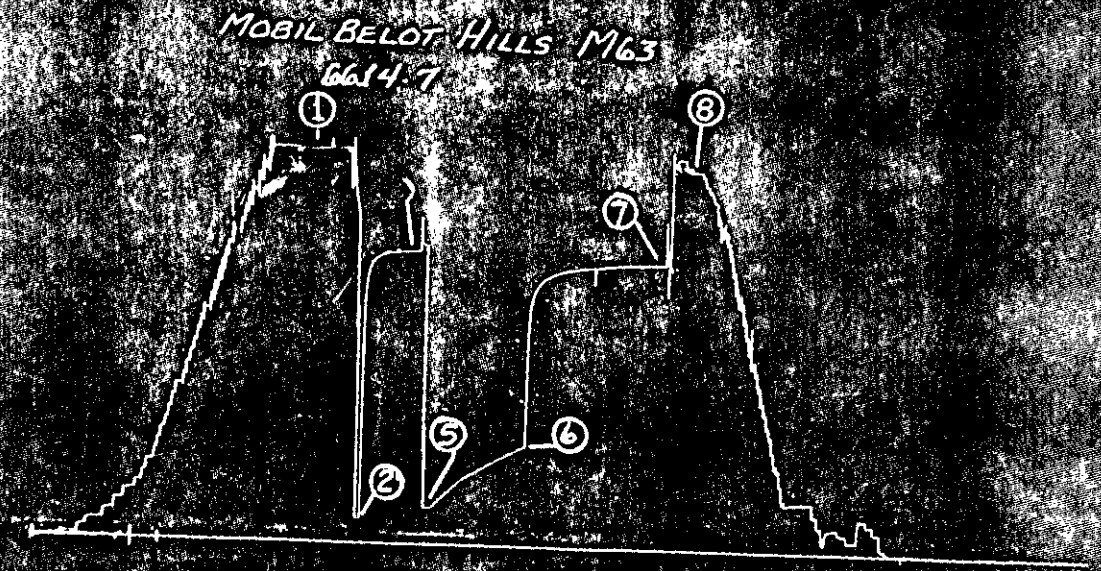
	Inside ___ Outside X	Inside ___ Outside X	Inside ___ Outside X	Inside ___ Outside ___
	Recorder No. 6614	Recorder No. 4647	Recorder No. 5731	Recorder No.
	Capacity 2900	Capacity 3000	Capacity 75-254	Capacity
	Depth tight	Depth tight	Depth tight	Depth
NUMBER KEY:				
1 - INITIAL HYDROSTATIC	1622	1630		
2 - PRE-FLOW	101	102	malfunctioned	
3 - INITIAL SHUT-IN	1209	1221		
4a - 2nd INITIAL FLOW				
4b - 2nd FINAL FLOW				
4c - 2nd SHUT-IN				
5 - 3rd INITIAL FLOW	151	142		
6 - FINAL FLOW	412	433		
7 - FINAL SHUT-IN	1187	1197		
8 - FINAL HYDROSTATIC	1579	1583		

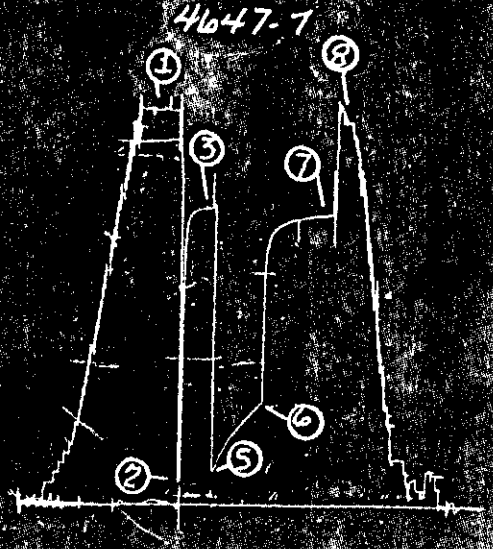
Company: Mobil Oil Canada Ltd.

Well Name and Description: Mobil Belot Hills M-63

Test No.: #7

Date of Test: April 6/72





5731-7 TEMP

DIPLOG RESULTS - DRESSER ATLAS

COMPANY - MOBIL OIL CANADA,
FIELD - WILDCAT,

LEASE - MOBIL BELDT HILLS,
LOCATION - N-W-T CANADA,

RUN NO. - TWO,

RECORDED - 3-31-72,

HCC NO. - 602,

INTERVAL - 3291-4200,

ENGINEER - MARTIN,

MAG DECL - 38.

```
**********************************
     4       0       0       1       0       0       0
    0.      0.      0.      0.      0.      0.      0.
    .0      .0      .0      .0
  2.00   90.00   20.00    4.55    1.65    1.00
  3250   4200       0       0       0       0       0       0       0
     0      1.       0      0.      0.      0.
**********************************
```

DEPTH	*DIRECTION* ** OF DIP**	AMOUNT OF DIP	INTERVAL GRADE	*BOREHOLE* *ANG	DIR*
3291	230 S50W	8.7	3	4.5	S88W
3313	276 N84W	10.2	2	5.5	S58W
3317	333 N27W	10.6	2	6.0	S58W
3319	270 N90W	1.0	2	6.0	S53W
3322	328 N32W	9.0	2	6.0	S48W
3326	305 N55W	8.8	2	6.0	S48W
3330	332 N28W	9.9	2	6.0	S48W
3339	340 N20W	15.2	3	6.0	S48W
3341	350 N10W	13.3	3	6.0	S48W
3346	16 N16E	5.5	3	6.0	S48W
3358	256 S76W	9.3	2	6.0	S28W
3370	272 N88W	15.8	2	6.0	S13W
3374	286 N74W	12.9	2	6.0	S13W
3378	286 N74W	12.2	2	6.0	S 8W
3381	288 N72W	12.6	2	6.0	S 2E
3393	306 N54W	5.9	3	5.5	S27E
3410	311 N49W	5.9	3	5.5	S22E
3424	358 N 2W	7.0	2	6.0	S32E
3431	239 S59W	2.1	3	6.0	S12E
3436	90 N90E	22.3	2	6.0	S13W
3447	60 N60E	9.6	3	6.0	S43W
3452	76 N76E	29.9	3	6.0	S43W
3456	89 N89E	31.9	2	6.5	S48W
3462	22 N22E	20.9	3	6.5	S48W
3466	54 N54E	15.6	2	6.5	S48W
3471	38 N38E	10.1	3	6.8	S28W
3474	9 N 9E	13.0	3	6.8	S28W
3478	182 S 2W	16.5	2	6.8	S18W
3481	190 S10W	19.5	3	6.5	S28W
3487	335 N25W	31.7	3	6.8	S28W
3490	3 N 3E	32.5	3	6.5	S33W
3496	358 N 2W	27.9	3	6.5	S43W
3508	303 N57W	27.9	2	6.5	S28W

3511	304	N56W	28.3	2	6.0	S33W
3514	316	N44W	26.2	2	6.5	S33W
3516	327	N33W	35.6	2	6.5	S38W
3520	326	N34W	26.5	2	6.5	S43W
3525	322	N38W	28.8	2	6.5	S43W
3531	319	N41W	32.2	2	6.5	S38W
3534	302	N56W	23.6	1	6.5	S38W
3539	34	N34E	11.0	2	6.5	S38W
3542	38	N38E	13.7	3	6.5	S43W
3546	22	N22E	15.5	3	6.5	S38W
3552	31	N31E	19.8	3	6.5	S38W
3556	12	N12E	21.9	3	6.5	S48W
3560	11	N11E	20.9	2	6.5	S53W
3564	9	N 9E	15.3	2	6.5	S58W
3568	59	N59E	23.2	2	6.5	S58W
3571	333	N27W	22.6	2	6.5	S58W
3574	352	N 8W	30.3	2	6.5	S68W
3578	351	N 9W	19.0	2	6.0	S68W
3581	341	N19W	25.6	2	6.0	S63W
3583	342	N18W	27.8	2	6.0	S68W
3586	343	N17W	33.8	2	6.0	S68W
3590	9	N 9E	32.1	2	7.0	S83W
3594	13	N13E	29.5	2	6.5	N72W
3596	20	N20E	27.3	2	7.0	N72W
3601	131	S49E	22.3	2	6.5	N28E
3604	126	S54E	16.2	2	7.0	S72E
3607	158	S22E	28.2	2	7.0	N48E
3610	163	S17E	21.8	2	6.0	N78E
3612	185	S 5W	20.4	2	6.0	S72E
3617	227	S47W	24.2	2	6.0	S47E
3621	247	S67W	27.5	3	6.0	S32E
3624	246	S66W	29.2	2	6.0	S32E
3630	249	S69W	25.1	2	6.0	S27E
3635	272	N88W	22.8	2	6.0	S22E
3640	268	S88W	26.6	2	6.0	S17E
3646	293	N67W	22.7	2	6.0	S 7E
3651	293	N67W	28.9	2	6.5	S 7E
3656	296	N64W	29.3	2	6.5	S 2E
3663	301	N59W	19.0	2	6.0	S18W
3666	320	N40W	25.5	2	6.0	S18W
3674	305	N55W	19.7	2	6.5	S18W
3678	317	N43W	20.1	2	6.0	S23W
3682	299	N61W	22.6	2	6.0	S18W
3688	317	N43W	10.1	2	6.0	S23W
3692	337	N23W	11.4	2	6.5	S38W
3698	26	N26E	15.1	2	6.5	S48W
3703	349	N11W	22.6	2	6.0	S53W
3714	330	N30W	20.2	3	6.0	S48W
3721	3	N 3E	30.1	3	6.5	S68W
3727	27	N27E	28.5	2	6.5	N82W
3731	57	N57E	22.7	2	7.0	N52W
3735	190	S10W	22.5	2	7.0	N78E
3739	227	S47W	22.4	2	7.0	S67E
3742	238	S58W	23.9	2	6.5	S52E
3747	242	S62W	26.5	2	6.5	S42E
3752	278	N82W	30.6	2	6.5	S22E
3756	281	N79W	29.2	2	6.5	S22E

3763	283	N77W	25.4	2	6.5	S17E
3767	300	N60W	25.9	2	7.0	S12E
3771	295	N65W	29.1	2	6.5	S12E
3775	277	N83W	14.2	2	7.0	S22E
3778	235	S55W	14.7	2	6.5	S12E
3782	247	S67W	13.6	2	7.0	S12E
3785	288	N72W	20.4	2	6.5	S 7E
3788	301	N59W	25.7	2	6.5	S 7E
3792	295	N65W	26.5	2	6.5	S 7E
3795	300	N60W	23.5	2	6.5	S 3W
3804	352	N 8W	21.4	2	6.5	S 3W
3813	329	N31W	19.1	2	6.5	S18W
3818	321	N39W	17.4	2	6.5	S13W
3824	315	N45W	19.8	2	6.5	S13W
3835	341	N19W	18.6	2	6.5	S23W
3839	330	N30W	7.7	2	6.5	S28W
3846	358	N 2W	13.0	3	7.0	S38W
3848	274	N86W	14.6	3	6.5	S38W
3852	357	N 3W	12.7	3	7.0	S43W
3855	351	N 9W	21.8	2	7.0	S43W
3863	356	N 4W	10.3	3	7.5	S63W
3869	22	N22E	28.2	2	7.5	S63W
3873	31	N31E	21.5	3	7.5	S68W
3880	2	N 2E	5.4	3	7.5	S68W
3893	143	S37E	10.1	3	8.0	S63W
3901	354	N 6W	13.3	3	9.0	S48W
3905	314	N46W	5.4	2	9.0	S48W
3910	184	S 4W	9.8	2	9.5	S43W
3910	313	N47W	15.0	2	9.5	S43W
3915	8	N 8E	27.4	3	10.0	S43W
3918	9	N 9E	30.5	3	10.0	S43W
3921	10	N10E	33.9	2	10.0	S43W
3928	28	N28E	27.9	3	10.5	S38W
3933	24	N24E	23.2	3	11.0	S38W
3938	16	N16E	37.3	2	11.0	S33W
3943	21	N21E	28.3	3	11.0	S38W
3948	15	N15E	24.5	3	11.0	S43W
3955	359	N 1W	19.2	3	11.5	S33W
3962	100	S80E	4.4	2	12.0	S38W
3967	79	N79E	6.1	3	12.0	S53W
3970	50	N50E	13.2	3	13.0	S33W
3975	20	N20E	14.4	2	13.0	S53W
3980	85	N85E	10.7	2	13.0	S43W
3986	36	N36E	18.7	3	13.0	S 2E
3996	35	N35E	13.2	3	13.0	S18W
4003	117	S63E	3.2	3	14.0	S28W
4008	78	N78E	9.8	3	14.0	S 3W
4011	45	N45E	13.3	3	14.0	S 2E
4018	0	N 0E	15.0	2	14.5	S 3W
4097	139	S41E	10.2	3	18.0	S 2E
4102	83	N83E	25.9	3	18.0	S 8W
4119	33	N33E	17.8	3	18.0	S18W
4123	38	N38E	33.8	3	18.0	S18W
4132	4	N 4E	12.3	3	18.0	S33W
4138	5	N 5E	13.3	3	18.0	S28W

4146	335	N25W	14.0	3	18.0	S28W
4151	1	N 1E	33.2	3	18.0	S28W
4160	359	N 1W	24.0	3	18.5	S28W
4165	335	N25W	23.4	3	18.5	S18W
4171	24	N24E	28.9	3	18.5	S33W
4175	34	N34E	21.3	3	19.0	S43W
4184	10	N10E	13.0	3	19.0	S23W
4187	26	N26E	10.7	3	19.0	S23W
4192	18	N18E	16.4	2	19.0	S23W
4198	51	N51E	14.6	2	19.0	S58W

BJ

BORG WARNER

DRILL STEM TEST REPORT

BJ SERVICE DIVISION
BORG-WARNER (CANADA) LIMITED

MOBIL BELOT HILLS

M-63

TEST # 1

BJ BORG WARNER

TESTING REPORT

DRILL-STEM TEST DATA

Well Name **MOBIL BELOT HILLS** — Test No. **1**

Well Number **M63** — Zone Tested

Company **MOBIL OIL CANADA LTD.** — Interval **3399.0 TO 3498.0**

Co. Rep. **KEITH BAXTER** — Tester **MEL MOSCRIP** — Date **MARCH 23, 1972**

Type of Test **DUAL BOTTOM HOLE** — R F S Tool No **106, 124**

5.0 mins. Flow — mins. FSI — mins.

	OUT REC. No. 3852		OUT REC. No. 3689		REC. No.			
	5800 RANGE	12 HR. CLOCK	5700 RANGE	24 HR. CLOCK	RANGE	HR. CLOCK		
DEPTH	3431.0		3436.0					
	1514.9		1516.3					
	1514.9		1516.3					

YES — Mud Weight **8.4**

34.0 — Net Pay Tested

3393.0 — **3399.0** — Total Depth **3498.0**

3.5 IF — Drill Collar I.D. **2.125** — Ft. Run **456.00**

CLOSED — **0.5** — Main Hole Size **6.250**

4.75 — Feet of Rat Hole

Rubber Size **5.5 X 2**

1368.0

1368 Feet of **MUD**

Riser size

Orifice Size — MCF Day

Orifice Size — MCF Day

Orifice Size — MCF Day

Orifice Size — MCF Day

Orifice Size — MCF Day

Orifice Size — MCF Day

REMARKS **MISRUN DUE TO PACKER SEAT FAILURE. MUD SEEPED AWAY FOR 11 MINUTES AND THEN TOOK OFF.**

No.

BJ BORG WARNER

TESTING REPORT

	ID	OD	LENGTH	
4S LANDING SUB				
4S CHAMBER				
4S TOOL OR P.O. SUB			1.00	
CO SUB				
SHUT IN TOOL		4¾	5.20	
R.F.S. No. 124	2¼	4¾	3.30	
R.F.S. No. 106	2¼	4¾	3.30	
HYDRAULIC TOOL		4¾	7.20	
JARS	1	4¾	6.00	
RECORDER No.	2¼	4¾		DEPTH
RECORDER No.	2¼	4¾		DEPTH
SAFETY JOINT	2 11/16	4¾	1.75	
BY PASS SUB	1 5/32	4¾		
PACKER	1 OR ⅞		6.00	
PACKER	1 or ⅞		5.00	TOOL ABOVE INTERVAL 38.75
ANCHOR—SPECIFY	2½		1.00	
PERF			29.00	
BLANK OFF OR BY PASS SUB	1 5/32	4¾		
RECORDER No.	2¼	4¾	5.00	DEPTH 3431
RECORDER			5.00	DEPTH 3436
PACKER	1 OR ⅞			TOTAL INTERVAL
PACKER	1 OR ⅞			
ANCHOR—SPECIFY	2½			
DRILL COLLARS			56.70	
RECORDER No	2¼	4¾		DEPTH
BULLNOSE	2¾	4¾	2.50	TOTAL TAIL PIPE 99.20

WEIGHT INDICATER READING

PRIOR TO SETTING PACKERS

AFTER PULL PACKERS LOOSE

1. PACKER DEPTH 3393

2. PACKER DEPTH 3399

3. PACKER DEPTH

4. PACKER DEPTH

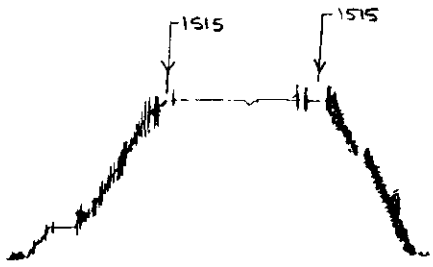
TOTAL DEPTH 3498

TOTAL TEST TOOL 81.25

DST CHARTS FOR COMPARATIVE VISUAL ANALYSIS

HIGH PERMEABILITY STRONG DAMAGE EFFECT | HIGH PERMEABILITY NO DAMAGE EFFECT | MEDIUM PERMEABILITY STRONG DAMAGE EFFECT | MEDIUM PERMEABILITY NO DAMAGE EFFECT | LOW PERMEABILITY STRONG DAMAGE EFFECT | LOW PERMEABILITY NO DAMAGE EFFECT

MOBIL BELOT HILLS M63
INTERVAL 3399 - 3498
DST NO. 1 REC. NO. 3852



DST RECORDER CHARTS

MOBIL BELOT HILLS M63
INTERVAL 3399 - 3498
DST NO. 1 REC. NO. 3689

DRILL STEM TEST REPORT

BJ SERVICE DIVISION
BORG-WARNER (CANADA) LIMITED

MOBIL BELOT HILLS

M-63

TEST # 2

BJ BORG WARNER

TESTING REPORT

DRILL-STEM TEST DATA

Well Name MOBIL BELOT HILLS — Test No. 2

Well Number M63 — Zone Tested

Company MOBIL OIL CANADA LTD. — Interval 3405.0 TO 3498.0

Comp Rep KEITH BAXTER — Tester MEL MOSCRIP — Date MARCH 23, 1972

Type of Test DUAL BOTTOM HOLE — R F S Tool No. 106, 124

Preflow 5.0 mins ISI mins Flow mins. FSI mins

	OUT REC No. 3852	OUT REC No. 3689	REC. No
	5800 RANGE 12 HR CLOCK	5700 RANGE 24 HR CLOCK	RANGE HR CLOCK
DEPTH	3430.0	3435.0	
Initial Hydro Mud Press	1500.0	1502.8	
Initial Shut-in Press			
Initial Flow Press			
Final Flow Press			
Final Shut-in Press			
Final Hydro Mud Press	1500.0	1502.8	

Mud Drop YES — Fluid Loss — Mud Weight 8.4

Viscosity 34.0 — Temperature °F — Net Pay Tested

Top Packer Depth 3402.0 — Bottom Packer Depth 3408.0 — Total Depth 3498.0

Drill Pipe Size 3.5 IF — Wt 13.3 — Drill Collar I.D. 2.125 — Ft Run 456.00

Surface Choke Size CLOSED — Bottom Choke Size 0.5 — Main Hole Size 6.250

Anchor Size 4.75 — Rat Hole Size — Feet of Rat Hole

Casing Perforations — Type — Rubber Size 5.5 X 2

Fluid Recovery Total Feet 600.0

Recovered 600 feet of MUD

Recovered feet of

Recovered feet of

Recovered feet of

Recovered feet of

Gas Recovery — Flow Meas Test — Riser size

mcf	Temp °F	Press Rdg	psi	Orifice Size	=	MCF Day
mcf	Temp °F	Press Rdg	psi	Orifice Size	=	MCF Day
mcf	Temp °F	Press Rdg	psi	Orifice Size	=	MCF Day
mcf	Temp °F	Press Rdg	psi	Orifice Size		MCF Day
mcf	Temp °F	Press Rdg	psi	Orifice Size	=	MCF Day
mcf	Temp °F	Press Rdg	psi	Orifice Size	=	MCF Day

Bottom Hole Temp °F Gas Gravity

REMARKS MISRUN DUE TO PACKER SEAT FAILURE. MUD SEEPED SLOWLY AWAY, THEN INCREASED DURING PREFLOW.

A Test No. mo Geo Lab Gas Test No

BJ BORG WARNER

TESTING REPORT

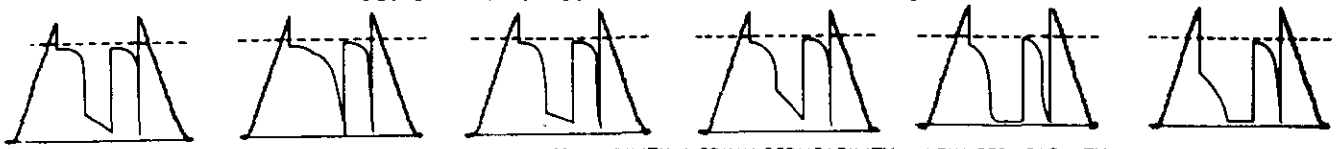
WEIGHT INDICATER READING

PRIOR TO SETTING PACKERS

AFTER PULL PACKERS LOOSE

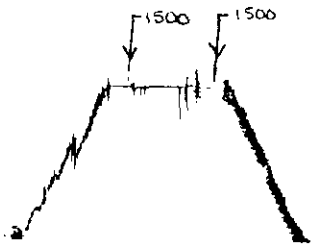
		ID	OD	LENGTH	
	4S LANDING SUB				
	4S CHAMBER				
	4S TOOL OR P.O. SUB			1.00	
	CO SUB				
	SHUT IN TOOL		4¾	5.20	
	R.F.S. No. 124	2¼	4¾	3.30	
	R.F.S. No. 106	2¼	4¾	3.30	
	HYDRAULIC TOOL		4¾	7.20	
	JARS	1	4¾	6.00	
	RECORDER No.	2¼	4¾		DEPTH
	RECORDER No.	2¼	4¾		DEPTH
	SAFETY JOINT	2 11/16	4¾	1.75	
	BY PASS SUB	1 5/32	4¾		
1. PACKER DEPTH 3402	PACKER	1 OR ⅞		6.00	
2. PACKER DEPTH 3408	PACKER	1 or ⅞		5.00	TOOL ABOVE INTERVAL 38.75
	ANCHOR—SPECIFY	2½		1.00	
	PERF			20.00	
	BLANK OFF OR BY PASS SUB	1 5/32	4¾		
	RECORDER No. 3852	2¼	4¾	5.00	DEPTH 3430
	RECORDER NO. 3689			5.00	DEPTH 3435
3. PACKER DEPTH	PACKER	1 OR ⅞			TOTAL INTERVAL
4. PACKER DEPTH	PACKER	1 OR ⅞			
	ANCHOR—SPECIFY	2½			
	DRILL COLLARS			56.70	
	RECORDER No	2¼	4¾		DEPTH
TOTAL DEPTH 3498	BULLNOSE	2¾	4¾	2.50	TOTAL TAIL PIPE 90.20
					TOTAL TEST TOOL 72.25

DST CHARTS FOR COMPARATIVE VISUAL ANALYSIS



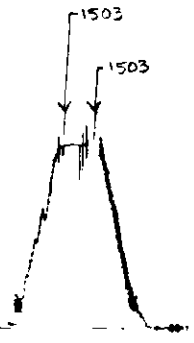
HIGH PERMEABILITY STRONG DAMAGE EFFECT | HIGH PERMEABILITY NO DAMAGE EFFECT | MEDIUM PERMEABILITY STRONG DAMAGE EFFECT | MEDIUM PERMEABILITY NO DAMAGE EFFECT | LOW PERMEABILITY STRONG DAMAGE EFFECT | LOW PERMEABILITY NO DAMAGE EFFECT

MOBIL BELOT HILLS M63
INTERVAL 3408 - 3498
DST NO. 2 REC. NO. 3852



DST RECORDER CHARTS

MOBIL BELOT HILLS M63
INTERVAL 3408 - 3498
DST NO. 2 REC. NO. 3689



BJ

BORG WARNER

DRILL STEM TEST REPORT

BJ SERVICE DIVISION
BORG-WARNER (CANADA) LIMITED

MOBIL BELCH HILLS

M-63

TEST NO. 3, 4, 5, 6

BJ BORG WARNER

TESTING REPORT

DRILL-STEM TEST DATA

Well Name MOBIL BELOT HILLS M63 Test No. 3

Well Number M63 Zone Tested CAMBRIAN SAND

Company MOBIL OIL CANADA LTD. Interval 3234.0 TO 4211.0

Comp. Rep. KEITH BAXTER Tester MEL MOSCRIP Date APRIL 3,1972

Type of Test LANE WELLS PACKER TEST RFS Tool No. 106 , 124

Preflow mins. ISI mins. Flow mins. FSI mins.

	OUT REC No. 3689 5700 RANGE 12 HR. CLOCK	OUT REC. No. 3852 5800 RANGE 24 HR CLOCK	REC. No. RANGE HR. CLOCK
DEPTH	3453.0	3458.0	
Initial Hydro Mud Press			
Initial Shut-In Press			
Initial Flow Press			
Final Flow Press			
Final Shut-In Press			
Final Hydro Mud Press			

Mud Drop NO

Viscosity 32.0

Top Packer Depth 3234.0

Drill Pipe Size 3.5 IF

Surface Choke Size CLOSED

Anchor Size 4.75

Cushion Amount

Fluid Loss

Temperature F 72.0

Bottom Packer Depth

Wt 13.3 Drill Collar I D 2.000

Bottom Choke Size 0.5

Rat Hole Size 6.250

Type

Mud Weight 9.2

Net Pay Tested

Total Depth 4211.0

Ft Run 438.00

Main Hole Size 7.000

Feet of Rat Hole

Rubber Size 5.75

Fluid Recovery Total Feet

Recovered Feet of

Recovered Feet of

Recovered Feet of

Recovered Feet of

Recovered Feet of

Gas Recovery How Measured Riser size:

mins	Temp. F	Press Rdg	psi	Orifice Size	=		MCF/Day
mins	Temp. F	Press Rdg.	psi	Orifice Size	=		MCF/Day
mins	Temp F	Press Rdg	psi	Orifice Size	=		MCF/Day
mins	Temp F	Press Rfg	psi	Orifice Size	=		MCF/Day
mins	Temp F	Press Rdg	psi	Orifice Size	=		MCF/Day
mins	Temp F	Press Rdg.	psi	Orifice Size	=		MCF/Day

Bleed Off Time for Drill Pipe

REMARKS MISRUN - RMV CHECKED OUT, OPERATING O.K.

A Core Lab Gas Cont No Chem Geo Lab Gas Cont No

BJ
BORG WARNER

TESTING REPORT

BOTTOM OF CASING 3240'

BOTTOM OF TEST TOOL 3464'

TOTAL DEPTH OF HOLE 4211'

WEIGHT INDICATER READING

PRIOR TO SETTING PACKERS

AFTER PULL PACKERS LOOSE

	ID	OD	LENGTH	
4S LANDING SUB			1.00	
4S CHAMBER				
4S TOOL OR P.O. SUB			5.00	
CO SUB				
SHUT IN TOOL		4¾	5.20	
R.F.S. No. 106	2¼	4¾	3.30	
R.F.S. No. 124	2¼	4¾	3.30	
HYDRAULIC TOOL		4¾		
JARS	1	4¾	6.00	
RECORDER No.	2¼	4¾		DEPTH
RECORDER No.	2¼	4¾		DEPTH
SAFETY JOINT	2 11/16	4¾	1.75	
BY PASS SUB	1 5/32	4¾		
1. PACKER DEPTH — PACKER	1 OR ⅞			
2. PACKER DEPTH 3234 — PACKER	1 or ⅞		7.10	TOOL ABOVE INTERVAL 32.75
ANCHOR—SPECIFY	2½			
2 STANDS PIPE			188.54	
BLANK OFF OR BY PASS SUB	1 5/32	4¾		
RECORDER No.	2¼	4¾		DEPTH
PERF			28.00	
3. PACKER DEPTH — PACKER	1 OR ⅞			TOTAL INTERVAL
4. PACKER DEPTH — PACKER	1 OR ⅞			
ANCHOR—SPECIFY	2½			
RECORDER NO. 3689			5.00	DEPTH 3453
RECORDER No 3852	2¼	4¾	5.00	DEPTH 3458
BULLNOSE	2¼	4¾	2.50	TOTAL TAIL PIPE 229.04
TOTAL DEPTH 4211 HOLE				TOTAL TEST TOOL 73.25

DST CHARTS FOR COMPARATIVE VISUAL ANALYSIS

HIGH PERMEABILITY STRONG DAMAGE EFFECT | HIGH PERMEABILITY NO DAMAGE EFFECT | MEDIUM PERMEABILITY STRONG DAMAGE EFFECT | MEDIUM PERMEABILITY NO DAMAGE EFFECT | LOW PERMEABILITY STRONG DAMAGE EFFECT | LOW PERMEABILITY NO DAMAGE EFFECT

MOBIL BELOT HILLS M63
INTERVAL 3234 - 4211
DST NO. 3 REC. NO. 3689

DST RECORDER CHARTS

MOBIL BELOT HILLS M63
INTERVAL 3234 - 4211
DST NO. 3 REC. NO. 3852

BJ BORG WARNER

TESTING REPORT

DRILL-STEM TEST DATA

Well Name MOBIL BELOT HILLS M63 Test No. 4

Well Number M63 Zone Tested CAMBRIAN SANDS

Company MOBIL OIL CANADA LTD. Interval 3230.0 TO 4211.0

Comp. Rep. KEITH BAXTER Tester MEL MOSCRIP Date APRIL 4,1972

Type of Test LANE WELLS PACKER TEST RFS Tool No. 106,124

Preflow mins. ISI mins. Flow mins. FSI mins.

	OUT REC No. 3689 5700 RANGE 12 HR. CLOCK	OUT REC. No. 3852 RANGE 24 HR. CLOCK	REC. No. RANGE HR CLOCK
DEPTH	3442.0	3453.0	
Initial Hydro Mud Press	1653.5		
Initial Shut In Press			
Initial Flow Press			
Final Flow Press			
Final Shut-In Press			
Final Hydro Mud Press	1653.5		

Mud Drop YES Fluid Loss Mud Weight 9.2

Viscosity 32.0 Temperature F 72.0 Net Pay Tested

Top Packer Depth 3230.0 Bottom Packer Depth Total Depth 4211.0

Drill Pipe Size 3.5 IF Wt 13.3 Drill Collar I D 2.000 Ft. Run 438.00

Surface Choke Size CLOSED Bottom Choke Size 0.5 Main Hole Size 7.000

Anchor Size 4.75 Rat Hole Size 6.250 Feet of Rat Hole

Cushion Amount Type Rubber Size 5.75

Fluid Recovery Total Feet

Recovered Feet of

Recovered Feet of

Recovered Feet of

Recovered Feet of

Recovered Feet of

Gas Recovery How Measured Riser size:

mins	Temp F	Press Rdg	psi	Orifice Size	=	MCF/Day
mins	Temp. F	Press Rdg.	psi	Orifice Size	=	MCF/Day
mins	Temp F	Press Rdg.	psi	Orifice Size	=	MCF/Day
mins	Temp F	Press Rdg	psi	Orifice Size	=	MCF/Day
mins	Temp F	Press Rdg.	psi	Orifice Size	=	MCF/Day
mins	Temp F	Press Rdg	psi	Orifice Size	=	MCF/Day

Bleed Off Time for Drill Pipe

REMARKS: MISRUN - PACKER SEAT FAILED.

A Core Lab Gas Cont No Chem Geo Lab Gas Cont No.

BJ BORG WARNER

TESTING REPORT

BOTTOM OF CASING 3240'

BOTTOM OF TEST TOOL 3460'

TOTAL DEPTH OF HOLE 4211'

WEIGHT INDICATER READING

PRIOR TO SETTING PACKERS

AFTER PULL PACKERS LOOSE

	ID	OD	LENGTH	
4S LANDING SUB			1.00	
4S CHAMBER				
4S TOOL OR P.O. SUB			5.00	
CO SUB				
SHUT IN TOOL		4¾	5.20	
R.F.S. No. 106	2¼	4¾	3.30	
R.F.S. No. 124	2¼	4¾	3.30	
HYDRAULIC TOOL		4¾		
JARS	1	4¾	6.00	
RECORDER No.	2¼	4¾		DEPTH
RECORDER No.	2¼	4¾		DEPTH
SAFETY JOINT	2 11/16	4¾	1.75	
BY PASS SUB	1 5/32	4¾		
1. PACKER DEPTH — PACKER	1 OR ⅞			
2. PACKER DEPTH 3230 — PACKER	1 or ⅞		7.10	TOOL ABOVE INTERVAL 32.75
ANCHOR—SPECIFY	2½			
2 STANDS PIPE			188.54	
BLANK OFF OR BY PASS SUB	1 5/32	4¾		
RECORDER No.	2¼	4¾		DEPTH
PERF			28.00	
3. PACKER DEPTH — PACKER	1 OR ⅞			TOTAL INTERVAL
4. PACKER DEPTH — PACKER	1 OR ⅞			
ANCHOR—SPECIFY	2½			
RECORDER NO. 3689			5.00	DEPTH 3448
RECORDER No. 3852	2¼	4¾	5.00	DEPTH 3453
BULLNOSE	2¾	4¾	2.50	TOTAL TAIL PIPE 229.04

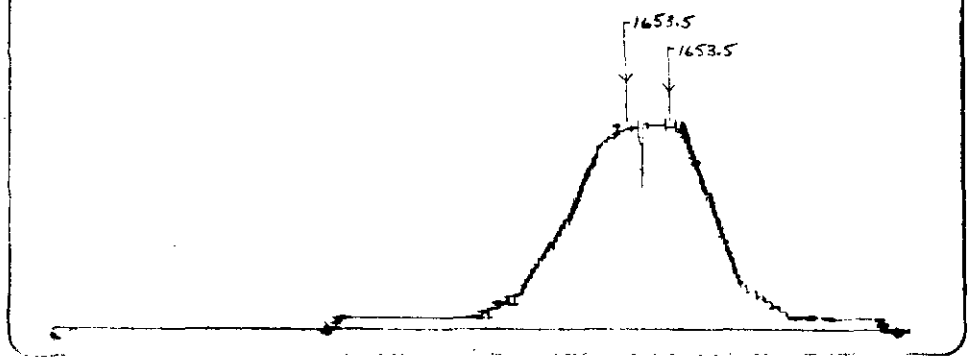
TOTAL DEPTH 4211 HOLE

TOTAL TEST TOOL 73.25

DST CHARTS FOR COMPARATIVE VISUAL ANALYSIS

HIGH PERMEABILITY STRONG DAMAGE EFFECT | HIGH PERMEABILITY NO DAMAGE EFFECT | MEDIUM PERMEABILITY STRONG DAMAGE EFFECT | MEDIUM PERMEABILITY NO DAMAGE EFFECT | LOW PERMEABILITY STRONG DAMAGE EFFECT | LOW PERMEABILITY NO DAMAGE EFFECT

MOBIL BELOT HILLS M63
INTERVAL 3230 - 4211
DST NO. 4 REC. NO. 3689



DST RECORDER CHARTS

MOBIL BELOT HILLS M63
INTERVAL 3230 - 4211
DST NO. 4 REC. NO. 3852

BJ BORG WARNER

TESTING REPORT

DRILL-STEM TEST DATA

Well Name **MOBIL BELOT HILLS M63** Test No. **5**

Well Number **M63** Zone Tested **CAMBRIAN SANDS**

Company **MOBIL OIL CANADA LTD.** Interval **3226.0 TO 4211.0**

Comp Rep **KEITH BAXTER** Tester **MEL MOSCRIP** Date **APRIL 4,1972**

Type of Test **LANE WELLS PACKER TEST** RFS Tool No. **106,124**

Preflow mins ISI mins. Flow mins. FSI mins.

	OUT REC. No 3689 5700 RANGE 12 HR. CLOCK	OUT REC No 3852 5800 RANGE 24 HR. CLOCK	REC. No RANGE HR. CLOCK
DEPTH	3445.0	3450.0	
Initial Hydro Mud Press	1639.4	1642.9	
Initial Shut-In Press			
Initial Flow Press			
Final Flow Press			
Final Shut In Press			
Final Hydro Mud Press	1639.4	1642.9	

Mud Drop **YES** Fluid Loss Mud Weight **9.2**

Viscosity **32.0** Temperature F **72.0** Net Pay Tested

Top Packer Depth **3226.0** Bottom Packer Depth Total Depth **4211.0**

Drill Pipe Size **4.75** Wt **16.6** Drill Collar I D **2.000** Ft. Run **438.00**

Surface Choke Size **CLOSED** Bottom Choke Size **0.5** Main Hole Size **7.000**

Anchor Size **4.75** Rat Hole Size **6.250** Feet of Rat Hole

Cushion Amount Type Rubber Size **5.75**

Fluid Recovery Total Feet

Recovered Feet of

Recovered Feet of

Recovered Feet of

Recovered Feet of

Recovered Feet of

Gas Recovery How Measured Riser size:

mins	Temp F	Press Rdg	psi	Orifice Size	=	MCF/Day
mins	Temp F	Press Rdg	psi	Orifice Size	=	MCF/Day
mins	Temp F	Press Rdg	psi	Orifice Size	=	MCF/Day
mins	Temp F	Press Rdg	psi	Orifice Size	=	MCF/Day
mins	Temp F	Press Rdg	psi	Orifice Size	=	MCF/Day
mins	Temp F	Press Rdg	psi	Orifice Size	=	MCF/Day

Bleed Off Time for Drill Pipe

REMARKS: **MISRUN - PACKER SEAT FAILED**

A Geo Lab Gas Cont No Chem Geo Lab Gas Cont No

BJ BORG WARNER

TESTING REPORT

	ID	OD	LENGTH	
4S LANDING SUB			1.00	BOTTOM OF CASING 3240'
4S CHAMBER				BOTTOM OF TEST TOOL 3456'
4S TOOL OR P.O. SUB			5.00	
CO SUB				
SHUT IN TOOL		4¾	5.20	
R.F.S. No. 106	2¼	4¾	3.30	
R.F.S. No. 124	2¼	4¾	3.30	
HYDRAULIC TOOL		4¾	7.20	
JARS	1	4¾	6.00	
RECORDER No.	2¼	4¾		DEPTH
RECORDER No.	2¼	4¾		DEPTH
SAFETY JOINT	2 11/16	4¾	1.75	
BY PASS SUB	1 5/32	4¾		

WEIGHT INDICATER READING

PRIOR TO SETTING PACKERS

AFTER PULL PACKERS LOOSE

1. PACKER DEPTH

PACKER	1 OR ⅞			

2. PACKER DEPTH 3226

PACKER	1 or ⅞		7.10	TOOL ABOVE INTERVAL 39.85
ANCHOR—SPECIFY	2½			
2 STANDS PIPE			188.54	
BLANK OFF OR BY PASS SUB	1 5/32	4¾		
RECORDER No.	2¼	4¾		DEPTH
PERF			28.00	

3. PACKER DEPTH

PACKER	1 OR ⅞			TOTAL INTERVAL

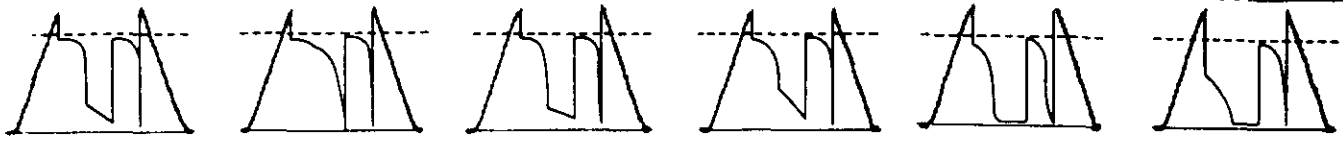
4. PACKER DEPTH

PACKER	1 OR ⅞			
ANCHOR—SPECIFY	2½			
RECORDER NO. 3689			5.00	DEPTH 3445
RECORDER No 3852	2¼	4¾	5.00	DEPTH 3450

TOTAL DEPTH 4211 OF HOLE

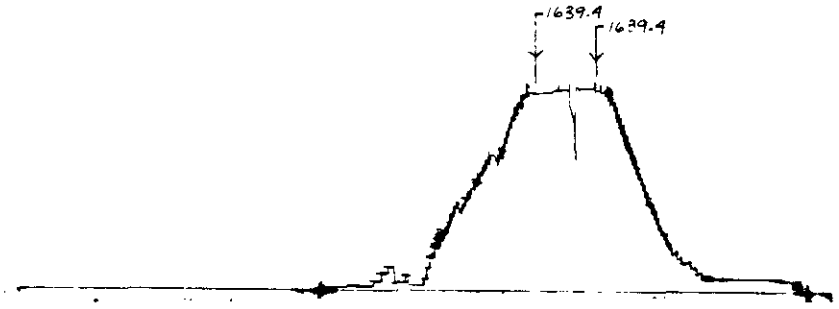
BULLNOSE	2¾	4¾		TOTAL TAIL PIPE 229.04
				TOTAL TEST TOOL 80.35

DST CHARTS FOR COMPARATIVE VISUAL ANALYSIS



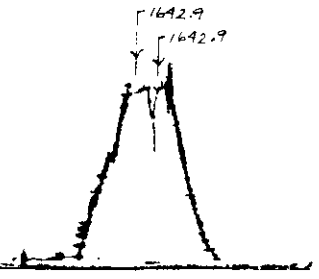
HIGH PERMEABILITY STRONG DAMAGE EFFECT | HIGH PERMEABILITY NO DAMAGE EFFECT | MEDIUM PERMEABILITY STRONG DAMAGE EFFECT | MEDIUM PERMEABILITY NO DAMAGE EFFECT | LOW PERMEABILITY STRONG DAMAGE EFFECT | LOW PERMEABILITY NO DAMAGE EFFECT

MOBIL BELOT HILLS M63
INTERVAL 3226 - 4211
DST NO. 5 REC. NO. 3689



DST RECORDER CHARTS

MOBIL BELOT HILLS M63
INTERVAL 3226 - 4211
DST NO. 5 REC. NO. 3852



TESTING REPORT

DRILL-STEM TEST DATA

Well Name MOBIL BELOT HILLS — Test No. 6

Well Number M63 — Zone Tested CAMBRIAN SANDS

Company MOBIL OIL CANADA LTD. — Interval 3187.0 TO 4211.0

Comp Rep. KEITH BAXTER — Tester MEL MOSCRIP — Date APRIL 5, 1972

Type of Test LANE WELLS PACKER TEST — R F S Tool No. 106 , 124

Preflow 45.0 mins. ISI 182.0 mins Flow mins. FSI mins

	OUT REC No. 3689	OUT REC. No. 3852	REC No.
	5700 RANGE 12 HR CLOCK	5800 RANGE 24 HR. CLOCK	RANGE HR CLOCK
DEPTH	3407.0	3412.0	
Initial Hydro Mud Press	1629.6	1631.5	
Initial Shut-in Press			
Initial Flow Press	285.7	287.9	
Final Flow Press	957.1	960.6	
Final Shut-In Press	1207.0	1210.0	
Final Hydro Mud Press	1629.6	1631.5	

Mud Drop NO — Fluid Loss — Mud Weight 9.2

Viscosity 32.0 — Temperature F 72.0 — Net Pay Tested 10.0

Top Packer Depth 3187.0 — Bottom Packer Depth — Total Depth 4211.0

Drill Pipe Size 3.5 IF — Wt 13.3 — Drill Collar I D 2.000 — Ft Run 438.00

Surface Choke Size CLOSED — Bottom Choke Size 0.5 — Main Hole Size 7.000

Anchor Size 4.75 — Rat Hole Size 6.250 — Feet of Rat Hole

Cushion Amount — Type — Rubber Size 5.75

Fluid Recovery Total Feet 2000.0

Recovered 2000 Feet of MUD (PUMPED OUT)

Recovered Feet of

Recovered Feet of

Recovered Feet of

Recovered Feet of

Gas Recovery — How Measured — Riser size:

mins	Temp F	Press Rdg	psi	Orifice Size	= MCF/Day
mins	Temp F	Press Rdg	psi	Orifice Size	= MCF/Day
mins	Temp F	Press Rdg	psi	Orifice Size	= MCF/Day
mins	Temp F	Press Rdg	psi	Orifice Size	= MCF/Day
mins	Temp F	Press Rdg	psi	Orifice Size	= MCF/Day
mins	Temp F	Press Rdg	psi	Orifice Size	= MCF/Day

Bleed Off Time for Drill Pipe

REMARKS TIGHT HOLE.

RFS TOOL - 2700 CC OF WATERY MUD.

A — Chem. Geo Lab Gas Cont No

BJ BORG WARNER

TESTING REPORT

	ID	OD	LENGTH
4S LANDING SUB			1.00
4S CHAMBER			
4S TOOL OR P.O. SUB			5.00
CO SUB			
SHUT IN TOOL		4¾	5.20
R.F.S. No. 106	2¼	4¾	3.30
R.F.S. No. 124	2¼	4¾	3.30
HYDRAULIC TOOL		4¾	
JARS	1	4¾	6.00
RECORDER No.	2¼	4¾	DEPTH
RECORDER No.	2¼	4¾	DEPTH
SAFETY JOINT	2 11/16	4¾	1.75
BY PASS SUB	1 5/32	4¾	
PACKER	1 OR ⅞		
PACKER	1 or ⅞		7.10
ANCHOR—SPECIFY	2½		
2 STANDS PIPE			188.54
BLANK OFF OR BY PASS SUB	1 5/32	4¾	
RECORDER No.	2¼	4¾	DEPTH
PERF			28.00
PACKER	1 OR ⅞		
PACKER	1 OR ⅞		
ANCHOR—SPECIFY	2½		
RECORDER NO. 3689			5.00
RECORDER No 3852	2¼	4¾	5.00
BULLNOSE	2¾	4¾	2.50

BOTTOM OF CASING 3240'

BOTTOM OF TOOL 3417'

TOTAL DEPTH OF HOLE 4211'

WEIGHT INDICATER READING

PRIOR TO SETTING PACKERS

AFTER PULL PACKERS LOOSE

1. PACKER DEPTH

2. PACKER DEPTH 3187

3. PACKER DEPTH

4. PACKER DEPTH

TOTAL DEPTH 4211 HOLE

DEPTH 3407

DEPTH 3412

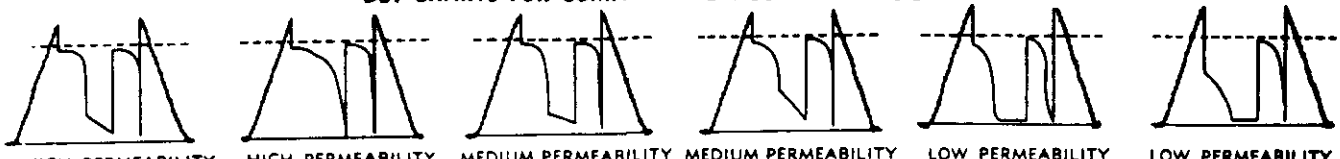
TOOL ABOVE INTERVAL 32.75

TOTAL INTERVAL

TOTAL TAIL PIPE 299.04

TOTAL TEST TOOL 73.25

DST CHARTS FOR COMPARATIVE VISUAL ANALYSIS



HIGH PERMEABILITY STRONG DAMAGE EFFECT | HIGH PERMEABILITY NO DAMAGE EFFECT | MEDIUM PERMEABILITY STRONG DAMAGE EFFECT | MEDIUM PERMEABILITY NO DAMAGE EFFECT | LOW PERMEABILITY STRONG DAMAGE EFFECT | LOW PERMEABILITY NO DAMAGE EFFECT

WELL NAME MOBIL BELOT HILLS DST. NO. 6

LOCATION M63 REC. NO. 3689 DEPTH 3407.

MEASURED PRESSURES

	POINT NUMBER	TIME MIN	PRESSURE PSIG
RUN IN HOLE	1	0.0	0.0
	2	134.0	1629.6
INITIAL HYDRO PRESSURE	3	158.0	1629.6
INITIAL FLOW PRESSURE	4	158.0	285.7
	5	163.0	451.4
	6	168.0	565.7
	7	173.0	658.6
	8	178.0	731.4
	9	183.0	794.3
	10	188.0	847.1
	11	193.0	891.4
	12	198.0	928.6
FINAL FLOWING PRESSURE	13	203.0	957.1
START SHUT-IN	14	203.0	957.1
	15	208.0	1160.6
	16	213.0	1183.1
	17	218.0	1191.5
	18	223.0	1195.8
	19	228.0	1198.6
	20	233.0	1200.0
	21	238.0	1201.4
	22	243.0	1202.8
	23	248.0	1204.2
	24	253.0	1204.2
	25	258.0	1204.2
	26	263.0	1204.2
	27	268.0	1205.6
	28	273.0	1205.6
	29	278.0	1205.6
	30	283.0	1205.6
	31	288.0	1205.6
	32	293.0	1205.6
	33	298.0	1207.0
	34	303.0	1207.0
	35	313.0	1207.0
	36	323.0	1207.0
	37	333.0	1207.0
	38	343.0	1207.0

WELL NAME MOBIL BELOT HILLS DST. NO. 6

LOCATION M63 REC. NO. 3689 DEPTH 3407.

MEASURED PRESSURES

	POINT NUMBER	TIME MIN	PRESSURE PSIG
	39	353.0	1207.0
	40	363.0	1207.0
	41	373.0	1207.0
	42	383.0	1207.0
SHUT-IN PRESSURE	43	385.0	1207.0
START PUMPING OUT	44	385.0	1207.0
	45	386.0	1628.2
FINISH PUMPING OUT	46	409.0	1628.2
FINAL HYDRO PRESSURE	47	410.0	1629.6
	48	435.0	1629.6
OUT OF HOLE	49	589.0	0.0

WELL NAME MOBIL BELOT HILLS DST. NO. 6

LOCATION M63 REC. NO. 3689 DEPTH 3407.

CALCULATIONS FOR LIQUID RECOVERY (FIRST SHUT-IN)

(A) EXTRAPOLATED RESERVOIR PRESSURE	1211.0
NO. OF POINTS CONSIDERED IN BUILD-UP	29
NO. OF POINTS USED IN EXTRAPOLATION	27
ROOT MEAN SQUARE DEVIATION OF BEST-FIT LINE (PSI)	0.90
EFFECTIVE PRODUCING TIME (MIN)	45.0

WELL NAME MOBIL BELOT HILLS DST. NO. 6

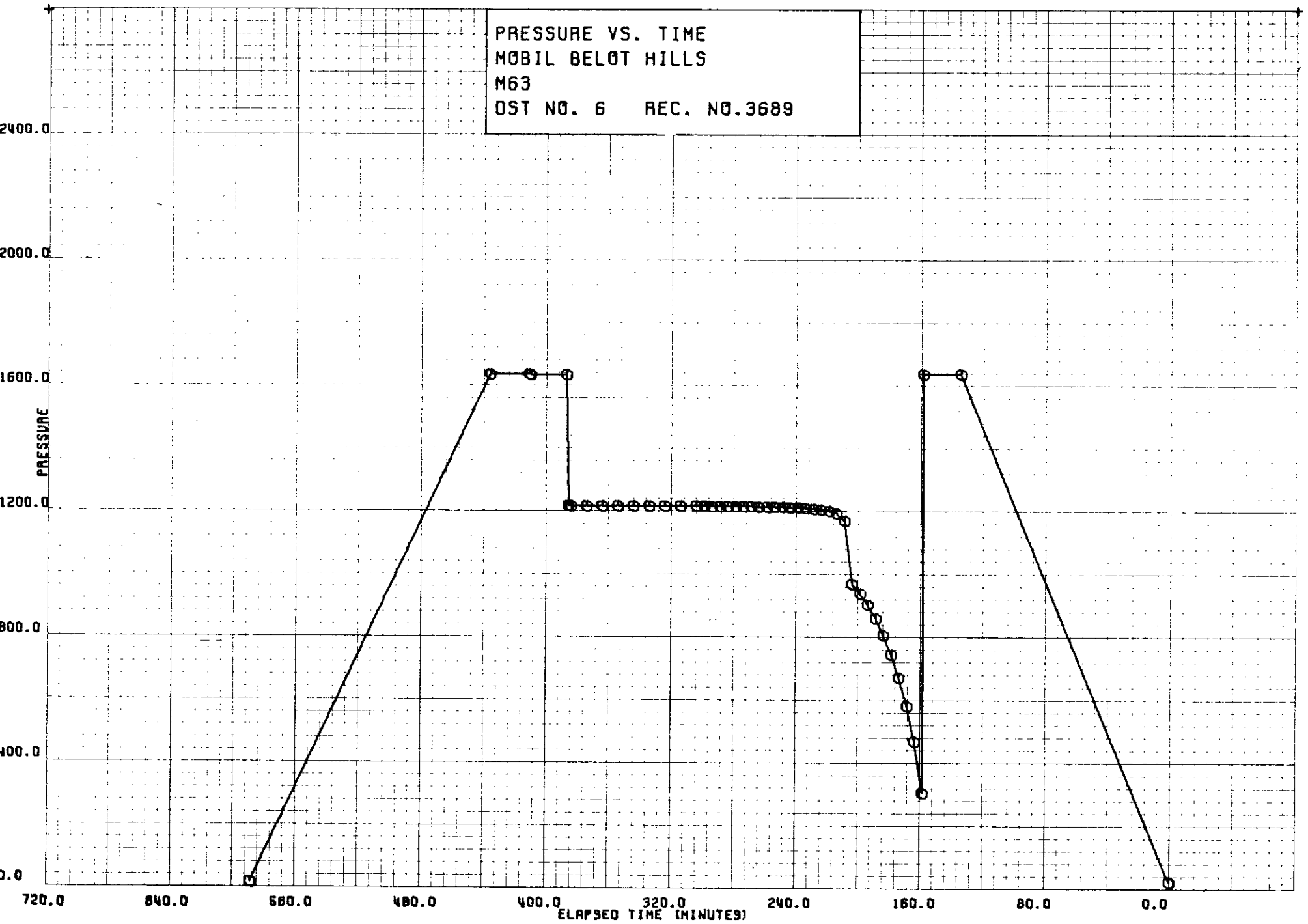
LOCATION M63 REC. NO. 3689 DEPTH 3407.

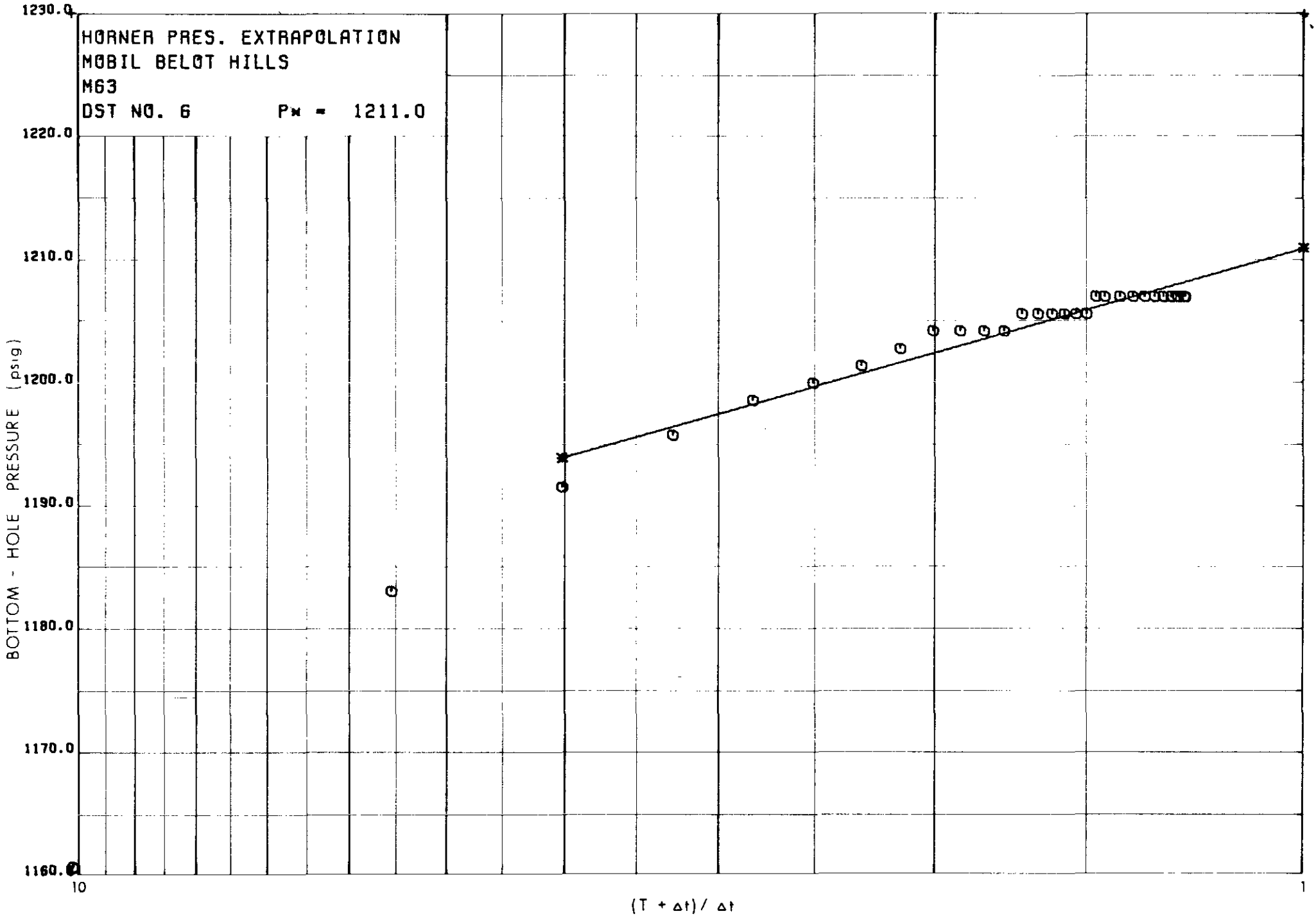
DATA FOR BUILD-UP PLOT (FIRST SHUT-IN)

POINT NUMBER	TIME MIN	PRESSURE PSIG	PRESSURE CALC FROM BEST FIT LINE	PRESSURE DIFFERENCE CALC - OBSERVED	T+DELTA(T)/ DELTA(T)
PORTION OF BUILD-UP CURVE NOT USED IN EXTRAPOLATION					
15	5.0	1160.6			10.00
16	10.0	1183.1			5.50
POINTS USED IN EXTRAPOLATION					
17	15.0	1191.5	1194.0	2.4	4.00
18	20.0	1195.8	1196.5	0.7	3.25
19	25.0	1198.6	1198.3	-0.2	2.80
20	30.0	1200.0	1199.7	-0.3	2.50
21	35.0	1201.4	1200.8	-0.6	2.29
22	40.0	1202.8	1201.7	-1.1	2.13
23	45.0	1204.2	1202.5	-1.7	2.00
24	50.0	1204.2	1203.1	-1.1	1.90
25	55.0	1204.2	1203.7	-0.6	1.82
26	60.0	1204.2	1204.1	-0.1	1.75
27	65.0	1205.6	1204.5	-1.1	1.69
28	70.0	1205.6	1204.9	-0.7	1.64
29	75.0	1205.6	1205.2	-0.4	1.60
30	80.0	1205.6	1205.5	-0.1	1.56
31	85.0	1205.6	1205.8	0.1	1.53
32	90.0	1205.6	1206.0	0.4	1.50
33	95.0	1207.0	1206.2	-0.8	1.47
34	100.0	1207.0	1206.4	-0.6	1.45
35	110.0	1207.0	1206.8	-0.3	1.41
36	120.0	1207.0	1207.1	0.0	1.38
37	130.0	1207.0	1207.3	0.3	1.35
38	140.0	1207.0	1207.6	0.5	1.32
39	150.0	1207.0	1207.8	0.7	1.30
40	160.0	1207.0	1208.0	0.9	1.28
41	170.0	1207.0	1208.1	1.1	1.26
42	180.0	1207.0	1208.3	1.2	1.25
43	182.0	1207.0	1208.3	1.2	1.25

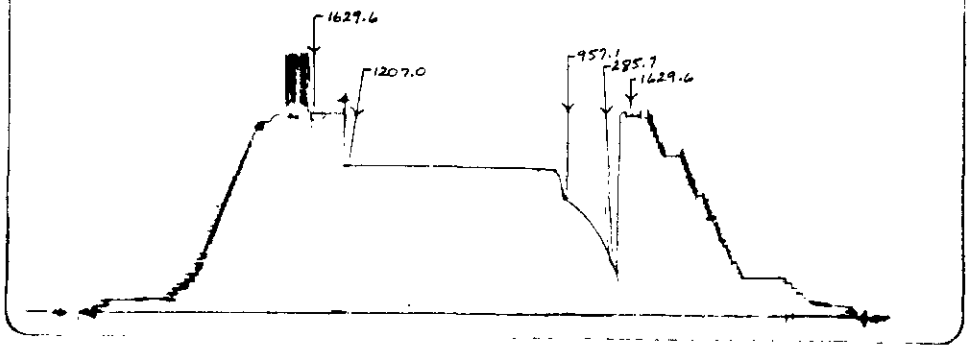
ASSUMPTIONS AND LIMITATIONS

THE ENCLOSED DST INTERPRETATION CALCULATIONS REQUIRE SEVERAL NECESSARY ASSUMPTIONS TO PROVIDE A QUICK ESTIMATE OF MANY OF THE FACTORS INVOLVED. AS A RESULT THE INFORMATION GAINED SHOULD BE USED TO FORM AN OPINION OR ESTIMATE ONLY, UNTIL THE ASSUMPTIONS OF RESERVOIR AND FLUID PROPERTIES CAN BE WHOLLY OR PARTIALLY CLARIFIED BY MORE COMPLETE ANALYSIS AND TESTING.


PRESSURE VS. TIME
MOBIL BELOT HILLS
M63
DST NO. 6 REC. NO.3689
2400.0
2000.0
1600.0
1200.0
800.0
400.0
0.0
PRESSURE
720.0
640.0
560.0
480.0
400.0
320.0
240.0
160.0
80.0
0.0
ELAPSED TIME (MINUTES)

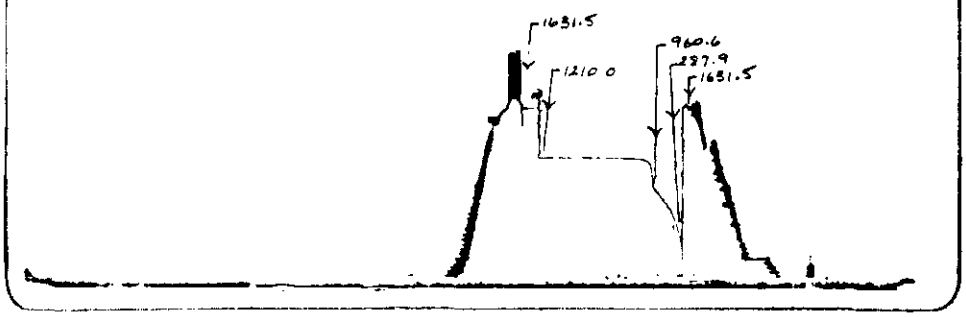

HORNER PRES. EXTRAPOLATION
MOBIL BELOT HILLS
M63
DST NO. 6 Pw = 1211.0
1230.0
1220.0
1210.0
1200.0
1190.0
1180.0
1170.0
1160.0
BOTTOM - HOLE PRESSURE (psig)
10
1
(T + Δt) / Δt

MOBIL BELOT HILLS M63
INTERVAL 3187 - 4211
DST NO. 6 REC. NO. 3689



DST RECORDER CHARTS

MOBIL BELOT HILLS M63
INTERVAL 3187 - 4211
DST NO. 6 REC NO. 3852



BJ

BORG WARNER

DRILL STEM TEST REPORT

BJ SERVICE DIVISION
BORG-WARNER (CANADA) LIMITED

MOBIL BELOT HILLS

M-63

Test # 3

BJ BORG WARNER

TESTING REPORT

DRILL-STEM TEST DATA

Well Name MOBIL BELOT HILLS M63 Test No. 3

Well Number M63 Zone Tested

Company MOBIL OIL CANADA LTD. Interval

Comp Rep KEITH BAXTER Tester MEL MOSCRIP Date APRIL 3,1972

Type of Test LANE WELLS PACKER TEST RFS Tool No. 106 , 124

	Preflow	mins ISI	mins. Flow	mins. FSI	mins
		OUT REC No 3689	OUT REC No 3852	REC No	
		5700 RANGE 12 HR CLOCK	5800 RANGE 24 HR CLOCK	RANGE	HR CLOCK
DEPTH					
Initial Hydro Mud Press					
Initial Shut-In Press					
Initial Flow Press					
Final Flow Press					
Final Shut-In Press					
Final Hydro Mud Press					

Mud Desc NO Fluid Loss Mud Weight 9.2

Viscosity 32.0 Temperature F 72.0 Net Pay Tested

Top Packer Depth Bottom Packer Depth Total Depth

Drill Pipe Size 3.5 IF Wt 13.3 Drl Collar I.D. 2.000 Ft. Run 438.00

Surface Choke Size CLOSED Bottom Choke Size 0.5 Main Hole Size 7.000

Anchor Size 4.75 Rat Hole Size 6.250 Feet of Rat Hole

Casing Anchor Type Rubber Size 5.75

Fluid Recovery Total Feet

Recovered Feet of

Recovered Feet of

Recovered Feet of

Recovered Feet of

Recovered Feet of

Gas Recovery Flow Measured Riser size

mcfd	Temp F	Press Rdg	psi	Orifice Size	=	MCF Day
mcfd	Temp F	Press Rdg	psi	Orifice Size	=	MCF Day
mcfd	Temp F	Press Rdg	psi	Orifice Size	=	MCF Day
mcfd	Temp F	Press Rdg	psi	Orifice Size	=	MCF Day
mcfd	Temp F	Press Rdg	psi	Orifice Size	=	MCF Day
mcfd	Temp F	Press Rdg	psi	Orifice Size	=	MCF Day

Recovered Total Feet Drill Pipe

REMARKS MISRUN - HMV FAILED TO OPEN.

Approved Gas Flow Cont No Comp Geo Lab Gas Cont No

BJ BORG WARNER

TESTING REPORT

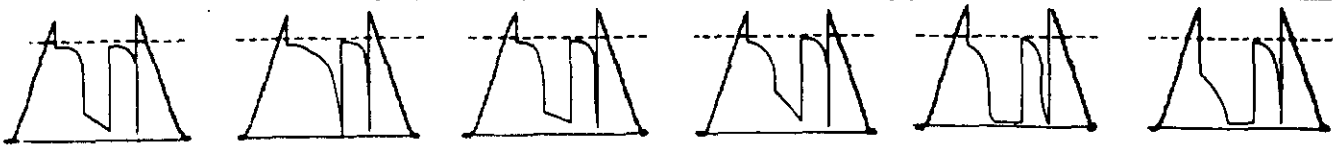
WEIGHT INDICATER READING

PRIOR TO SETTING PACKERS

AFTER PULL PACKERS LOOSE

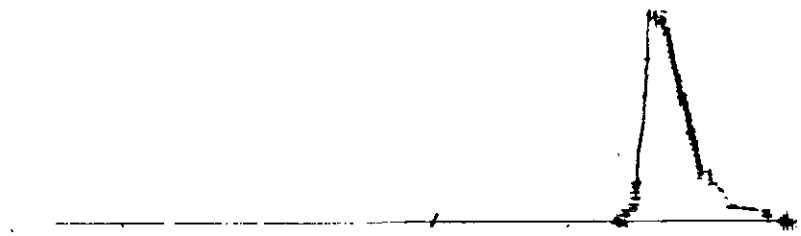
	ID	OD	LENGTH	
4S LANDING SUB			1.00	
4S CHAMBER				
4S TOOL OR P.O. SUB			5.00	
CO SUB				
SHUT IN TOOL		4¾	5.20	
R.F.S. No. 106	2¼	4¾	3.30	
R.F.S. No. 124	2¼	4¾	3.30	
HYDRAULIC TOOL		4¾		
JARS	1	4¾	6.00	
RECORDER No.	2¼	4¾		DEPTH
RECORDER No.	2¼	4¾		DEPTH
SAFETY JOINT	2 11/16	4¾	1.75	
BY PASS SUB	1 5/32	4¾		
1. PACKER DEPTH — PACKER	1 OR ⅞			
2. PACKER DEPTH — PACKER	1 or ⅞		7.10	TOOL ABOVE INTERVAL 32.75
ANCHOR—SPECIFY	2½			
2 STANDS PIPE			188.54	
BLANK OFF OR BY PASS SUB	1 5/32	4¾		
RECORDER No.	2¼	4¾		DEPTH
PERF			28.00	
3. PACKER DEPTH — PACKER	1 OR ⅞			TOTAL INTERVAL
4. PACKER DEPTH — PACKER	1 OR ⅞			
ANCHOR—SPECIFY	2½			
RECORDER NO. 3689			5.00	
RECORDER No 3852	2¼	4¾	5.00	DEPTH
TOTAL DEPTH — BULLNOSE	2¾	4¾	2.50	TOTAL TAIL PIPE 229.04
				TOTAL TEST TOOL 73.25

DST CHARTS FOR COMPARATIVE VISUAL ANALYSIS



HIGH PERMEABILITY STRONG DAMAGE EFFECT | HIGH PERMEABILITY NO DAMAGE EFFECT | MEDIUM PERMEABILITY STRONG DAMAGE EFFECT | MEDIUM PERMEABILITY NO DAMAGE EFFECT | LOW PERMEABILITY STRONG DAMAGE EFFECT | LOW PERMEABILITY NO DAMAGE EFFECT

MOBIL BELOT HILLS M63
DST NO. 3
REC. NO. 3689



DST RECORDER CHARTS

MOBIL BELOT HILLS M63
DST NO. 3
REC. NO. 3852

BJ

BORG WARNER

DRILL STEM TEST REPORT

BJ SERVICE DIVISION
BORG-WARNER (CANADA) LIMITED

MOBIL BELOT HILLS

M-63

Test # 4

BJ
BORG WARNER

TESTING REPORT

DRILL-STEM TEST DATA

Well Name MOBIL BELOT HILLS M63 | Test No. 4

Well Number M63 | Zone Tested

Company MOBIL OIL CANADA LTD. | Interval

Comp Rep KEITH BAXTER | Tester MEL MOSCRIP | Date APRIL 4,1972

Type of Test LANE WELLS PACKER TEST | RFS Tool No. 106,124

Prefix	mins IS	mins Flow	mins FSI	mins
	OUT REC No 3689	OUT REC No 3852	REC No	
	5700 RANGE 12 HR CLOCK	RANGE 24 HR CLOCK	RANGE	HR CLOCK
DEPTH				
Initial Hydro Mud Pres	1653.5			
Initial Shut-In Press				
Initial Flow Press				
Final Flow Press				
Final Shut-In Press				
Final Hydro Mud Press	1653.5			

Mud Drop YES | Fluid Loss | Mud Weight 9.2

Viscosity 32.0 | Temperature F 72.0 | Net Pay Tested

Top Packer Depth | Bottom Packer Depth | Total Depth

Drill Pipe Size 3.5 IF | Wt 13.3 | Drill Collar I.D. 2.000 | Ft Run 438.00

Surface Choke Size CLOSED | Bottom Choke Size 0.5 | Main Hole Size 7.000

Anchor Size 4.75 | Rat Hole Size 6.250 | Feet of Rat Hole

Cushion Amount | Type | Rubber Size 5.75

Fluid Recovery: Total Feet

Recovered Feet of

Recovered Feet of

Recovered Feet of

Recovered Feet of

Recovered Feet of

Gas Recovery | Flow Measured | Riser size:

mins	Temp F	Press Rdg	psi	Orifice Size	=	MCF Day
mins	Temp F	Press Rdg	psi	Orifice Size	=	MCF Day
mins	Temp F	Press Rdg	psi	Orifice Size	=	MCF Day
mins	Temp F	Press Rdg	psi	Orifice Size	=	MCF Day
mins	Temp F	Press Rdg	psi	Orifice Size	=	MCF Day
mins	Temp F	Press Rdg	psi	Orifice Size	=	MCF Day

Blow at Final Flow Period

REMARKS MISRUN - PACKER SEAT FAILED.

A [illegible] N | From Geo Lab Gas Cont No

BJ
BORG WARNER

TESTING REPORT

WEIGHT INDICATER READING

PRIOR TO SETTING PACKERS

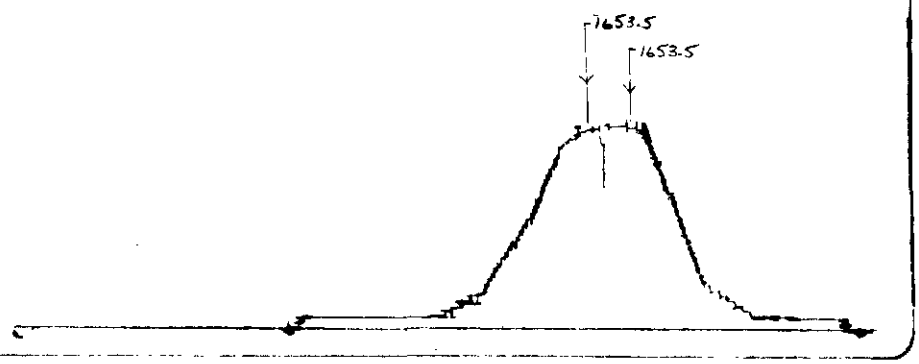
AFTER PULL PACKERS LOOSE

	ID	OD	LENGTH	
4S LANDING SUB			1.00	
4S CHAMBER				
4S TOOL OR P.O. SUB			5.00	
CO SUB				
SHUT IN TOOL		4¾	5.20	
R.F.S. No. 106	2¼	4¾	3.30	
R.F.S. No. 124	2¼	4¾	3.30	
HYDRAULIC TOOL		4¾		
JARS	1	4¾	6.00	
RECORDER No.	2¼	4¾		DEPTH
RECORDER No.	2¼	4¾		DEPTH
SAFETY JOINT	$2\frac{11}{16}$	4¾	1.75	
BY PASS SUB	$1\frac{5}{32}$	4¾		
1. PACKER DEPTH — PACKER	1 OR ⅞			
2. PACKER DEPTH — PACKER	1 or ⅞		7.10	TOOL ABOVE INTERVAL 32.75
ANCHOR—SPECIFY	2½			
2 STANDS PIPE			188.54	
BLANK OFF OR BY PASS SUB	$1\frac{5}{32}$	4¾		
RECORDER No.	2¼	4¾		DEPTH
PERF			28.00	
3. PACKER DEPTH — PACKER	1 OR ⅞			TOTAL INTERVAL
4. PACKER DEPTH — PACKER	1 OR ⅞			
ANCHOR—SPECIFY	2½			
RECORDER NO. 3689			5.00	
RECORDER No 3852	2¼	4¾	5.00	DEPTH
TOTAL DEPTH — BULLNOSE	2¾	4¾	2.50	TOTAL TAIL PIPE 229.04
				TOTAL TEST TOOL 73.25

DST CHARTS FOR COMPARATIVE VISUAL ANALYSIS

HIGH PERMEABILITY STRONG DAMAGE EFFECT | HIGH PERMEABILITY NO DAMAGE EFFECT | MEDIUM PERMEABILITY STRONG DAMAGE EFFECT | MEDIUM PERMEABILITY NO DAMAGE EFFECT | LOW PERMEABILITY STRONG DAMAGE EFFECT | LOW PERMEABILITY NO DAMAGE EFFECT

MOBIL BELOT HILLS M63
DST NO. 4
REC. NO. 3689



DST RECORDER CHARTS

MOBIL BELOT HILLS M63
DST NO. 4
REC. NO. 3852

BJ

BORG WARNER

DRILL STEM TEST REPORT

BJ SERVICE DIVISION
BORG-WARNER (CANADA) LIMITED

MOBIL BELOT HILLS

M-63

Test # 5

BJ
BORG WARNER

TESTING REPORT

DRILL-STEM TEST DATA

Well Name MOBIL BELOT HILLS M63 | Test No. 5

Well Number M63 | Zone Tested

Company MOBIL OIL CANADA LTD. | Interval

Comp Rep | Tester | Date APRIL 4,1972

Type of Test LANE WELLS PACKER TEST | RFS Tool No 106,124

	Preflow	mins	ISI	mins	Flow	mins	FSI	mins
			OUT REC No 3689		OUT REC No 3852		RFC No.	
	DEPTH		5700 RANGE 12 HR CLOCK		5800 RANGE 24 HR CLOCK		RANGE	HR CLOCK
Initial Hydro Mud Press			1639.4		1642.9			
Initial Shut In Press								
Initial Flow Press								
Final Flow Press								
Final Shut In Press								
Final Hydro Mud Press			1639.4		1642.9			

Mud Drop YES | Fluid Loss | Mud Weight 9.2

Viscosity 32.0 | Temperature F 72.0 | Net Pay Tested

Top Packer Depth | Bottom Packer Depth | Total Depth

Drill Pipe Size 4.75 | Wt 16.6 | Drl Collar I.D. 2.000 | Ft Run 438.00

Surface Choke Size CLOSED | Bottom Choke Size 0.5 | Main Hole Size 7.000

Anchor Size 4.75 | Rat Hole Size 6.250 | Feet of Rat Hole

Casing Perforations | Type | Rubber Size 5.75

Feet of Recovery, Total Feet

Recovered Feet of

Recovered Feet of

Recovered Feet of

Recovered Feet of

Recovered Feet of

Gas Recovery | Flow Measured | Riser size

mins	Temp F	Press Rdg	psi	Orifice Size	=	MCF/Day
mins	Temp F	Press Rdg	psi	Orifice Size	=	MCF/Day
mins	Temp F	Press Rdg	psi	Orifice Size	=	MCF/Day
mins	Temp F	Press Rdg	psi	Orifice Size	=	MCF/Day
mins	Temp F	Press Rdg	psi	Orifice Size	=	MCF/Day
mins	Temp F	Press Rdg	psi	Orifice Size	=	MCF/Day

Blow Description

REMARKS MISRUN - PACKER SEAT FAILED

A Chem Gel Cont No | Chem Gel Gas Cont No

BJ BORG WARNER

TESTING REPORT

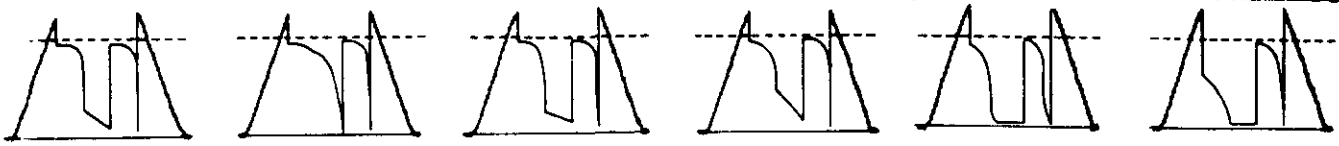
WEIGHT INDICATER READING

PRIOR TO SETTING PACKERS

AFTER PULL PACKERS LOOSE

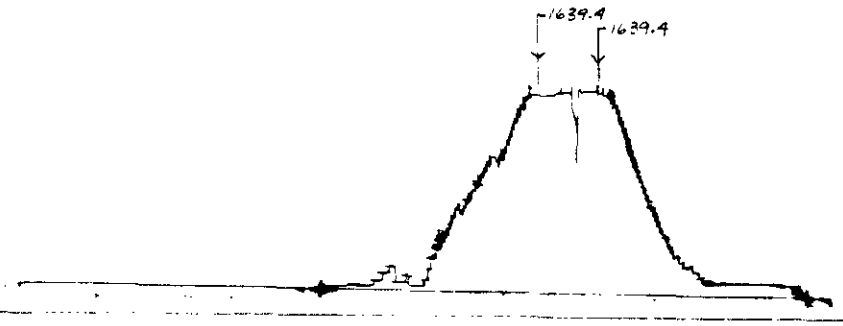
	ID	OD	LENGTH
4S LANDING SUB			1.00
4S CHAMBER			
4S TOOL OR P.O. SUB			5.00
CO SUB			
SHUT IN TOOL		4¾	5.20
R.F.S. No. 106	2¼	4¾	3.30
R.F.S. No. 124	2¼	4¾	3.30
HYDRAULIC TOOL		4¾	7.20
JARS	1	4¾	6.00
RECORDER No.	2¼	4¾	DEPTH
RECORDER No.	2¼	4¾	DEPTH
SAFETY JOINT	$2\frac{11}{16}$	4¾	1.75
BY PASS SUB	$1\frac{5}{32}$	4¾	
1. PACKER DEPTH — PACKER	1 OR ⅞		
2. PACKER DEPTH — PACKER	1 or ⅞		7.10 TOOL ABOVE INTERVAL 39.85
ANCHOR—SPECIFY	2½		
2 STANDS PIPE			188.54
BLANK OFF OR BY PASS SUB	$1\frac{5}{32}$	4¾	
RECORDER No.	2¼	4¾	DEPTH
PERF			28.00
3. PACKER DEPTH — PACKER	1 OR ⅞		TOTAL INTERVAL
4. PACKER DEPTH — PACKER	1 OR ⅞		
ANCHOR—SPECIFY	2½		
RECORDER NO. 3689			5.00
RECORDER No 3852	2¼	4¾	5.00 DEPTH
TOTAL DEPTH — BULLNOSE	2¾	4¾	2.50 TOTAL TAIL PIPE 229.04
			TOTAL TEST TOOL 80.35

DST CHARTS FOR COMPARATIVE VISUAL ANALYSIS



HIGH PERMEABILITY STRONG DAMAGE EFFECT | HIGH PERMEABILITY NO DAMAGE EFFECT | MEDIUM PERMEABILITY STRONG DAMAGE EFFECT | MEDIUM PERMEABILITY NO DAMAGE EFFECT | LOW PERMEABILITY STRONG DAMAGE EFFECT | LOW PERMEABILITY NO DAMAGE EFFECT

MOBIL BELOT HILLS M63
DST NO. 5
REC. NO. 3689



DST RECORDER CHARTS

MOBIL BELOT HILLS M63
DST NO. 5
REC. NO. 3852

BJ

BORG WARNER

DRILL STEM TEST REPORT

BJ SERVICE DIVISION
BORG-WARNER (CANADA) LIMITED

MOBIL BELOT HILLS

M - 63

Test # 6

BJ BORG WARNER

TESTING REPORT

DRILL-STEM TEST DATA

Well Name **MOBIL BELOT HILLS** Test No. **6**

Well Number **M63** Zone Tested

Company **MOBIL OIL CANADA LTD.** Interval

Comp. Rep **KEITH BAXTER** Tester **MEL MOSCRIP** Date **APRIL 5,1972**

Type of Test **LANE WELLS PACKER TEST** RFS Tool No **106 , 124**

Preflow **45.0** mins ISI **182.0** mins Flow mins. FSI mins

	OUT REC. No. **3689**	OUT REC. No. **3852**	REC. No.
	5700 RANGE **12** HR CLOCK	**5800** RANGE **24** HR CLOCK	RANGE HR CLOCK
DEPTH	**3607.0**	**3612.0**	
Initial Hydro Mud Press	**1629.6**	**1631.5**	
Initial Shut In Press			
Initial Flow Press.	**285.7**	**287.9**	
Final Flow Press	**957.1**	**960.6**	
Final Shut In Press	**1207.0**	**1210.0**	
Final Hydro Mud Press	**1629.6**	**1631.5**	

Mud Drop **NO** Fluid Loss Mud Weight **9.2**

Viscosity **32.0** Temperature F **72.0** Net Pay Tested **10.0**

Top Packer Depth Bottom Packer Depth Total Depth **3618.0**

Drill Pipe Size **3.5 IF** Wt **13.3** Drill Collar I.D **2.000** Ft Run **438.00**

Surface Choke Size **CLOSED** Bottom Choke Size **0.5** Main Hole Size **7.000**

Anchor Size **4.75** Rat Hole Size **6.250** Feet of Rat Hole

Casing Perforations Type Rubber Size **5.75**

Fluid Recovery, Total Feet **2000.0**

Recovered **2000** Feet of **MUD (PUMPED OUT)**

Recovered Feet of

Recovered Feet of

Recovered Feet of

Recovered Feet of

Gas Recovery Flow Measured Riser size

mcfd	Temp F	Press Rdg	psi	Orifice Size	=	MCF/Day
mcfd	Temp F	Press Rdg	psi	Orifice Size	=	MCF/Day
mcfd	Temp F	Press Rdg	psi	Orifice Size	=	MCF/Day
mcfd	Temp F	Press Rdg	psi	Orifice Size	=	MCF/Day
mcfd	Temp F	Press Rdg	psi	Orifice Size	=	MCF/Day
mcfd	Temp F	Press Rdg	psi	Orifice Size	=	MCF/Day

Based Off Time for Drill Pipe

REMARKS. **TIGHT HOLE.**

RFS TOOL - 2700 CC OF WATERY MUD.

A Cont. Lab Test No. Chem. Geo. Lab Gas Cont. No

BJ BORG WARNER

TESTING REPORT

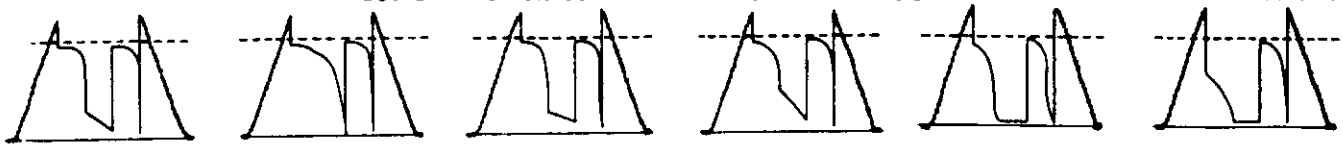
WEIGHT INDICATER READING

PRIOR TO SETTING PACKERS

AFTER PULL PACKERS LOOSE

	ID	OD	LENGTH	
4S LANDING SUB			1.00	
4S CHAMBER				
4S TOOL OR P.O. SUB			5.00	
CO SUB				
SHUT IN TOOL		4¾	5.20	
R.F.S. No. 106	2¼	4¾	3.30	
R.F.S. No. 124	2¼	4¾	3.30	
HYDRAULIC TOOL		4¾		
JARS	1	4¾	6.00	
RECORDER No.	2¼	4¾		DEPTH
RECORDER No.	2¼	4¾		DEPTH
SAFETY JOINT	$2\ ^{11}/_{16}$	4¾	1.75	
BY PASS SUB	$1\ ^{5}/_{32}$	4¾		
1. PACKER DEPTH — PACKER	1 OR ⅞			
2. PACKER DEPTH 3390 — PACKER	1 or ⅞		7.10	TOOL ABOVE INTERVAL 32.75
ANCHOR—SPECIFY	2½			
2 STANDS PIPE			188.54	
BLANK OFF OR BY PASS SUB	$1\ ^{5}/_{32}$	4¾		
RECORDER No.	2¼	4¾		DEPTH
PERF			28.00	
3. PACKER DEPTH — PACKER	1 OR ⅞			TOTAL INTERVAL
4. PACKER DEPTH — PACKER	1 OR ⅞			
ANCHOR—SPECIFY	2½			
RECORDER NO. 3689			5.00	DEPTH 3607
RECORDER No 3852	2¼	4¾	5.00	DEPTH 3612
TOTAL DEPTH 3618 — BULLNOSE	2¾	4¾	2.50	TOTAL TAIL PIPE 229.04
				TOTAL TEST TOOL 73.25

DST CHARTS FOR COMPARATIVE VISUAL ANALYSIS



HIGH PERMEABILITY STRONG DAMAGE EFFECT | HIGH PERMEABILITY NO DAMAGE EFFECT | MEDIUM PERMEABILITY STRONG DAMAGE EFFECT | MEDIUM PERMEABILITY NO DAMAGE EFFECT | LOW PERMEABILITY STRONG DAMAGE EFFECT | LOW PERMEABILITY NO DAMAGE EFFECT

WELL NAME MOBIL BELOT HILLS DST. NO. 6

LOCATION M63 REC. NO. 3689 DEPTH 3607.

MEASURED PRESSURES

	POINT NUMBER	TIME MIN	PRESSURE PSIG
RUN IN HOLE	1	0.0	0.0
	2	134.0	1629.6
INITIAL HYDRO PRESSURE	3	158.0	1629.6
INITIAL FLOW PRESSURE	4	158.0	285.7
	5	163.0	451.4
	6	168.0	565.7
	7	173.0	658.6
	8	178.0	731.4
	9	183.0	794.3
	10	188.0	847.1
	11	193.0	891.4
	12	198.0	928.6
FINAL FLOWING PRESSURE	13	203.0	957.1
START SHUT-IN	14	203.0	957.1
	15	208.0	1160.6
	16	213.0	1183.1
	17	218.0	1191.5
	18	223.0	1195.8
	19	228.0	1198.6
	20	233.0	1200.0
	21	238.0	1201.4
	22	243.0	1202.8
	23	248.0	1204.2
	24	253.0	1204.2
	25	258.0	1204.2
	26	263.0	1204.2
	27	268.0	1205.6
	28	273.0	1205.6
	29	278.0	1205.6
	30	283.0	1205.6
	31	288.0	1205.6
	32	293.0	1205.6
	33	298.0	1207.0
	34	303.0	1207.0
	35	313.0	1207.0
	36	323.0	1207.0
	37	333.0	1207.0
	38	343.0	1207.0

WELL NAME MOBIL BELOT HILLS DST. NO. 6

LOCATION M63 REC. NO. 3689 DEPTH 3607.

MEASURED PRESSURES

	POINT NUMBER	TIME MIN	PRESSURE PSIG
	39	353.0	1207.0
	40	363.0	1207.0
	41	373.0	1207.0
	42	383.0	1207.0
FINAL SHUT-IN PRESSURE	43	385.0	1207.0
START PUMPING OUT	44	385.0	1207.0
	45	386.0	1628.2
FINISH PUMPING OUT	46	409.0	1628.2
FINAL HYDRO PRESSURE	47	410.0	1629.6
	48	435.0	1629.6
OUT OF HOLE	49	589.0	0.0

WELL NAME MOBIL BELOT HILLS DST. NO. 6

LOCATION M63 REC. NO. 3689 DEPTH 3607.

CALCULATIONS FOR LIQUID RECOVERY (FIRST SHUT-IN)

(A) EXTRAPOLATED RESERVOIR PRESSURE	1211.0
NO. OF POINTS CONSIDERED IN BUILD-UP	29
NO. OF POINTS USED IN EXTRAPOLATION	27
ROOT MEAN SQUARE DEVIATION OF BEST-FIT LINE (PSI)	0.90
EFFECTIVE PRODUCING TIME (MIN)	45.0

WELL NAME MOBIL BELOT HILLS DST. NO. 6

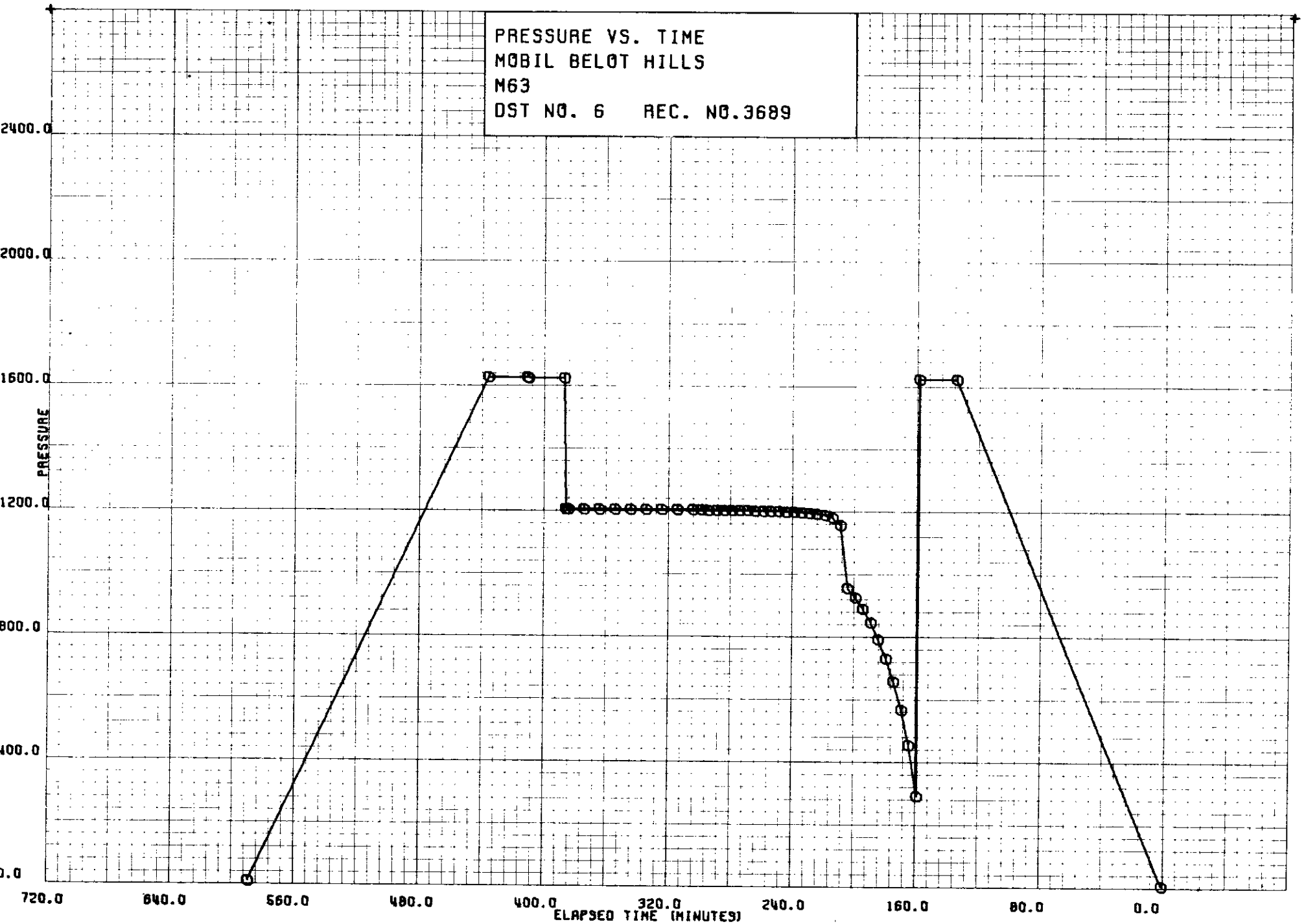
LOCATION M63 REC. NO. 3689 DEPTH 3607.

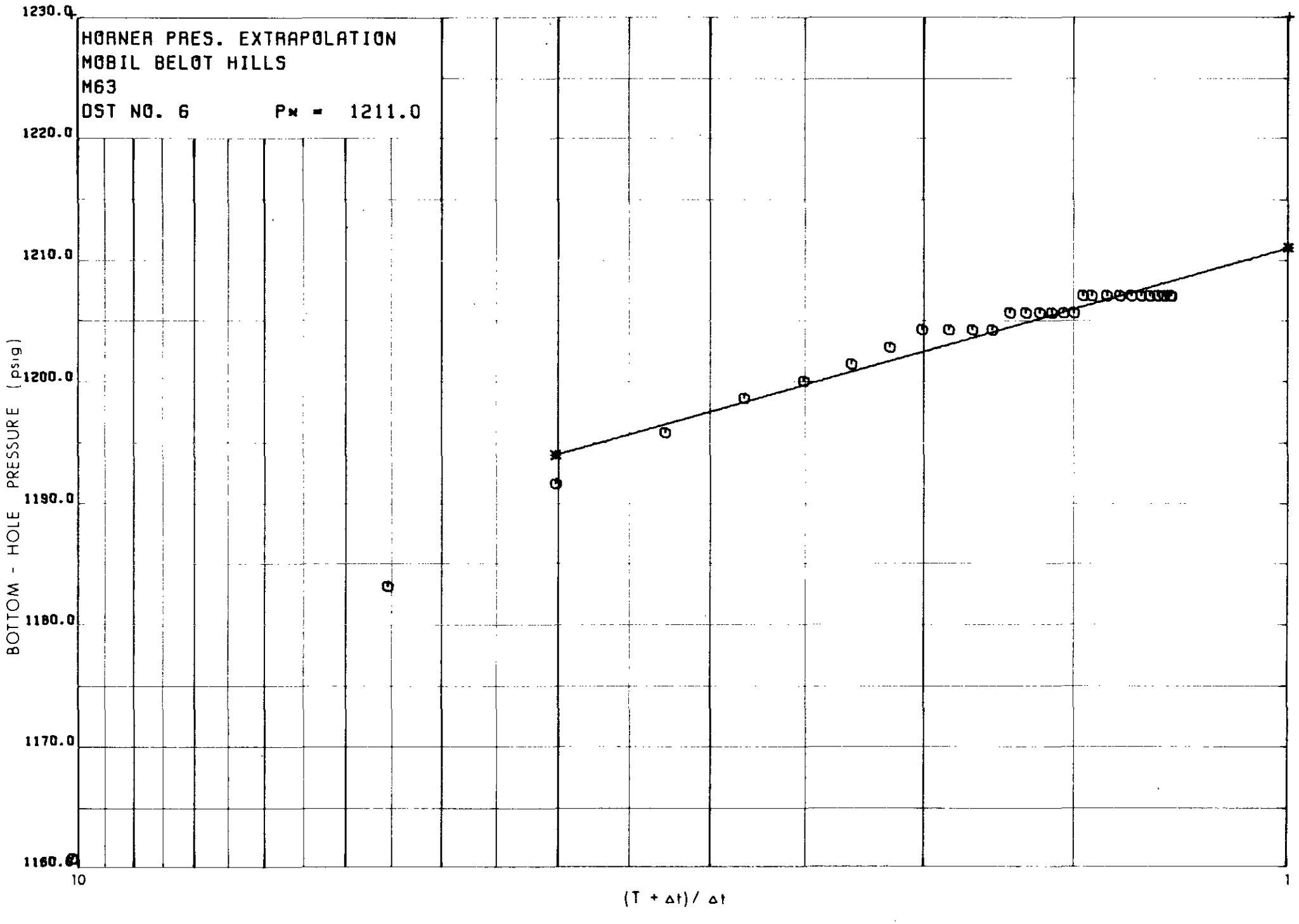
DATA FOR BUILD-UP PLOT (FIRST SHUT-IN)

POINT NUMBER	TIME MIN	PRESSURE PSIG	PRESSURE CALC FROM BEST FIT LINE	PRESSURE DIFFERENCE CALC - OBSERVED	T+DELTA(T)/ DELTA(T)
PORTION OF BUILD-UP CURVE NOT USED IN EXTRAPOLATION					
15	5.0	1160.6			10.00
16	10.0	1183.1			5.50
POINTS USED IN EXTRAPOLATION					
17	15.0	1191.5	1194.0	2.4	4.00
18	20.0	1195.8	1196.5	0.7	3.25
19	25.0	1198.6	1198.3	-0.2	2.80
20	30.0	1200.0	1199.7	-0.3	2.50
21	35.0	1201.4	1200.8	-0.6	2.29
22	40.0	1202.8	1201.7	-1.1	2.13
23	45.0	1204.2	1202.5	-1.7	2.00
24	50.0	1204.2	1203.1	-1.1	1.90
25	55.0	1204.2	1203.7	-0.6	1.82
26	60.0	1204.2	1204.1	-0.1	1.75
27	65.0	1205.6	1204.5	-1.1	1.69
28	70.0	1205.6	1204.9	-0.7	1.64
29	75.0	1205.6	1205.2	-0.4	1.60
30	80.0	1205.6	1205.5	-0.1	1.56
31	85.0	1205.6	1205.8	0.1	1.53
32	90.0	1205.6	1206.0	0.4	1.50
33	95.0	1207.0	1206.2	-0.8	1.47
34	100.0	1207.0	1206.4	-0.6	1.45
35	110.0	1207.0	1206.8	-0.3	1.41
36	120.0	1207.0	1207.1	0.0	1.38
37	130.0	1207.0	1207.3	0.3	1.35
38	140.0	1207.0	1207.6	0.5	1.32
39	150.0	1207.0	1207.8	0.7	1.30
40	160.0	1207.0	1208.0	0.9	1.28
41	170.0	1207.0	1208.1	1.1	1.26
42	180.0	1207.0	1208.3	1.2	1.25
43	182.0	1207.0	1208.3	1.2	1.25

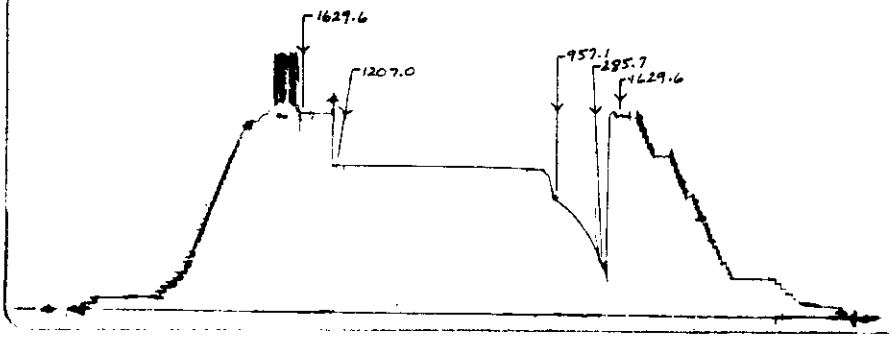
ASSUMPTIONS AND LIMITATIONS

THE ENCLOSED DST INTERPRETATION CALCULATIONS REQUIRE SEVERAL NECESSARY ASSUMPTIONS TO PROVIDE A QUICK ESTIMATE OF MANY OF THE FACTORS INVOLVED. AS A RESULT THE INFORMATION GAINED SHOULD BE USED TO FORM AN OPINION OR ESTIMATE ONLY, UNTIL THE ASSUMPTIONS OF RESERVOIR AND FLUID PROPERTIES CAN BE WHOLLY OR PARTIALLY CLARIFIED BY MORE COMPLETE ANALYSIS AND TESTING.


PRESSURE VS. TIME
MOBIL BELOT HILLS
M63
DST NO. 6 REC. NO.3689
2400.0
2000.0
1600.0
1200.0
800.0
400.0
0.0
PRESSURE
720.0
640.0
560.0
480.0
400.0
320.0
240.0
160.0
80.0
0.0
ELAPSED TIME (MINUTES)

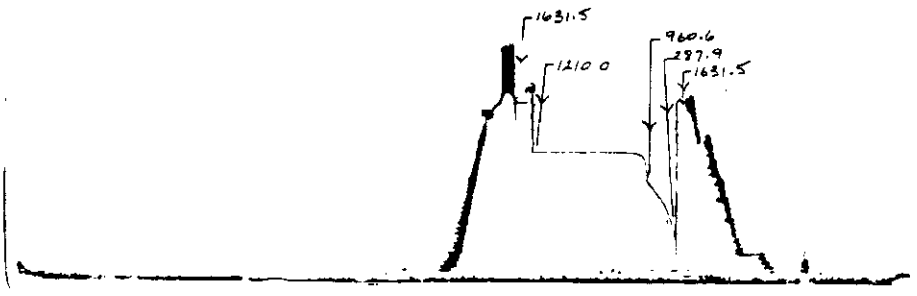

HORNER PRES. EXTRAPOLATION
MOBIL BELOT HILLS
M63
DST NO. 6 Pm = 1211.0
1230.0
1220.0
1210.0
1200.0
1190.0
1180.0
1170.0
1160.0
BOTTOM - HOLE PRESSURE (psig)
10
1
(T + Δt) / Δt

MOBIL BELOT HILLS M63
INTERVAL 3390 - 3618
DST. NO. 6 REC. NO. 3689



DST RECORDER CHARTS

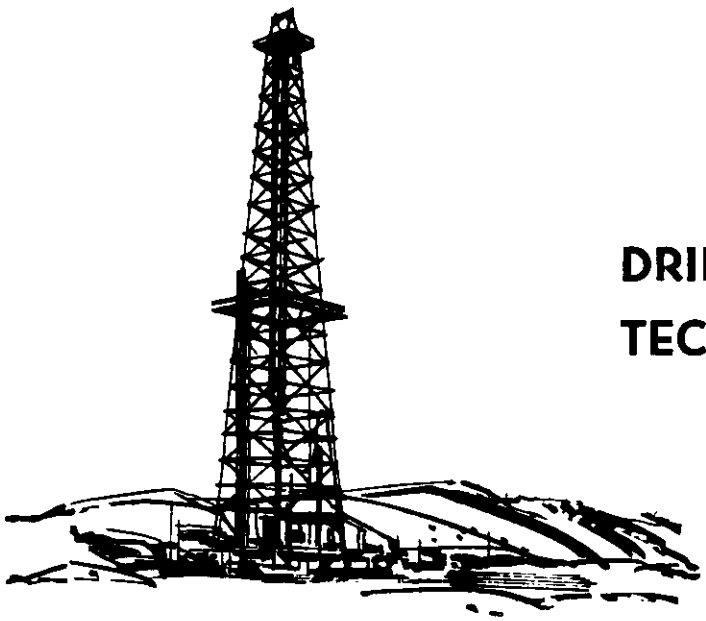
MOBIL BELOT HILLS M63
INTERVAL 3390 - 3618
DST. NO. 6 REC. NO. 3852



LYNES

BRIGHT NAME IN THE OIL PATCH

Inflatable and Conventional Packer Tools



DRILL STEM TEST
TECHNICAL SERVICE REPORT

NOMENCLATURE (Definition of Symbols)

Q	=	average production rate during test, bbls./day
Q_g	=	measured gas production rate during test, MCF/day
k	=	permeability, md
h	=	net pay thickness, ft. (when unknown, test interval is chosen)
μ	=	fluid viscosity, centipoise
Z	=	compressibility factor
T_f	=	reservoir temperature, ° Rankine
m	=	slope of final SIP buildup plot, psig/cycle (psig²/cycle for gas)
b	=	approximate radius of investigation, feet
r_w	=	wellbore radius, feet
t_o	=	total flowing time, minutes
P_o	=	Extrapolated maximum reservoir pressure, psig
P_f	=	final flowing pressure, psig
P.I.	=	productivity index, bbls./day/psi
$P.I._t$	=	theoretical productivity index with damage removed, bbl./day/psi
D.R.	=	damage ratio
E.D.R.	=	estimated damage ratio
AOF	=	absolute open flow potential, MCF/D
AOF_t	=	theoretical absolute open flow if damage were removed
$\bar{Z}$	=	subsea depth
W	=	water gradient based on salinity
H_w	=	potentiometric surface

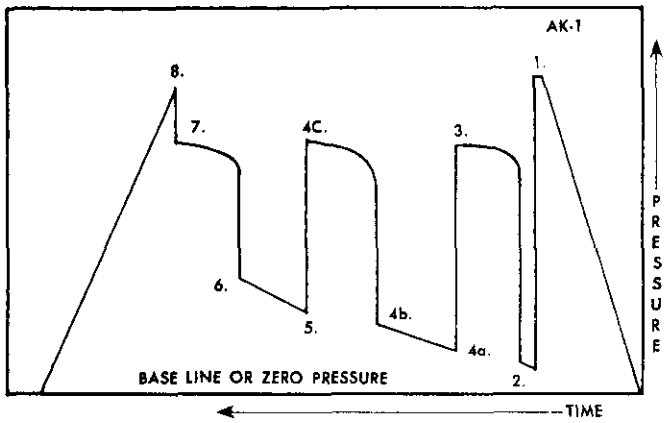
In making any interpretation, our employees will give Customer the benefit of their best judgment as to the correct interpretation. Nevertheless, since *all* interpretations are opinions based on inferences from electrical, mechanical or other measurements, we cannot, and do not, guarantee the accuracy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

DEFINITION OF SYMBOLS

LYNES

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

AK-1 recorders. Read from right to left.

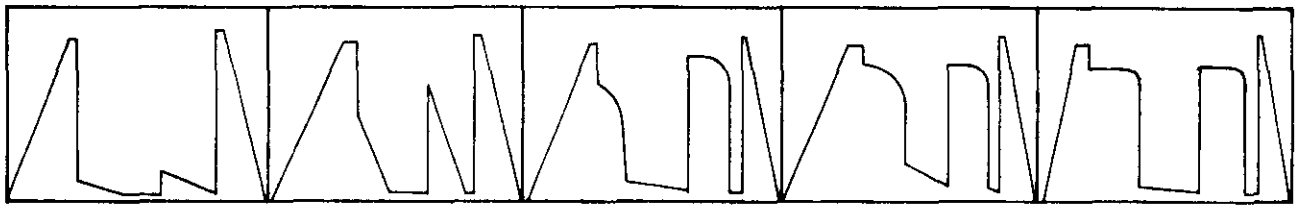


K-K-3 recorders. Read from left to right.

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

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

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



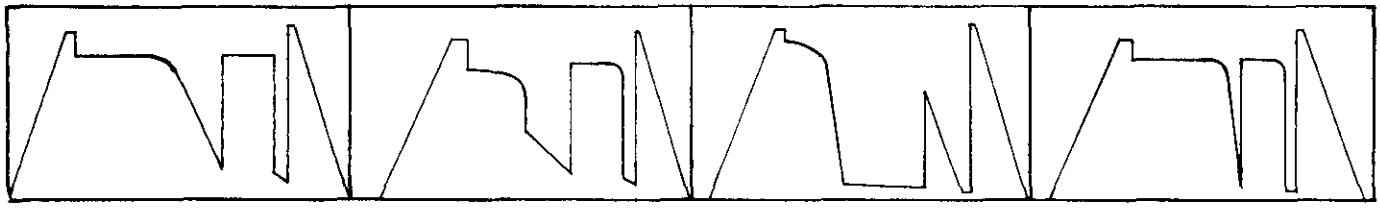
Very low permeability. Usually only mud recovered from interval tested. Virtually no permeability.

Slightly higher permeability. Again usually mud recovered.

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

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

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



Excellent permeability where final flow final shut-in pressure.

High permeability where ISIP and FSIP are within 10 psi.

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

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

LYNES UNITED SERVICES LTD.

WELL NAME - MOBIL BELOT HILLS

LOCATION - M-63

DST NUMBER - 7

INTERVAL TESTED - 0 TO 0

RECORDER NO. - 6614

DEPTH - 0

INITIAL SHUT IN PRESSURE

TIME(MIN) Φ	$\frac{T + \Phi}{\Phi}$	PSIG
0	0.0000	101
5	1.8000	1150
10	1.4000	1193
15	1.2667	1195
20	1.2000	1200
25	1.1600	1202
30	1.1333	1206
35	1.1143	1209

EXTRAPOLATION OF INITIAL SHUT-IN = 1222.09

LYNES UNITED SERVICES LTD.

WELL NAME - MOBIL BELOT HILLS

LOCATION - M-63

DST NUMBER - 7

INTERVAL TESTED - 0 TO 0

RECORDER NO. - 6614

DEPTH - 0

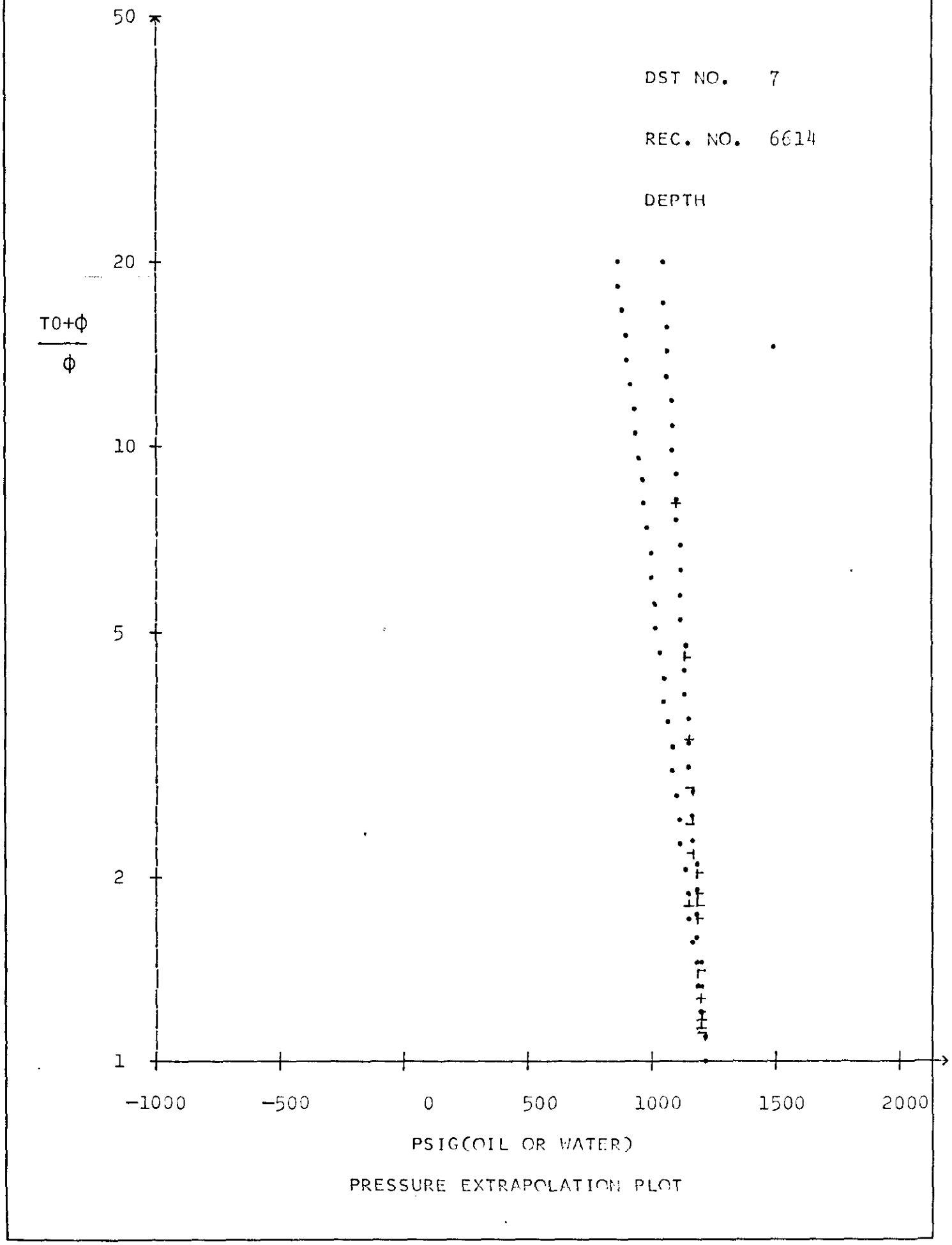
SECOND SHUT IN PRESSURE

TIME(MIN) Φ	$\frac{T + \Phi}{\Phi}$	PSIG
0	0.0000	411
9	8.1111	1105
18	4.5556	1135
27	3.3704	1150
36	2.7778	1160
45	2.4222	1165
54	2.1852	1173
63	2.0159	1178
72	1.8889	1181
81	1.7901	1184
90	1.7111	1187

EQU. FITTED LINE IS LOG((TO+Φ)/Φ)= -0.00777 PSIG + 9.45656

EXTRAPOLATION OF SECOND SHUT-IN = 1217.02 M= 128.70

LYNES UNITED SERVICES LTD.



LYNES UNITED SERVICES LTD.

TEST DATA						GENERAL INFORMATION			
Test No.	7		Lynes Test	7		Company	Mobil Oil Canada Ltd.		
Formation	Tight Hole		T.D.		Ft.	Address			
Interval Tested	tight hole	Ft. to	tight hole.		Ft.				
Feet of Net Pay Tested	50				Ft.				
Type of Test	Inflatable Straddle								
Cushion			Amount		Ft.	Well Name	Mobil Belot Hills		
Started in Hole at	6:30	Hrs.	Tool Open at	9:26	Hrs.	Well Number	M-63		
Pre-Flow	4	Mins.	Initial Shut-in	35	Mins.	K.B. Elevation		Sub-Sea Elevation	
2nd Flow		Mins.	Second Shut-in		Mins.	Area	NWT	Province	NWT
Final Flow	60	Mins.	Final Shut-in	90	Mins.	Company Rep.	K. Baxter		
Remarks:						Tester	D. Baillie		
						Contractor	Nabors	Rig No.	8
						Ticket No.	3798	Date	April 6/72
Blow:	Fair air blow on preflow.					Service Reports To:			
	Fair to weak air blow throughout						7 - above address		
	the final flow.								

GAS BLOW MEASUREMENTS			
Measured with	no gas to surface.		
Time	Surface Choke	Reading Inches	Cubic Feet/Day

MUD AND HOLE DATA					
Mud Type	salt and water and gel				
Weight	9.2	Viscosity	32	Water Loss	
Filter Cake	2/32"	Bottom Hole Temperature			
Drill Pipe Size	3 1/2" IF			Weight	13.3
Drill Collars	4 3/4"	I.D.	2"	Feet Run	491.75
Main Hole or Casing Size	6 1/4"				
Rathole or Liner Size				No. of Feet	
Bottom Hole Choke Size	1"				
Surface Choke Size					
Packer Rubber Size	5 5/8"				

REMARKS

Shut-in pressures suggest average permeability within the interval tested.

RECOVERY	
TOTAL FLUID RECOVERED	900 Ft. Consisting of:
900 Ft. of	formation fluid.
Ft. of	
Ft. of	
Ft. of	
Test was/was not Reverse Circulated	
Oil Recovery A.P.I.	Water Specific Gravity
Salinity	

PRESSURE READINGS				
	Inside ___ Outside X	Inside ___ Outside X	Inside ___ Outside X	Inside ___ Outside ___
	Recorder No. 6614	Recorder No. 4647	Recorder No. 5731	Recorder No.
	Capacity 2900	Capacity 3000	Capacity 75-254	Capacity
	Depth tight	Depth tight	Depth tight	Depth
NUMBER KEY:				
1 - INITIAL HYDROSTATIC	1622	1630		
2 - PRE-FLOW	101	102	malfunctioned	
3 - INITIAL SHUT-IN	1209	1221		
4a - 2nd INITIAL FLOW				
4b - 2nd FINAL FLOW				
4c - 2nd SHUT-IN				
5 - 3rd INITIAL FLOW	151	142		
6 - FINAL FLOW	412	433		
7 - FINAL SHUT-IN	1187	1197		
8 - FINAL HYDROSTATIC	1579	1583		

Company: Mobil Oil Canada Ltd.

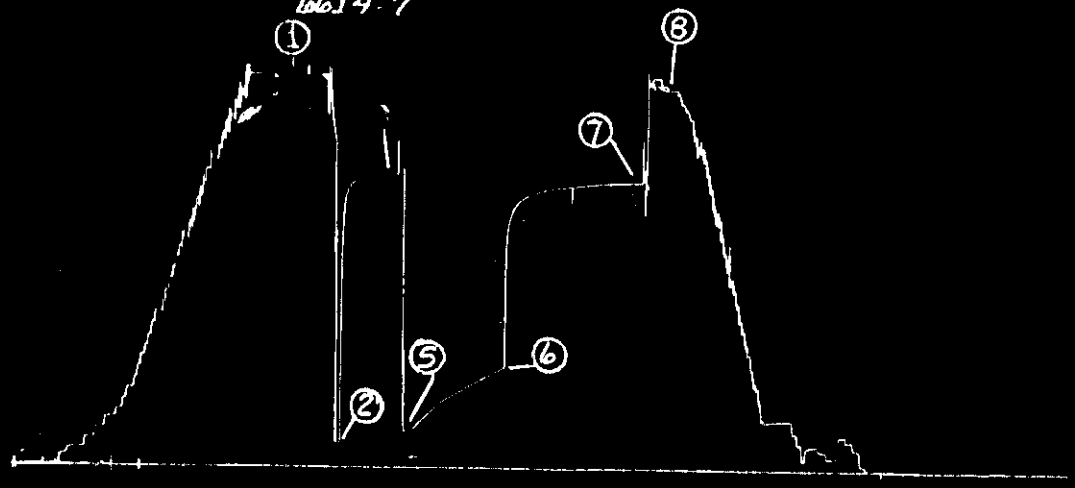
Well Name and Description: Mobil Belot Hills M-63

Test No.: #7

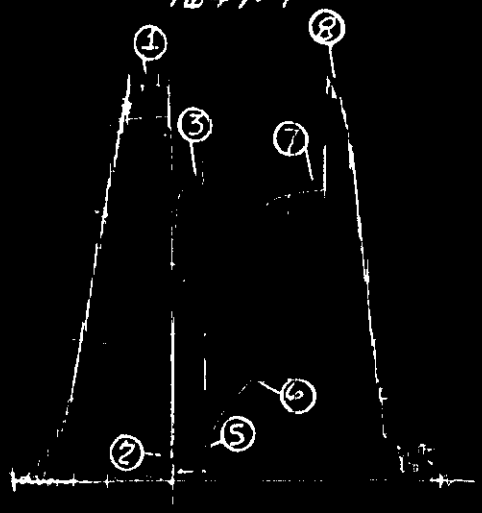
Date of Test: April 6/72

MOBIL BELOT HILLS M63

6614-7



4647-7



5731-7 TEMP

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

WATER ANALYSIS Lab No. C72-4713

Received: April 14,1972 Reported: April 19, 1972 Well: Location: Mobil Balot Hills M-63-N.W.T.

Operator: MOBIL OIL CANADA, LTD. Field or Area: Balot Hills

Elev.: K.B. 1515' Grd. 1500' Zone/Formation: Cambrian (Mount Clarke) Sample Interval: 3450' - 3500'

Method of Production: D.S.T. 7 Sampled from: LUS No. 8 Bottom Hole Sampler Sampled by: Lynes United Services Ltd. Date April 6,1972

OTHER PERTINENT DATA

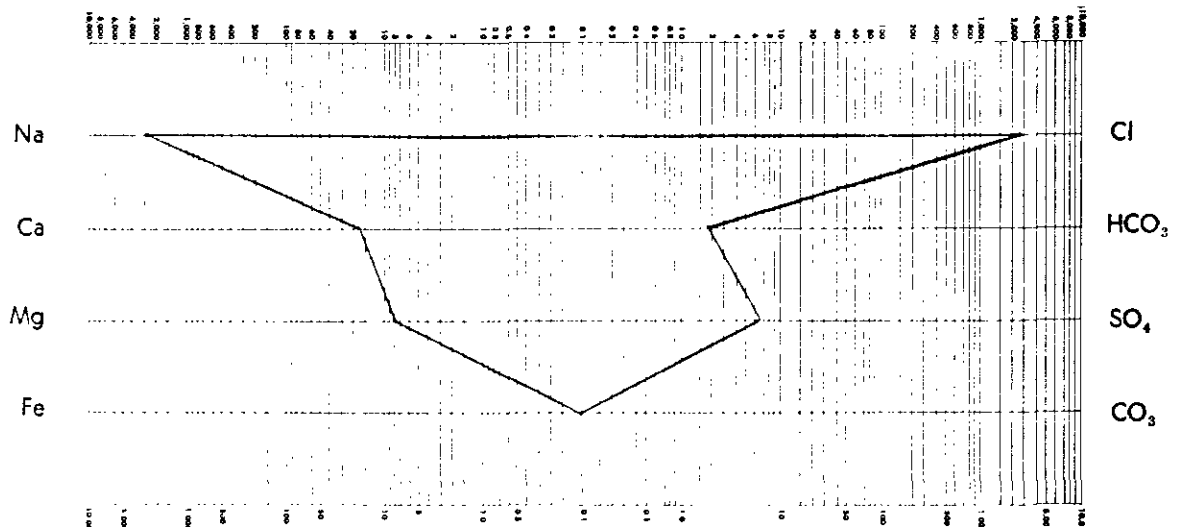
(Signed)

	Na & K		Ca	Mg					SO_4	Cl			CO_3	HCO_3		
Mg./L	65,755		330	97					316	102,000				110		
Meq./L	2860.33		16.47	7.97					6.57	2876.40				1.80		
Meq. %	49.58		0.29	0.13					0.11	49.86				0.03		

Total Solids Mg/L: By Evaporation 171,830 Fe Nil Specific Gravity 1.113 @60°F Observed pH 8.1 @ 74°F

Calculated 168,608 After Ignition 165,080 H_2S Nil Refractive Index 1.3594 @25°C Resistivity 0.060 ohm meters @ 68°F

Pattern Unit Meq./L



Remarks and Conclusions

Analysis determined on pale yellow filtrate recovered from water containing a thin layer of sediment. Organic matter detected in evaporated total dissolved solids.

			VERTICAL DEPTH				COURSE COORDINATES				TOTAL COORDINATES			PAGE 1
STATION NUMBER	MEASURED DEPTH	DRIFT ANGLE	COURSE	TOTAL	COURSE DEVIATION	DEVIATION DIRECTION	NORTH	SOUTH	EAST	WEST	NORTH	SOUTH	EAST	WEST
1	600	3.2		600.000										
2	700	3.0	99.863	699.863	5.234	240		2.617		4.533		2.617		4.533
3	800	4.0	99.756	799.619	6.976	130		4.484	5.344			7.101	.811	
4	900	5.0	99.619	899.238	8.716	155		7.899	3.684			15.000	4.495	
5	1000	6.3	99.396	998.634	10.973	190		10.806		1.905		25.806	2.590	
6	1100	6.0	99.452	1098.086	10.453	295	4.418			9.474		21.388		6.884
7	1200	5.3	99.572	1197.658	9.237	290	3.159			8.680		18.229		15.564
8	1300	4.8	99.649	1297.307	8.368	275	.729			8.336		17.500		23.900
9	1400	4.8	99.649	1396.956	8.368	340	7.863			2.862		9.637		26.762
10	1500	3.9	99.768	1496.724	6.802	15	6.570		1.760			3.067		25.002
11	1600	3.5	99.813	1596.537	6.105	330	5.287			3.052	2.220			28.054
12	1700	2.2	99.926	1696.463	3.839	65	1.622		3.479		3.842			24.575
13	1800	.1	100.000	1796.463	.175	350	.172			.030	4.014			24.605
14	1900	1.4	99.970	1896.433	2.443	315	1.727			1.727	5.741			26.332
15	2000	.7	99.993	1996.426	1.222	135		.864	.864		4.877			25.468
16	2100	1.8	99.951	2096.377	3.141	335	2.847			1.327	7.724			26.795
17	2200	1.4	99.970	2196.347	2.443	330	2.116			1.221	9.840			28.016
18	2300	.6	99.995	2296.342	1.047	55	.601		.858		10.441			27.158
19	2400	1.4	99.970	2396.312	2.443	55	1.401		2.001		11.842			25.157
20	2500	2.8	99.881	2496.193	4.885	110		1.671	4.590		10.171			20.567
21	2600	2.8	99.881	2596.074	4.885	230		3.140		3.742	7.031			24.309
22	2700	3.2	99.844	2695.918	5.582	15	5.392		1.445		12.423			22.864
23	2800	4.0	99.756	2795.674	6.976	100		1.211	6.870		11.212			15.994
24	2900	2.8	99.881	2895.555	4.885	125		2.802	4.002		8.410			11.992
25	3000	1.2	99.978	2995.533	2.094	50	1.346		1.604		9.756			10.388
26	3100	3.8	99.780	3095.313	6.627	280	1.151			6.526	10.907			16.914
27	3200	4.6	99.678	3194.991	8.020	135		5.671	5.671		5.236			11.243
28	3300	3.8	99.780	3294.771	6.627	245		2.801		6.006	2.435			17.249
29	3400	4.3	99.719	3394.490	7.498	155		6.795	3.169			4.360		14.080
30	3500	5.6	99.523	3494.013	9.758	220		7.475		6.272		11.835		20.352
31	3600	5.6	99.523	3593.536	9.758	315	6.900			6.900		4.935		27.252
32	3700	5.6	99.523	3693.059	9.758	225		6.900		6.900		11.835		34.152
33	3800	5.4	99.556	3792.615	9.411	175		9.375	.820			21.210		33.332
34	3900	8.0	99.027	3891.642	13.917	240		6.959		12.052		28.169		45.384
35	4000	13.0	97.437	3989.079	22.495	225		15.906		15.906		44.075		61.290
36	4100	17.0	95.630	4084.709	29.237	205		26.498		12.356		70.573		73.646
37	4200	18.0	95.106	4179.815	30.902	255		7.998		29.849		78.571		103.495

NET MEASURED DEPTH 4200 NET ACTUAL DEPTH 4179.815 HOLE BOTTOM POSITION SOUTH 78.571 WEST 103.495

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

WATER ANALYSIS

Lab No. C72-4714

Received: Apr.14,1972 Reported: April 19,1972

Well: Location: Mobil Balot Hills M-63-N.W.T.

Operator: MOBIL OIL CANADA, LTD.

Field or Area: Balot Hills

Elev.: K.B. 1515' Grd. 1500' Zone/Formation: Mount Clark (Cambrian Sand)

Sample Interval: 3187' - 4211'

Method of Production: D.S.T. 6

Sampled from: Bottom Hole Sampler

Sampled by: B.J. Service Ltd. Date: April 5,1972

OTHER PERTINENT DATA Recovery: 2100' mud.

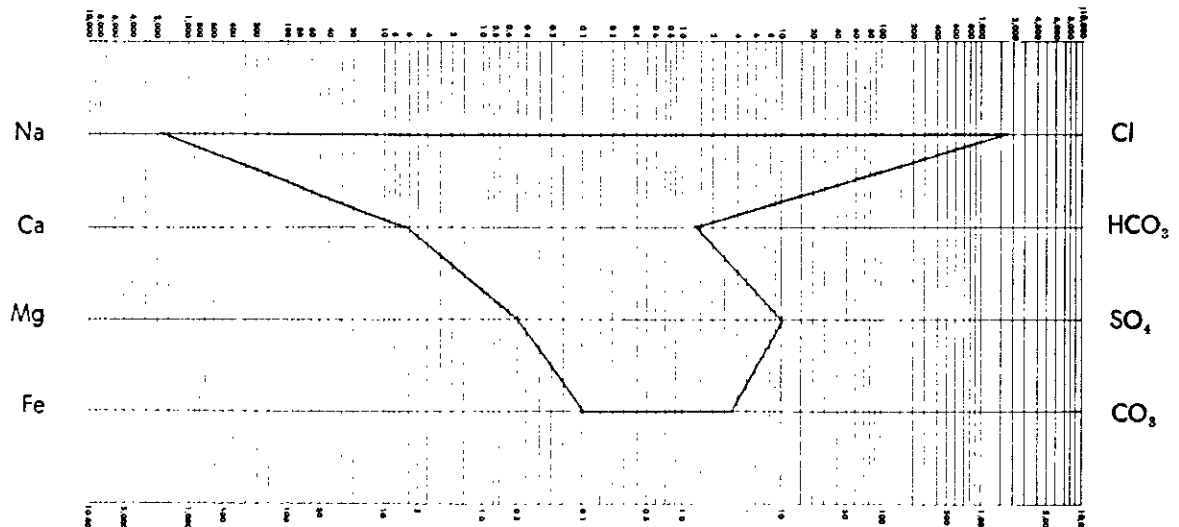
(Signed)

	Na & K		Ca	Mg					SO_4	Cl			CO_3	HCO_3		
Mg./L	40,846		126	6					517	62,700			99	85		
Meq./L	1776.80		6.29	0.49					10.75	1768.14			3.30	1.39		
Meq. %	49.81		0.18	0.01					0.30	49.57			0.09	0.04		

Total Solids Mg./L: By Evaporation 109,270 Fe Nil Specific Gravity 1.075 @60°F Observed pH 9.4 @ 74°F

Calculated 104,379 After Ignition 103,380 H_2S Nil Refractive Index 1.3502 @25°C Resistivity 0.080 ohm meters @ 68°F

Pattern Unit Meq./L



Remarks and Conclusions

Analysis determined on yellow filtrate from water containing approximately 60% sediment. Much organic matter detected in evaporated total dissolved solids.

GEOCHEM

/lq all
Mobil Belot Hills M-63 3400 4300 180 .25

HOLE #	FORMATION	SAMPLE NO.	TOC	L C	S1+S2	TMAX	S1	S2	S3	HI	O
BELOT	HILLS M-63 R	3460F	.17	.44	.80	363	.35	.45	.11	264	64
BELOT	HILLS M-63	3460	.17	.67	1.56	357	1.05	.51	.28	300	164
BELOT	HILLS M-63 R	3480	.31	.49	1.02	380	.50	.52	.22	167	70
BELOT	HILLS M-63	3480	.31	.69	2.16	359	1.49	.67	.77	216	248
BELOT	HILLS M-63 R	3500	.16	.71	.14	374	.10	.04	.19	25	118
BELOT	HILLS M-63	3500	.16	.62	.52	313	.32	.20	.49	125	306
BELOT	HILLS M-63 R	3540	.10	.00	.24	574	.00	.24	.08	240	80
BELOT	HILLS M-63	3540	.10	1.00	.02	243	.02	.00	.08	0	80
BELOT	HILLS M-63 R	3580	.02	.50	.04	438	.02	.02	.03	100	150
BELOT	HILLS M-63	3580	.02	1.00	.04	253	.04	.00	.00	0	0
BELOT	HILLS M-63 R	3630	.01	1.00	.03	192	.03	.00	.04	0	400
BELOT	HILLS M-63	3630	.01	1.00	.08	248	.08	.00	.00	0	0
BELOT	HILLS M-63 R	3680	.01	1.00	.02	206	.02	.00	.04	0	400
BELOT	HILLS M-63	3680	.01	.76	.21	276	.16	.05	.18	5001	800
BELOT	HILLS M-63 R	3720	.03	.67	.03	286	.02	.01	.06	33	200
BELOT	HILLS M-63	3720	.03	.80	.05	253	.04	.01	.01	33	33
BELOT	HILLS M-63 R	3770	.03	.75	.04	353	.03	.01	.11	33	366
BELOT	HILLS M-63	3770	.03	.70	.10	250	.07	.03	.09	100	300
BELOT	HILLS M-63 R	3820	.09	.29	.07	345	.02	.05	.32	55	355
BELOT	HILLS M-63	3820	.09	1.00	.05	277	.05	.00	.07	0	77
BELOT	HILLS M-63	3850	99.99	.11	.09	472	.01	.08	.00	0	0
BELOT	HILLS M-63 R	3860	.17	.35	.23	503	.08	.15	.08	88	47
BELOT	HILLS M-63	3860	.17	.36	.80	493	.29	.51	.00	300	0
BELOT	HILLS M-63 R	3890	.70	.24	.98	483	.24	.74	.06	105	8
BELOT	HILLS M-63	3890	.70	.38	1.96	461	.74	1.22	.01	174	1
BELOT	HILLS M-63 R	3950	.12	.00	.07	582	.00	.07	.07	58	58
BELOT	HILLS M-63	3950	.12	.11	.09	472	.01	.08	.00	66	0
BELOT	HILLS M-63 R	3990	.16	.06	.31	573	.02	.29	.08	181	50
BELOT	HILLS M-63	3990	.16	.19	.37	449	.07	.30	.00	187	0
BELOT	HILLS M-63 R	4030	.12	.00	.06	582	.00	.06	.07	50	58
BELOT	HILLS M-63	4030	.12	.27	.22	380	.06	.16	.00	133	0
BELOT	HILLS M-63 R	4070	.78	.16	.80	583	.13	.67	.09	85	11
BELOT	HILLS M-63	4070	.78	.22	1.31	467	.29	1.02	.00	130	0
BELOT	HILLS M-63 R	4120	1.29	.24	1.66	494	.40	1.26	.09	97	6
BELOT	HILLS M-63	4120	1.29	.37	2.94	466	1.09	1.85	.02	143	1
BELOT	HILLS M-63 R	4160	1.11	.22	1.25	495	.27	.98	.07	88	6
BELOT	HILLS M-63	4160	1.11	.32	2.16	468	.69	1.47	.00	132	0
BELOT	HILLS M-63 R	4190	.39	.16	.38	580	.06	.32	.08	82	20
BELOT	HILLS M-63	4190	.39	.26	.87	452	.23	.64	.15	164	38
BELOT	HILLS M-63 R	4210	.82	.24	2.60	337	.62	1.98	.12	241	14
BELOT	HILLS M-63	4210	.82	.48	2.55	427	1.23	1.32	.32	160	39

Re: Mobil Belot Hills N-63 (67-10-126-15) 67° 02' 45" 126° 27' 45"

In accordance with Section (1) of the addendum to the Memorandum of Agrement "Respecting Storage and Security of Drill Cuttings and Cores from Wells Drilled in Canada's North", signed October 29, 1970, we are forwarding the Well History Report and following enclosures for the above noted well:

Drill Stem Test Nos. **1 to 7 inclusive**
Lab Report Nos. C72-4713 & C72-4714 - Water Analyses;

Logs -
Gamma Ray Induction
Sidewall Neutron GR, runs one and two
Compensated Densilog
Laterolog
BHC Accoustilog
Directional Survey
4-Arm Diplog and Computed Diplog - run one
4-Arm Diplog and Computed Diplog - run two