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

for

SOCONY MOBIL WESTERN MINERALS

WEST PARKIN YT D-51

Latitude 66° 10' 8.5" N

Longitude 137° 26' 4.5" W

Socony Mobil Oil of Canada, Ltd.
Dawson Creek District

G. A. Atkinson
DISTRICT GEOLOGIST

INDEX

WELL HISTROY REPORT

SECTION I - Summary of Well Data

(a)	Well Name and Number:	Socony Mobil Western Minerals West Parkin YT D-51
(b)	Permittee:	Western Minerals Ltd.
(c)	Operator:	Socony Mobil Oil of Canada, Ltd.
(d)	Location:	Unit D Section 51 Grid N 66° 20'; W 137° 15' Latitude 66° 10' 8.5" N Longitude 137° 26' 4.5" W
(f)	Permit:	335
(g)	Drilling Contractor:	Parker Drilling Company of Canada, Ltd. Rig #10 (Rotary)
(h)	Drilling Authority:	151; February 5, 1965
(i)	Classification:	New Field Wildcat
(j)	Elevation:	Ground 1544 (at shot point 3642) K.B. 1560.40
(k)	Spudded:	February 24, 1965
(l)	Completed Drilling:	March 28, 1965
(m)	Total Depth:	Driller 4950 Schlumberger 4947.5

(n)	Well Status:	Dry and Abandoned
(o)	Rig Released:	April 3, 1965
(p)	Hole Size:	12 1/4" to 708 8 5/8" to 4950 (T.D.)
(q)	Casing	9 5/8" - 36# J-55 New to 680' 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	+1544		
Blackie Sand mbr.	2234	- 674	2220	- 660
New formation	2553	- 993	2549	- 989
Permo-Pennsylvanian:				
Alder Formation	3730	-2170	3725	-2165
Chance Sand	3885	-2325	3884	-2324

(b) Cored Intervals

Core Number	From	To	Rec.	Formation
1	4120	4129.5	9.5	Alder

(c) Core Description

Diamond Core #1	Permo-Pennsylvanian Alder
	4120 - 4129.5' Recovered 9.5'
Coring times:	31, 25, 19, 18, 19, 20, 20, 9 minutes per foot.
4120 - 4129.5'	
9.5'	Siltstone, very dark brown, 30% limy, 20% shaly, very slightly pyritic, calcite crystals, no apparent porosity, no fractures, oil saturated, poor hydrocarbon cut but with strong petroliferous odour. The bedding is horizontal. Fossiliferous throughout with shell bands scattered throughout. Pelecypods, crinoids, spicules and possible brachiopods, found in the bedding planes retaining original mother of pearl lustre. Good pecten family pelecypods occur at 4122.9'.

(d) Sample Description

0 - 2255'	Shale, grey to black, micromicaceous, silty in part, interbedded with siltstone, grey to brown and sandstone, very fine to fine grained, subangular to subrounded, salt and pepper, abundant coal in part.
2255 - 2290'	Sandstone, light to medium grey, salt and pepper, very fine to fine grained, porosity 10 - 12%.
2290 - 2553'	Sandstone, fine grained to very fine grained, salt and pepper, grading to siltstone in part, porosity tight to 6%.
2553 - 2910'	Shale, black, with minor siltstone and sandstone.
2910 - 2950'	Siltstone, medium grey, sandy.
2950 - 3010'	Sandstone, medium grey, very fine to fine grained, tight.
3010 - 3550'	Shale, medium to dark grey, silty.
3550 - 3660'	Silstone, medium grey, glauconitic, minor chert pebbles.
3660 - 3700'	Siltstone, medium grey, glauconitic.
3700 - 3718'	Shale, brown, micromicaceous, glauconitic.

3718 - 3730'	Limestone and sandstone conglomerate, with chert pebbles, average porosity 5%, mainly bitumen infill, petroliferous odour, good scattered oil stain.
3730 - 3760'	Limestone, light grey to buff brown, dense, rare crinoids.
3760 - 3800'	Limestone, light grey to buff brown, dense, poor oil stain, tight.
3800 - 3885'	Limestone, as above, sandy in part.
3885 - 3940'	Sandstone, light grey, quartz and chert grains, very fine to medium grained, calcite cemented, tight.
3940 - 3970'	Limestone, light to dark grey, very silty.
3970 - 4000'	Siltstone, very limy with interbedded limestone bands.
4000 - 4020'	Shale, medium to dark brown, limy.
4020 - 4108'	Shale as above, grading into very limy siltstone.
4108 - 4147'	Siltstone, very limy, tight.
4147 - 4187'	Limestone, tan to brown, silty, calcite in fractures, crinoids, slightly bituminous, poor hydrocarbon cut.

4187 - 4200'	Limestone, tan to brown, silty, calcite in fractures, crinoidal in part, slightly bituminous, poor hydrocarbon cut.
4200 - 4290'	Limestone as above, becoming very cherty and slightly sandy, scattered bitumen blebs.
4290 - 4340'	Limestone as above.
4340 - 4350'	Limestone as above, grading to crinoidal and cherty.
4350 - 4370'	Sandstone, light grey, quartz and chert grains and chert pebbles, trace porosity.
4370 - 4390'	Dolomite, light tan, with chert pebbles.
4390 - 4420'	Sandstone, very fine to coarse grained, 5% porosity with oil stain.
4420 - 4426'	Sandstone as above, tight.
4426 - 4456'	Dolomite, dense, cherty.
4456 - 4513'	Limestone, light grey to tan, trace sandy at top, very cherty and slightly argillaceous as base.
4513 - 4634'	Limestone very cherty and slightly argillaceous.
4634 - 4720'	Limestone, light tan grey to dark brownish grey, silty throughout with interbedded chert, slightly sandy in part.

4720 - 4730'	Sandstone, light grey, salt and pepper, rounded to subrounded, poor sorting, clear quartz, coloured chert, bituminous and limy cement. 50% sample porous, estimated maximum porosity 12%.
4730 - 4740'	Dolomite, light buff brown, with white quartz silt, and interbedded chert.
4740 - 4950'	Limestone, light buff brown to dark grey, with white quartz silt, much interbedded chert and brown argillaceous material, poor hydrocarbon cut throughout with petroliferous odour.

SECTION III - Engineering Summary

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

No.	Date	From	To	Formation
1	3-21-65	4385	4456	Alder
2	3-30-65	4342	4376	Alder
3	3-31-65	3960	3730	Cretaceous - Alder MR
4	3-31-65	3640	3726	Cretaceous MR
5	4- 1-65	2250	2356	Blackie Sand (Cretaceous)

(b) Casing Record

Casing Size (inches)	Weight	Amount	Set At	Cement	Method
9 5/8"	36#	22 Jnts.	680' K.B.	275 saxs + 3% $CaCl_2$	Displacement

60 saxs + 3% $CaCl_2$ Inserted from the top, outside casing.

SOCONY MOBIL OIL OF CANADA, LTD.

BIT RECORD

Well SOCONY MOBIL WESTERN MINERALS WEST PARKIN YT D-51 Date Spudded FEB 24, 1965

Area EAGLE PLAINS, YUKON Date Completed APRIL 3, 1965

DATE	BIT No.	BIT SIZE	TYPE	SERIAL No.	JET SIZE	DEPTH FROM	DEPTH TO	FOOT AGE	TIME HRS.	ACCUMULATED DRILLING TIME	ACCUMULATED REAMING TIME	CONDITION	REMARKS wt. rpm psi
2	1	8 5/8	OWV	64368 RR	CON.	712	725	13	1/2	1/2		1-2-1	20-95-500
3	2	"	DT	85155	"	725	1395	670	19	19 1/2		1-2-0	" " "
4	3	"	OSC	42088	"	1395	2098	703	22 3/4	42 1/4		2-3-1	25-60-575
5	4	"	OWV	43967	"	2098	2413	315	13 3/4	56		3-4-0	40-70-750
6	5	"	W7	71346	"	2413	2650	237	13 1/2	69 1/2		2-4-0	" " "
7	6	"	OSC	42091	"	2650	3007	357	13 1/2	83		1-3-1	45-65-700
8	7	"	"	42090	"	3007	3372	365	22 1/4	105 1/4		1-4-1	" " 800
9	8	"	"	42093	"	3372	3611	239	19	124 1/4		?	40 " "
10	9	"	"	42085	"	3611	3731	120	9	133 1/4		4-2-0	45 " 900
11	10	"	MHWG	E74480	"	3731	3763	32	11 1/2	144 3/4		3-3-1	" " 1000
12	11	"	RG7XJ	57089	3-20/64	3763	4001	238	60 1/2	205 1/4		1-1-1	50 42-600
15	12	"	W7R	36847	CON	4001	4120	119	24 3/4	230		?	" -65- "
15	◊1	6 1/8	CHRIST.	EC1505	—	4120	4129	9	3 1/4			?	9 62 650
16	13	8 5/8	W7R	36051	CON	4129	4170	41	11 1/4	241 1/4	9	2-3-1	52 65-1000
17	14	"	RG7XJ	69471	3-20/64	4170	4314	144	35 1/2	276 3/4		4-2-0	" 45 700
19	15	"	"	57089 RR	3-20/64	4314	4352	34	9	285 3/4		2-2-1	" " "
20	16	"	YCG	E93155	3-20/64	4352	4426	74	17 1/4	303		4-3-0	52 38 800
20	17	"	RG1J	74594	3-20/64	4426	4455	29	8 1/2	311 1/2		1-1-1	" " "
21	18	"	H8J	752095	3-20/64	4455	4539	84	19 1/4	330 3/4		4-3-1	50 44 700
23	19	"	RG1J	66429	3-22/64	4539	4622	83	27 1/4	358		?	" " "
24	20	"	"	38384	3-22/64	4622	4700	78	25	383		3-4-1	" " "
26	21	"	RG7XJ	17727	3-20/64	4700	4822	122	29 1/2	402 1/2		4-2-1	54 30 900
27	22	"	H8-J	752751	3-22/64	4822	4883	61	15	417 1/2		4-2-1	50 38 600
28	23	"	YCG	E35279	3-11/16	4883	4950	67	16	433 1/2		?	54 40 "

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

(d) Mud Report

Magcogel	398 bags
Soltex	173 bags
Peltex	149 bags
Caustic	17 bags
Q-Broxin	3 bags
Soda Ash	7 bags
Ethyl Hexanol	22 gals
Acrysol A-3	8½ gals
Tannex	5 bags

(e) Deviation Record

Depth	Degrees
0 - 296	3 surveys, no recording
296	1/4°
354	1/2°
410	1/2°
468	1/2°
530	1/2°
700	1/2°
1000	1/2°
1300	3/4°
1310	1°
1920	1 3/8°
2075	1 3/4°
2250	2°
2413	2°
2650	2 1/2°
2938	2 1/4°
3150	2 1/2°
3372	2 3/4°
3555	3°
3611	3 1/8°
3763	N/R
4001	2 3/4°
4120	2 3/4°
4539	1 1/4°
4822	7/8°

(f) Abandonment Plugs

Plug #1	4310 - 4460	120 sax plus 3% $CaCl_2$
Plug #2	3640 - 3768	57 sax plus 3% $CaCl_2$
Plug #3	2170 - 2294	57 sax plus 3% $CaCl_2$
Plug #4	606 - 730	59 sax plus 3% $CaCl_2$

Plug at surface 5 sax, weld on plate

(g) Lost Circulation Zones

None

(h) Report of Blowouts

None

SECTION IV - Logs (See Attachment)

Run No.	Date	Type of Log	From	To
1	3-30-65	IES	4943	677
1	3-28-65	BSL GR-C	4936	678
1	3-29-65	ML-C	4937	677
1	3-30-65	SRS	4930	500
1	3-28-65	CDM	4941	3400

SECTION V - Analysis

(a) Core Analysis

None

(b) Water Analysis (See Appendix)

Lab No.	From	To	Source	Remarks
E 25610-1	4385	4456	D.S.T. #1	Filtrate water
E 25610-2	4342	4376	D.S.T. #2	Filtrate water
E 25610-3	2250	2356	D.S.T. #5	Filtrate Water

(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. E25610-1 Received: June 18, 1965 Reported: June 22, 1965

Well: S.M.W.M. W. Parkin Y.T. D-51 Operator: Socony Mobil Oil Of Canada Limited

Field or Area: Eagle Plain, Yukon Location: 66° 10' 08.5" N. 137° 26' 04.5" W Elev.: K.B. _____ Grd. _____

Zone and Formation: Permo-Pennsylvanian Alder Sample Interval: 4385' - 4456'

Method of Production: D.S.T. #1 Well Production or Recovery at Sampling Time: _____

Sampled from: 1000' above packer Sampled by: _____ Date: March 21, 1965

OTHER PERTINENT DATA

(Signed)

Milligrams Per Liter

Na & K	Ca	Mg		SO4	Cl	CO3	HCO3	OH	
5820	33	29		486	3470	Trace	9100		

Milligram Equivalents

253.17	1.65	2.38		10.11	97.85		149.24		

Iron Present Hydrogen Sulfide Nil

Total Solids in Milligrams Per Liter:

By evaporation 17,690

After ignition 10,690

Calculated 14,320

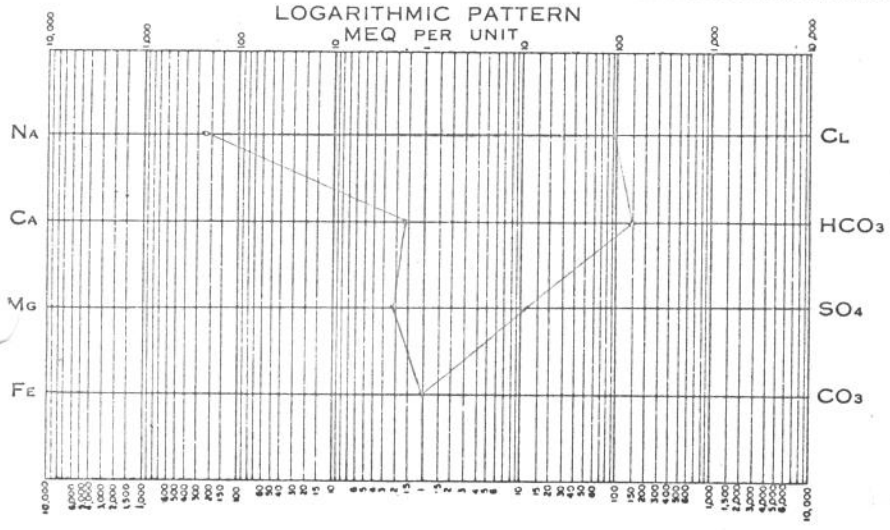
Physical Properties:

Resistivity 0.587 ohm meters @ 68°F.

Observed pH 8.3

Specific Gravity 1.012

Remarks and Conclusions: The total solids contained a large amount of organic matter. The sample has the characteristics of a filtrate water. There may be some formation water present.



CGL-6

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

Edmonton — Fort St. John — Calgary

WATER ANALYSIS REPORT: Lab. No. E25610-2 Received: June 18, 1965 Reported: June 22, 1965

Well: S.M.W.M. W. Parkin Y.T. D-51 Operator: Socony Mobil Oil Of Canada Limited

Field or Area: Eagle Plain, Yukon Location: 66° 10' 08.5" N. 137° 26' 04.5" W. Elev.: K.B. _____ Grd. _____

Zone and Formation: Permo-Pennsylvanian Alder Sample Interval: 4342' - 4376'

Method of Production: D.S.T. #2 Well Production or Recovery at Sampling Time: _____

Sampled from: 100' above packer Sampled by: _____ Date: March 30, 1965

OTHER PERTINENT DATA _____

(Signed)

Milligrams Per Liter

Na & K	Ca	Mg		SO_4	Cl	CO_3	HCO_3	OH	
3405	26	16		782	2860	640	6900		

Milligram Equivalents

148.12	1.30	1.32		16.27	80.65	21.31	113.16		

Iron Present Hydrogen Sulfide Nil

Total Solids in Milligrams Per Liter:

By evaporation 15,730

After ignition 9,900

Calculated 11,127

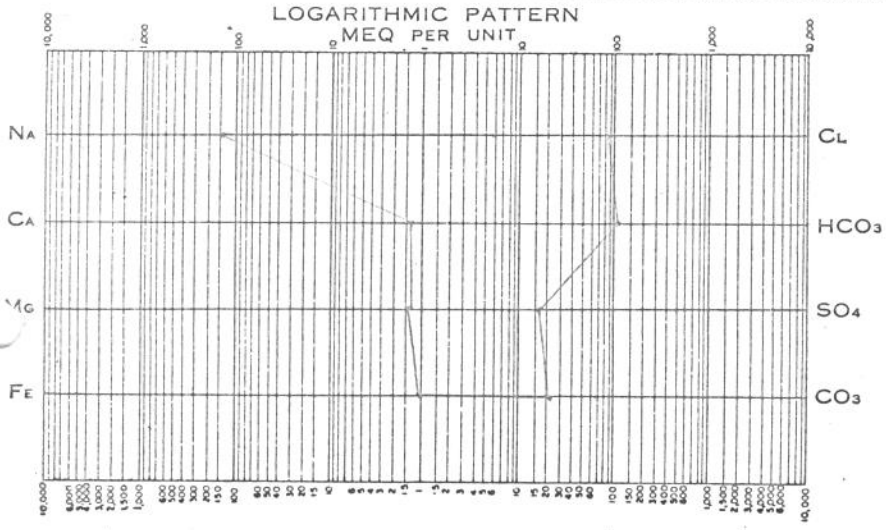
Physical Properties:

Resistivity 0.639 ohm meters @ 68°F.

Observed pH 8.6

Specific Gravity 1.010

Remarks and Conclusions: The total solids contained a large amount of organic matter. The sample has the characteristics of a filtrate water. There may be a slight amount of formation water present.



CGL-6

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

Edmonton — Fort St. John — Calgary

WATER ANALYSIS REPORT: Lab. No. E25610-3 Received: June 18,1965 Reported: June 23,1965

Well: S.M.W.M. W. Parkin Y.T. D-51 Operator: Socony Mobil Oil Of Canada Limited

Field or Area: Eagle Plain, Yukon Location: 66° 10' 08.5" N. 137° 26' 04.5" W. Elev.: K.B. _____ Grd. _____

Zone and Formation: Cretaceous Blackie Sample Interval: 2250' - 2356'

Method of Production: D.S.T. #5 Well Production or Recovery at Sampling Time: _____

Sampled from: 100' above packer Sampled by: _____ Date: April 1, 1965

OTHER PERTINENT DATA

(Signed)

Milligrams Per Liter

Na & K	Ca	Mg		SO_4	Cl	CO_3	HCO_3	OH	
1655	48	16		2053	95	74	1700		

Milligram Equivalents

72.00	2.40	1.32		42.70	2.68	2.46	27.88		

Iron Present Hydrogen Sulfide Nil

Total Solids in Milligrams Per Liter:

By evaporation 8,030

After ignition 4,440

Calculated 4,778

Physical Properties:

Resistivity 1.56 ohm meters @ 68°F.

Observed pH 8.7

Specific Gravity 1.006

Remarks and Conclusions: The total solids contained a very large amount of organic matter. The sample has the characteristics of a filtrate water.