W E L L H I S T O R Y R E P O R T

for

SOCONY MOBIL WESTERN MINERALS

ELLEN YT C-24

Latitude 66° 33' 8.87" N

Longitude 137° 50' 8.15" W

Socony Mobil Oil of Canada, Ltd.
Dawson Creek District

G. A. Atkinson
DISTRICT GEOLOGIST

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ATTACHMENTS

LAB REPORT ## 25611 (Water Analysis Report)

Schlumberger Logs (IES, BHCSGR-C, ML-C, CDM)

D.S.T. Technical Reports (1-9)

WELL HISTORY REPORT

SECTION I - Summary of Well Data

(a)	Well Name and Number:	Socony Mobil Western Minerals Ellen YT C-24
(b)	Permittee:	Western Minerals Ltd.
(c)	Operator:	Socony Mobil Oil of Canada, Ltd.
(d)	Location:	Unit C Section 24 Grid 66° 40' N; 137° 45' W Latitude 66° 33' 08.87" N Longitude 137° 50' 08.15" W
(f)	Permit:	3332
(g)	Drilling Contractor:	Socony Mobil Oil of Canada, Ltd. Rig #4
(h)	Drilling Authority:	144; December 8, 1964
(i)	Classification:	New Field Wildcat
(j)	Elevation:	Ground 1345 K.B. 1360
(k)	Spudded:	December 25, 1964
(l)	Completed Drilling:	March 30, 1965
(m)	Total Depth:	7134 (Schlumberger) 7132 (Driller)

(n) Well Status: Abandoned

(o) Rig Released: April 3, 1965

(p) Hole Size:

24" to 101

17 1/2" to 780

12 1/4" to 823

8 5/8" to 7131 (Driller's Depth)

(q) Casing:

18"	47.4#	Spiral Weld	New to	101' K.B.
13 3/8"	54.5#	J-55 Seamless	New to	780' K.B.

SECTION II - Geological Summary

(a) Formation Tops

	Sample Tops Depth	Sample Tops Elevation	E-log Tops Depth	E-log Tops Elevation
Cretaceous:				
Cody Creek fm.	Surface	+1345		
Blackie mbr.	2370	-1010	2366	-1006
New Shale			2683	-1323
U. Devonian:			4822	-3462

(b) Core Intervals

Core Number	From	To	Rec.	Formation
1	3065	3074	3.5'	Cretaceous (New Fm.)
2	4212	4221	9.0'	Cretaceous (New Fm.)
3	4852	4867	14.5'	Upper Devonian
4	5225	5235	10'	Upper Devonian
5	5451	5460	9'	Upper Devonian
6	5460	5469	9'	Upper Devonian
7	5983	5992	8.5'	Upper Devonian
8	6261	6276	15'	Upper Devonian
9	6646	6656	10'	Upper Devonian
10	7120	7129	8.5	

(c) Core Description

Diamond Core #1	Lower Cretaceous New Formation
	3065 - 3074' Recovered 3.5'
Coring times:	16, 18, 18, 20, 20, 24, 21, 28, 25 minutes per foot.
3065 - 3074'	
3.5'	Shale medium to dark grey, buff tinged where siltier, non-calcareous, fissile but blocky where siltier in thinly alternating bands, carbonaceous partings.
Diamond Core #2	Cretaceous New formation
	4212 - 4221' Recovered 9.0'
Coring times:	22, 30, 24, 24, 28, 28, 28, 23, 33 minutes per foot.
4212 - 4221'	
9.0'	Shale, medium to dark grey, slightly calcareous, fissile, pyritic. Oblate nodules of sandstone, fine grained, calcareous very slight dip (not more than 5°). Occasional bands are blocky and calcareous. Solitary chert pebbles occur throughout. A vertical fracture occurs in the first one foot, non-mineralized.
Diamond Core #3	Tentative Tuttle
	4852 - 4867' Recovered 14.5'
Coring times:	23, 32, 35, 27, 20, 30, 24, 24, 25, 28, 27, 23, 26, 25, 24 minutes per foot.

4852 - 4867'

14.5'

Thinly interbedded sequence of sandstone and shale. Sandstone, grey and quartzose, very fine to fine grained, quartz and chert grains, angular to subround, well sorted, siliceous, slightly calcitic cement, with intergranular pyrite which forms the cement in small lenses as at 4857.6 and with no visible porosity or oil stain.

The sandstone shows thin parallel bedding, straight and wavy, and topset, foreset and bottomset bedding. It contains coalified and pyritized plant remains as at 4864.9.

The shale is dark grey to black with brown tint. It is fissile and quite waxy as from 4856.2 to 4857.2 and from 4865.6 to 4866. It exhibits slumping from 4856.2 to 4856.8 and from 4866 to 4866.4. Highly polished slickensided surfaces occur throughout. Coalified plant remains occur as at 4864 and 4856.

Non-continuous slickensided vertical fractures occur throughout in places mineralized by calcite. From 4859.1 to 4859.4, clear drusy calcite occurs in an open fracture.

Minor tan grey thin limy zones occur as at 4861.5.

The bedding planes dip at approximately 20° to the horizontal.

The whole core suggests deltaic deposition, most likely delta front.

Diamond Core #4 — Tentative Upper Devonian Imperial

5225 - 5235' Recovered 10'

Coring times: 30, 20, 31, 26, 23, 27, 31, 28, 30, 30 minutes per foot.

5225 - 5235'

10.0'

Thinly interbedded shale and sandstone.

Shale, dark grey to black, fissile, soft, horizontal and vertical slickensiding.

Sandstone, mainly very fine grained to fine grained, grey, angular to subrounded, foreset, topset bedded.

Core shows post-consolidation micro-fracturing and contortion, forming rubbly zones. Fractures are closed, often with calcite infill.

Dips estimated at 20 - 25° at top of core, 10° at base of core.

Some drusy fractures occur in the shale, as between 5228 - 5229' with clear calcite crystals.

Diamond Core #5 — Tentative Upper Devonian Imperial?

5451 - 5460' Recovered 9'

Coring times: 33, 22, 20, 20, 25, 20, 26, 24, 25 minutes per foot.

5451 - 5460'

9.0' Shale with thin sandstone beds.

Shale, dark grey to black, fissile; dip is mainly horizontal, up to a maximum 5 degrees; slickensiding vertical, mainly horizontal with pyrite nodules on slickenside planes; minor pyritized plant fragments; no chert pebbles.

In bottom 1.7 feet of core, shale is slumped, almost overturned with micro-fracturing and faulting at top. Geode cavities with drusy quartz, contain free oil which bleeds from geodes and fractures in slumped shale. Sandstone, grey, somewhat salt and pepper, very fine grained to fine grained, occasional coarser bands, chert and quartz grains, occasional coal pebbles as at 5457.3', slightly calcareous, tight. Current bedding occurs throughout, truncated laminae.

Diamond Core #6 — Tentative Upper Devonian Imperial

5460 - 5469' Recovered 9'

Coring times: 47, 44, 28, 40, 37, 35, 35, 36, 38 minutes per foot.

5460 - 5469'

9.0'

Interbedded sandstone and shale.

Sandstone, light grey, salt and pepper, quartz, chert, fine to coarse grained, medium sorting, subrounded to subangular, scattered coal grains as at 5465.5', cross-bedded, tight.

Shale, medium to dark grey, dense, abundant plant remains, traces pyrite, some slumping, slickensided, generally along bedding planes.

At 5461 feet, 2 inches of porosity, small cavities, lined with crystalline calcite and quartz, oil stained.

Dip varies 0° to 15°. Environment possibly deltaic, close to shore.

Diamond Core #7

Upper Devonian

5983 - 5992' Recovered 8.5'

Coring times:

33, 40, 30, 37, 34, 31, 34, 30, 31 minutes per foot.

5983 - 5992'

8.5'

Shale with interbeds and lenses of sandstone and siltstone. Shale approximately 90% of core. Beds are horizontal.

Shale, grey, slightly silty, contains pyrite nodules, pyritized and carbonized plant remains. Occasional slickensides parallel to bedding planes. Hard and brittle.

Sandstone, grey to brown, very fine grained, sub-rounded to angular, well sorted, silty with slightly calcareous infilling, tight. Grades to a grey to brown siltstone.

Diamond Core #6 — Upper Devonian

6261 - 6276' Recovered 15'

Coring times: 18, 17, 18, 16, 20, 17, 25, 20, 20, 21, 20, 20, 25, 18, 19 minutes per foot.

6261 - 6276'

15'

Sandstone with interbeds and lenses of shale. Minor brown siltstone. Sandstone approximately 85% of core. Dips vary from 0° to 5°.

Shale, dark grey, slightly silty, crumbly to brittle. Slickensided and slumped. Pods of sandstone contained in the shale. Pyritized and carbonized plant fragments as at 6261.5'.

Sandstone, grey to brown, very fine to coarse grained (also has occasional pebble up to 1/2" diameter as at 6271'). Angular to well rounded, poorly sorted, silty, white and black chert granules, pyrite. Scattered bitumen.

Traces of intergranular porosity in scattered bands approximately 2" in diameter at the following depths:

6264', 6272', 6273'. Trace gas was observed bubbling out of these zones for about 1/2 hour after the core was surfaced. These areas also show bleeding oil stain. These areas have almost nil porosity. Oil stain was also noted along several fractures in the core as at 6272.5' and 6263.5'.

Diamond Core #9 — Upper Devonian

6646 - 6656' Recovered 10'

Coring times: 35, 34, 21, 20, 28, 31, 32, 39, 43, 57 minutes per foot.

6646 - 6656'

10'

Sandstone with interbeds and lenses of shale. Sandstone approximately 90% of core. Dips vary from 0° to 10°.

Shale, dark grey, slightly silty, dense. Slickensided and slumped. (graphite has formed in some slickensided zones as at 6651'). Pods of sandstone contained in the shale as at 6651.5'. Carbonized and pyritized plant fragments.

Sandstone, light grey, silty, very fine to coarse grained, angular to well rounded, poorly sorted, slightly calcareous infill, abundant white, black, blue, green, chert pebbles, scattered pyrite.

Occasional plant fragment. Scattered traces bitumen. Has truncated bedding as at 6650.5'.

Traces of bleeding oil stain at 6653'. The sandstone was very tight throughout.

Diamond Core #10 — Upper Devonian

7120 - 7129' Recovered 8.5'

Coring times: 24, 30, 32, 20, 32, 32, 33, 28, 37 minutes per foot.

7120 - 7129'

8.5'

Sandstone with interbeds and lenses of shale. Sandstone approximately 90% of core, light grey to light brown, silty, very fine to coarse grained, angular to well rounded, poorly sorted, slightly calcareous to dolomitic cement, abundant chert granules - mainly white and black, scattered pyrite, tight. Bedding horizontal.

Shale, dark grey, slightly silty, dense to crumbly. Slickensided (white clay material along some slickensided zones as at 7122.5').

Core has split along healed fractures as at 7124' to 7125' and 7128' (dolomite crystals).

Thin 1" thick bands of poor oil stain at 7122', 7123.5' and 7125.5'.

Trace non-effective vuggy porosity in healed fracture at 7127'.

(d) Sample Description

0 - 100'	Sandstone, medium grey, very fine to medium grained, subangular to subrounded, well sorted, minor shale, trace bentonite, minor glauconite.
100 - 200'	No samples.
200 - 280'	Sandstone, very fine to medium grained, medium grey, subangular to subrounded, well sorted, minor shale and siltstone interbeds, dark grey, trace bentonite, trace coal.
280 - 340'	Shale, dark grey to brown, with interbeds of siltstone, dark grey and coal, trace sandstone.
340 - 360'	Sandstone, medium to dark grey, very fine grained, subangular to subrounded, well sorted, minor shale and siltstone, dark grey.
360 - 440'	Shale, dark grey, silty in part with siltstone interbeds and ironstone concretions, trace sandstone, medium grey, very fine grained.
440 - 540'	Shale, dark grey, silty in part with siltstone interbeds, trace sandstone, abundant coal.
540 - 690'	Siltstone, dark grey with interbeds of shale, dark grey, silty in part and sandstone, very fine to fine

grained, salt and pepper, subangular to subrounded, well sorted, abundant coal.

690 - 800' Siltstone, medium grey, shale interbeds, trace sandstone, very fine to fine grained.

800 - 880' No samples.

880 - 940' Siltstone, medium grey with interbeds of shale, medium grey, silty in part and sandstone, white, salt and pepper, very fine to fine grained, subangular, well sorted, glauconitic, and abundant coal.

940 - 1010' Sandstone, grey to brown, very fine coarse grained, subangular to rounded, medium sorting, slightly calcareous, with interbeds of siltstone and coal.

1010 - 1080' Siltstone, dark grey with interbedded sandstone, grey to brown, very fine to medium grained, subangular to subrounded, medium to well sorted, trace shale.

1080 - 1165' Siltstone and shale interbedded, medium grey, trace sand.

1165 - 1230' Sandstone, light grey, very fine grained, subangular to subrounded, well sorted, trace siltstone, tight.

1230 - 1260' Siltstone, dark grey with abundant coal, trace bentonite.

1260 - 1520'	Siltstone and shale, medium grey with minor sandstone, very fine to coarse grained, subangular to rounded, well to poorly sorted, minor coal.
1520 - 1630'	Sandstone, light grey, very fine to coarse grained, subangular to rounded, medium to poorly sorted, fair porosity, minor siltstone and coal.
1630 - 1700'	Siltstone and shale, medium grey with minor sandstone as above, tight and trace coal.
1700 - 1790'	Shale, medium grey, with abundant coal.
1790 - 1840'	Sandstone, light grey, very fine to fine grained, subangular to subrounded, well sorted with interbeds of siltstone and shale.
1840 - 1900'	Shale and siltstone, medium grey, trace sandstone.
1900 - 2040'	Shale as above with minor siltstone and sandstone, abundant coal.
2040 - 2370'	Shale, medium grey, with minor interbeds of siltstone, and sandstone as above.
2370 - 2420'	Sandstone, light grey, very fine grained, subangular to subrounded, well sorted, slightly calcareous and glauconitic, poor porosity, trace oil stain, trace siltstone.

2420 - 2500'	Siltstone and sandstone interbedded as above.
2500 - 2600'	Shale, medium grey with sandstone interbeds, very fine grained, subangular to subrounded, well sorted, slightly pyritic and glauconitic, very poor porosity.
2600 - 2870'	Shale, grey to brown with siltstone interbeds, minor coal, trace sandstone as above.
2870 - 2890'	Sandstone, medium grey, very fine to coarse grained, interbedded with siltstone and shale, trace porosity.
2890 - 3350'	Shale, brown to light grey with minor siltstone.
3350 - 3420'	Siltstone, grey with shale, brown to grey and minor sandstone, very fine to fine grained, subrounded, well sorted, minor chert granules, tight.
3420 - 3520'	Siltstone, grey with abundant interbeds of shale, medium grey, rare bentonitic shale.
3520 - 3570'	Shale and siltstone, grey.
3570 - 3700'	Siltstone and shale, grey, rare sandstone, very fine grained, trace coarse chert grains.
3700 - 3880'	Siltstone, grey, minor shale, minor sandstone, grey, very fine grained, glauconitic, trace pyrite, rare chert pebbles.

3880 - 3950'	Siltstone and sandstone as above, bituminous in part, subangular, medium sorted, rare chert pebbles.
3950 - 4020'	Siltstone and sandstone as above.
4020 - 4080'	Siltstone, grey with shale, brown to grey, fissile, trace bentonite, rare chert pebbles.
4080 - 4200'	Shale, grey, fissile, slightly pyritic, with minor siltstone.
4200 - 4380'	Shale, grey, fissile, rare sandstone stringers, pyritic, rare chert pebbles.
4380 - 4420'	Shale, grey, silty in part, trace pyrite with sandstone stringers, calcareous.
4420 - 4520'	Siltstone, grey, argillaceous, trace pyrite, glauconite, scattered chert pebbles, rare sandstone stringers, with medium to dark grey shale interbeds, local brown limestone concretions.
4520 - 4540'	Siltstone, as above, quartz fragments, chert pebbles with rare medium grained sandstone, trace poor porosity.
4540 - 4760'	Siltstone, dark grey, as above, thin interbeds of grey quartzose siltstone, grading to sandstone, tight, with shale, dark grey to light grey, locally bentonitic.

4760 - 4820'	Shale, brown, grey, micromicaceous, silty, bentonitic, trace pyrite, with thin interbeds siltstone, grey, as above.
4820 - 4920'	Sandstone, white, very fine grained to fine grained, quartzose, chert pebbles, pyrite, slightly silty glauconitic, subangular to subrounded, moderate sorting, tight, locally calcareous, locally grading to coarse grained, tight, with shale, dark grey, silty, fissile, thin coal beds.
4920 - 5080'	Shale, silty, as above, coal beds, with minor sandstone, as above, slightly calcareous, locally slightly bituminous.
5080 - 5150'	Shale, medium to dark grey, black with thin interbeds siltstone, grey.
5150 - 5220'	Shale, silty, as above, locally bentonitic with minor sandstone, very fine grained, tight, as above, trace coal.
5220 - 5300'	Shale, dark grey, black, silty, pyritic, carbonaceous lenses, coal beds, with minor sandstone, grey, very fine grained to fine grained, thin bedded, tight.
5300 - 5350'	Shale, dark grey, silty, scattered pyrite, chert locally bentonitic, trace coal, minor sandstone, grey, very fine grained, subangular to subrounded, well sorted, tight.

5350 - 5430'	Shale, dark grey, buff, slight to moderately silty, as above, minor coal, bentonite with sandstone, as above.
5430 - 5470'	Interbedded sandstone, grading to siltstone, buff, buff-grey, as above, minor sandstone, very fine grained to coarse grained, chert, interbeds siltstone, grey and shale, silty as above; calcite stringers, pyrite, chert, local live oil stain along fracture planes, small cavities.
5470 - 5550'	Shale, dark grey, with sandstone, light grey, salt and pepper, fine to coarse grained, subangular to subrounded, medium sorting, tight; scattered pyrite, chert.
5550 - 5560'	Shale, buff-grey, silty, trace oil-stained cavities, as above, with minor sandstone, as above, with chert fragments.
5560 - 5740'	Shale, grey, silty with minor sandstone, grey, very fine grained to medium grained, tight, siltstone, brown; scattered chert, pyrite.
5740 - 5890'	Interbedded shale, grey, silty, sandstone, grey, very fine to medium grained, silty, argillaceous, slightly calcareous infill, siltstone, brown; pyrite, angular chert.
5890 - 5980'	Shale as above, very minor sandstone and siltstone as above.

5980 - 6191'	Shale with minor sandstone as above.
6191 - 6376'	Sandstone, brown, very fine to coarse grained, white and black chert pebbles, slightly calcareous, tight, with variable amounts of siltstone and shale, increasing to 20 - 50% over bottom 70 feet.
6376 - 6470'	Shale, grey, silty, grading to siltstone, grey, with minor sandstone, brown, very fine to coarse grained, white and black chert pebbles, slightly calcareous, tight.
6470 - 6629'	Sandstone, grey to brown, very fine to coarse grained, angular to rounded, poorly sorted, white and black chert pebbles, slightly calcareous, tight.
6629 - 6670'	Sandstone, grey to brown, silty, very fine to coarse grained, angular to well rounded, poorly sorted, abundant varicoloured chert granules, slightly calcareous, scattered pyrite, tight, interbedded with minor shale, grey.
6670 - 6730'	Sandstone as above with minor shale as above.
6730 - 6800'	Sandstone, interbedded with shale, silty.
6800 - 6884'	Shale as above 70%, with interbedded sandstone as above 30%.

6884 - 7134'	Sandstone, grey to brown, silty, very fine to medium grained, minor coarse grained, angular to subrounded, poor sorting, abundant varicoloured chert granules, scattered pyrite, dolomite crystals, tight, interbedded with minor shale, silty in part, grey.

SECTION III - Engineering Summary

(a) Report of Drill Stem Tests (See Attachments)

No.	Date	From	To	Formation
1	1-22-65	2369	2449MR	Blackie Member (Cretaceous)
2	1-24-65	2374	2404MR	Blackie Member (Cretaceous)
3	1-30-65	4519	4671	Mississippian
4	2- 2-65	4826	4900	Upper Devonian
5	2- 4-65	4948	5021	Upper Devonian
6	2-13-65	5410	5469MR	Upper Devonian
7	2-15-65	5410	5501MR	Upper Devonian
8	2-16-65	5410	5501	Upper Devonian
9	3- 1-65	6190	6276	Upper Devonian

(b) Casing Record

Casing Size (inches)	Weight	Amount	Set At	Cement	Method
18"	47.4#	4 Jnts.	101 ft.	145 sax + 400# $CaCl_2$	Displacement
13 3/8"	54.5#	24 Jnts.	780 ft.	650 sax + 3% $CaCl_2$	Displacement

SOCONY MOBIL OIL OF CANADA, LTD.

BIT RECORD

Well SMWM ELLEN YT C-24 Date Spudded Dec 25, 1964

Area EAGLE PLAIN, YUKON Date Completed APRIL 4, 1965

DATE	BIT No.	BIT SIZE	TYPE	SERIAL No.	JET SIZE	DEPTH FROM	DEPTH TO	FOOTAGE	TIME HRS.	ACCUMULATED DRILLING TIME	ACCUMULATED REAMING TIME	CONDITION	REMARKS
JAN 13	1	8 3/8	YHW	293277	CON	823	1584	761	13 1/4	13 1/4		2-1-1	AIR 15M 90 200
17	2	"	S4	695209	"	1584	1894	310	12 3/4	26		2-2-1	30M - 120 RPM 600
18	3	"	"	811149	"	1894	2320	426	16 1/4	42 1/4		3-4-0	" " 900
19	4	"	"	745085	"	2320	2440	120	9 1/2	51 3/4		3-2-1	" " "
20	5	"	"	745039	"	2440	2498	58	4 3/4	56 1/2		4-2-0	" " "
20	6	"	YM	N94929	"	2498	2670	172	10 3/4	67 1/4		2-3-1	35 120 "
21	7	"	YSI	EN4447	"	2670	3065	395	17 1/2	84 3/4		1-2-1	30 " "
22	0-1	6 1/8	KOBEL	7025	—	3065	3074	9	3 1/2	—		GOOD	8 70 525
24	8	8 3/8	OWC	87890	CON	3074	3080	5	1/2	85 1/4		1-1-1	30 120 900
25	9	"	YT14		"	3080	3532	452	16 3/4	102		2-3-1	25 " 950
26	10	"	"		"	3532	3852	320	14	116		2 3 1	30 115 1100
27	11	"	OSC1G		"	3852	4212	360	18 1/4	134 1/4			25 110 "
28	0-2	6 1/8	KOBEL	7025	RR	4212	4221	9	4 1/2	—			8 76 600
29	12	8 3/8	OSC1G		CON	4221	4524	303	16 1/4	150 1/2			25 110 1100
30	13	"	OSC		"	4524	4671	147	11	161 1/2		2-2-1	" " "
31	14	"	YSI	EN4446	"	4671	4825	154	14	175 1/2			" 80 1200
FEB 1	15	"	"	EN4448	"	4825	4852	27	2 1/2	178		2-1-1	30 " "
1	0-3	6 1/8	KOBEL	3328	—	4852	4867	15	6 1/2	—			10 70 575
2	16	8 3/8	OWC	37611	CON	4867	4900	33	11	189		4-2-0	30 80 1200
4	17	"	W7	17724	"	4900	5021	121	16 3/4	205 3/4		2-2-1	40 80 "
6	18	"	YSI		"	5021	5226	205	19	224 3/4			" 70 "
7	0-4	6 1/8	KOBEL	3329	RR	5226	5235	9	5	—			10 78 550
9	19	8 3/8	YS	E14479	CON	5235	5320	85	14 1/4	239 1/2		2-3-1	45 80 900
10	20	"	S4	810940	"	5320	5412	92	15	254 1/2		4 2 0	" " "
11	21	"	H7	43859	"	5412	5451	39	12 1/2	267		3 2 1	" 40 —
12	0-5	6 1/8	KOBEL	3329	RR	5451	5460	9	4	—			10 75 600
13	0-6	"	"	"	RR	5460	5469	9	6	—			" " 850

CONT'D

SOCONY MOBIL OIL OF CANADA, LTD.

BIT RECORD CONT'D

Well SMWM ELLEN YT C-24 Date Spudded DEC 25, 1964

Area EAGLE PLAIN, YUKON Date Completed MAY 4, 1965

DATE	BIT No.	BIT SIZE	TYPE	SERIAL No.	JET SIZE	DEPTH FROM	DEPTH TO	FOOTAGE	TIME HRS.	ACCUMULATED DRILLING TIME	ACCUMULATED REAMING TIME	CONDITION	REMARKS
FEB 15	22	8 5/8	YHR	E 04480	CON	5469	5501	31	13	280		3-2-1	45m 90 RPM
" 16	23	"	YHW2R	E 04206	"	5501	5516	15	9 1/2	289 1/2		4-2-0	50 45 "
" 18	24	"	RRGIJ	48629	?	5516	5561	45	21 1/2	311		4-3-2	" 35 "
" 20	25	"	EGIJ	2265	?	5561	55 72	11	11 3/4	322 3/4		1-1-1	" " "
" 21	26	"	YHR2	25538	CON	5572	5682	110	12 1/2	395		4-4-1	" 110 "
" 22	27	"	H7	812825	"	5682	5755	73	13	348		3-2-1	" 100 135
" 23	28	"	M4L	742762	"	5755	5861	106	17 1/2	365 1/2		4-3-1	" 56 140
" 24	29	"	YS	E 15108	"	5861	5983	122	18 1/2	384		4-3-1	45 65 137
" 25	0-7	6 1/8	RCBEL ◇	3329 (RR)		5983	5992	9	4 1/2	-		GOOD	10 75 80
" 26	30	8 5/8	YTIA	E 15102	"	5992	6107	115	16 3/4	400 3/4		2-1-1	40 65 140
" 27	31	"	"	E 29142	"	6107	6220	113	20	420 3/4		3-2-1	" " "
" 28	32	"	OWV	440502	"	6220	6261	41	11	431 3/4		4-3-1	45 " "
" 28	0-8	6 1/8	RCBEL ◇	19680	"	6261	6276	15	5	436 3/4		?	10 75 85
MAR 1	33	8 5/8	W7	68857	"	6261	6276	15	(REAM)			2-1-1	20 70 140
" 2	34	"	YHW2	74050	"	6276	6340	64	17	453 3/4		2-2-1	50 65 "
" 3	35	"	OWV	68260	"	6340	6384	44	12 3/4	466 1/2		4-3-1	35 110 "
" 4	36	"	"	66456	"	6384	6459	75	15 1/2	482		3-2-1	50 88 "
" 5	37	"	"	43832	"	6459	6480	21	6	488		4-2-1	" 70 "
" 6	38	"	YHW	29222	"	6480	6526	46	16 1/2	504 1/2		4-3-1	" " "
" 7	39	"	W7	7683	"	6526	6544	18	8 1/4	512 3/4		4-2-1	" " "
" 8	40	"	RGTKJ	24877	?	6544	6544	-	-	"		—	STUCK
" 12	41	"	YTIA	012833	CON	"	"	-	—	"		—	CLEAN & FISH
" 14	42	"	YHW4	E 74475	"	6544	6586	42	13 3/4	526 1/2		4-2-1	50 70 100
" 15	43	"	"	E 74473	"	6586	6616	30	11 1/2	538		4-2-1	" " "
" 16	44	"	RGTKJ	24877	?	6616	6645	29	19 1/2	557 1/2		4-2-1	" 39 137
" 18	09	6 1/8	RCBEL ◇	3329 (RR)		6645	6654	9	5	-		GOOD	12 69 1200
" 19	45	8 5/8	YHW5	E 74478	CON	6654	6712	58	23 1/4	580 3/4		4-3-1	52 70 137

CONT'D

SOCONY MOBIL OIL OF CANADA, LTD.

BIT RECORD

Well: SMWM ELLEN YT C-24 Date Spudded:

Area: EAGLE PLAIN, YUKON Date Completed:

DATE	BIT No.	BIT SIZE	TYPE	SERIAL No.	JET SIZE	DEPTH FROM	DEPTH TO	FOOTAGE	TIME HRS.	ACCUMULATED DRILLING TIME	ACCUMULATED REAMING TIME	CONDITION	REMARKS
Mar 20	46	8¾	YHWG	E74409	Cond	6712	6750	38	18	598¾		4-2-1	52-70-137
✓ 21	47	✓	H7	748571	✓	6750	6782	37	17¼	616		4-2-1	✓ ✓ ✓
22	48	✓	M4L	74795	✓	6782	6829	42	17½	633½		4-2-0	✓ ✓ ✓
23	49	✓	W7	18205	✓	6829	6840	11	5½	639		4-3-1	✓ ✓ ✓
24	50	✓	YHWG	E74588	✓	6840	6890	50	15	654		3-2-1	50 ✓ ✓
25	51	✓	✓	E15594	✓	6890	6948	57	17	671		3-2-1	✓ ✓ ✓
26	52	✓	✓	E74477	✓	6948	6979	31	10	681		3-2-1	✓ 65 ✓
27	53	✓	✓	E15589	✓	6979	7016	37	14	695		3-2-1	45 ✓ ✓
28	54	✓	W7R	5116	✓	7016	7055	39	15¾	710¾		3-2-1	✓ ✓ ✓
29	55	✓	✓	5094	✓	7055	7102	47	17¾	728½		3-2-1	✓ ✓ ✓
30	56		✓	69052	✓	7102	7120	18	10¼	738¾		2-2-1	✓ ✓ 13
30	D10	6¾	KOBEL D	3329	(RR)	7120	7129	9	5	743¾		GOOD	
31	57	8½	OWC	59014	✓	7120	7129	9	2¼	[illegible]	REAM RAT HOLE		
April 1	58	✓	✓	✓	(RR)		CLEAN		OUT	TRIP		TO LOG.	

DISTRIBUTION: WHITE - TO CALGARY OFFICE; YELLOW - TO FIELD OFFICE; BLUE - FOR FILE

(d) Mud Report

Magcogel	895 bags
Q-Broxin	151 bags
Peltex	101 bags
Caustic	42 bags
Cellex (regular)	30 bags
Carbonox	37 bags
Soltex	295 bags
Dextrid	1 bag
Tide	4 x 5 lb. boxes
Quick Vis	5 gals.
Diesel Fuel	60 bbls.
B. Free	30 gals.

(e) Deviation Record

DEPTH	DEGREES
30	1/4°
60	3/8°
90	1/2°
135	1/4°
165	1/4°
197	1/4°
228	1/4°
249	1/8°
280	1/4°
311	1/8°
342	1/4°
374	1/2°
446	1/4°
477	1/4°
509	1/4°
560	1/4°
602	1/4°
633	1/4°
664	1/4°
695	1/8°
726	1/4°
748	1/4°
779	1/8°
978	1°
1228	3/4°
1546	1/2°
1879	?
2200	1 3/4°
2320	1 3/4°
2440	2°
2670	1°
3060	1 1/2°
3532	1°
3852	1 1/2°
4212	1 1/2°
4500	?
4524	1 1/4°
4825	1 1/2°
4900	1°
5021	1 1/2°
5225	?
5320	3 1/2°
5501	?
5861	3 1/4°
6107	3°
6330	?
6544	?
6645	MR
6712	3 1/2°
7000	3°
7120	3°

(f) Abandonment Plugs

April 2, 1965 Plug #1 4870 to 4785 with 57 saxs plug 3% $CaCl_2$.

April 3, 1965 Plug #2 2420 to 2305 with 75 saxs plus 3% $CaCl_2$.

April 3, 1965 Plug #3 830 to 705 with 90 saxs plus 3% $CaCl_2$.

April 3, 1965 Plug #4 at surface with 5 saxs, weld on plate.

(g) Lost Circulation Zones

None.

(h) Report of Blowouts

None.

SECTION IV - Logs (See Attachments)

Run No.	Date	Type of Log	From	To
1	3-31-65	IES	7132	778
1	3-31-65	BHCSGR-C	7131	778
1	3-31-65	ML-C	7132	778
1	4- 1-65	CDM	7132	4000
1	4- 1-65	SRS	7120	500

SECTION V - Analysis

(a) Core Analysis

None.

(b) Water Analysis (See Appendix)

E 25611 - Water from blooie line at 1540 feet, 426 ppm Cl.

(c) Gas Analysis

None.

(d) Oil Analysis

None.

SECTION VI - Completion Summary

None.

CGL-6

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

Edmonton — Fort St. John — Calgary

WATER ANALYSIS REPORT: Lab. No. E25611 Received: June 18, 1965 Reported: June 23, 1965

Well: S.M.W.M. Ellen Y.T. C-24 Operator: Socony Mobil Oil Of Canada Limited

Field or Area: Eagle Plain, Yukon Location: 66°33' 08.87"N. 137°50' 08.15"W. Elev.: K.B. _____ Grd. _____

Zone and Formation: Cretaceous Cody Ck. Sample Interval: 1540'

Method of Production: _____ Well Production or Recovery at Sampling Time: _____

Sampled from: _____ Sampled by: _____ Date: January 13, 1965

OTHER PERTINENT DATA Blooie line sample.

(Signed)

Milligrams Per Liter

Na & K	Ca	Mg		SO4	Cl	CO3	HCO3	OH	
853	6	3		26	426	74	1380		

Milligram Equivalents

37.09	0.30	0.25		0.54	12.01	2.46	22.63		

Iron Nil Hydrogen Sulfide Nil

Total Solids in Milligrams Per Liter:

By evaporation 2,356

After ignition 1,892

Calculated 2,068

Physical Properties:

Resistivity 3.29 ohm meters @ 68°F.

Observed pH 8.7

Specific Gravity 1.003

Remarks and Conclusions: Nothing on file from this area with which to correlate the analysis.