

WELL HISTORY REPORT

for

SOCONY MOBIL WESTERN MINERALS

WHITESTONE YT N-26

November 17, 1964

WELL HISTORY REPORT

For

SECORV MOBIL WESZEN MINERALS

WINDSTONE WT N-26

Latitude $65^{\circ} 09' 59''$ N

Longitude $138^{\circ} 20' 00''$ W

Secorv Mobil Oil of Canada, Ltd.
Euvasa Creek District

November 18, 1964

G. A. Atkinson
DISTRICT GEOLOGIST

INDEX

SECTION I - Summary of Well Data

(a) Well Name and Number	Page	1
(b) Permittee	"	1
(c) Operator	"	1
(d) Location	"	1
(e) Permit	"	1
(f) Drilling Contractor	"	1
(g) Drilling Authority	"	1
(h) Classification	"	1
(i) Elevations	"	1
(j) Spudded	"	1
(k) Classification	"	1
(l) Total Depth Plugged Back Total Depth	"	1
(m) Well Status	"	2
(n) Rig Released	"	2
(o) Hole Size	"	2
(p) Casing	"	2

SECTION II - Geological Summary

(a) Formation Tops	"	3
(b) Cored Intervals	"	3
(c) Core Descriptions	"	4
(d) Sample Descriptions	"	15

SECTION III - Engineering Summary

(a) Reports of Drill Stem Tests	Page 30
(b) Casing Record	" 30
(c) Bit Record	" 31
(d) Mud Report	" 35
(e) Deviation Records	" 36
(f) Abandonment Plugs	" 37
(g) Lost Circulation	" 37
(h) Report of Blowouts	" 37

SECTION IV - Logs " 38

SECTION V - Analysis

(a) Core Analysis	" 39
(b) Water Analysis	" 39
(c) Gas Analysis	" 39
(d) Oil Analysis	" 39

SECTION VI - Completion Summary " 40

WELL HISTORY REPORT

SECTION I - Summary of Well Data

- (a) Well Name and Number: Secny Mobil Western Minerals
Unit 26-26
- (b) Permittee: Western Minerals Ltd.
- (c) Operator: Secny Mobil Oil of Canada, Ltd.
- (d) Location: Unit 26 Section 26
Grid N 66° 10'; W 130° 15'
Latitude 66° 05' 50"
Longitude 130° 20'
- (e) Permit: 3560
- (f) Drilling Contractor: Secny Mobil Oil of Canada, Ltd.
Rig # National-55 Diesel Rotary
- (h) Drilling Authority: 139; April 1, 1964
- (i) Classification: New Field Well
- (j) Elevations: Ground 2233
R.D. 2235
- (k) Spudded: April 7, 1964
- (l) Completed Drilling: July 27, 1964
- (m) Total Depth: Driller 6095 R.D.; Schlumberger 6091 R.D.

- (n) Well Status: Dry and Abandoned
- (o) Rig Released: August 6, 1964
- (p) Hole Size: 24" to 80'
17 1/4" to 1017'
8 5/8" to 8085'
- (q) Casing: 18" 0.250 Spiral Weld to 80' K.B.
13 3/8" 54.5 lbs./ft. J-55 Seamless to
1010' K.B.

SECTION II - Geological Summary

(a) Formation Tops	Sample Tops		E-log Tops	
	Depth	Elevation	Depth	Elevation
Cretaceous:				
Cody Creek				
Blacklo Sand	2692	- 407	2695	- 410
Shale			3304	-1019
Penns-Penn:				
Aldor	6342	-4057	6335	-4050
Mississippian:				
Parkin Creek	7929	-5644	7929	-5644

(b) Core Intervals

Core Number	From	To	Rec.	Formation
1	3512	3521	4.5'	Cretaceous
2	5073	5082	9'	Cretaceous
3	6348	6355	4.4'	Aldor
4	6355	6363	5.0'	Aldor
5	6363	6370	3.4'	Aldor
6	6400	6409	6.3'	Aldor
7	6523	6525	0.7'	Aldor
8	7090	7093	2.2'	Aldor
9	7477	7486	9'	Aldor
10	7877	7878	0.4'	Aldor
11	7912	7912.5	0.2'	Aldor
12	7912.5	7943	30.5'	Aldor

(c) Core Description

Diamond Core #1

Cretaceous Shale

3512 - 3521' Cut 9' Recovered 4.5' (badly broken)

Coring times

8, 6, 5, 6, 9, 12, 8, 11, 16, minutes per foot.

3512 - 3521'

1.5'

Shale, black, micaceous, with very black shiny carbonaceous flakes throughout, shale is slightly fissile and fairly soft.

1'

Shale as above grades to siltstone, very dark grey, argillaceous, micaceous, blocky with small carbonaceous flakes, shows good cross-bedding 2.5' from top of core.

1.5'

Interbedded shale and siltstone, as above.

.5'

Siltstone, dark grey, finely banded, micaceous with black shale lenses or beds.

Diamond Core #2

Cretaceous Shale

5073 - 5082' Recovered 9'

Coring times

6, 7, 8, 7, 7, 8, 7, 6, 8, minutes per foot.

5073 - 5082'

9'

Shale, dark grey, micaceous, blocky, very slightly dolomitic, minor black carbonaceous flakes, dense, contains numerous rounded, meandering streaks and minute nodules of disseminated pyrite throughout. Minor silt particles are angular, milky white to light green. 5080 - 5081' shale

becomes darker grey to black with little or no pyrite.

Diamond Core 1/3

Ferns-Penn Alder formation

6348 - 6355' Recovered 4.4'

Coring times

112, 165, 215, 240, 152, 168, 195 minutes per foot.

6348 - 6355'

0.3'

Green-white siliceous spicules or spines in ground mass of tan grey crypto-crystalline silica. Areas of black carbonaceous material. Both disseminated through the silica and collected around the spicules or spines.

0.3'

Tan, weathered chert with very fine grained floating quartz grains, and spicules or spines as above.

Carbonaceous or shaly streaky bands to base.

0.6'

Spicular chert as before, carbonaceous at top.

Bracediated, with tan chert filling cracks.

1.4'

Banded tan and tan-grey chert with scattered spicules. Shaly and carbonaceous bands, thin, wavy.

0.6'

Chert, grey to dark grey, amorphous to crypto-crystalline with floating sand grains, angular. Two grey to black shale breaks up to one and a half inches thick with polished surfaces.

1.0' Chert, dark gray to tan, amorphous to crypto-crystalline with much carbonaceous and shale streaking. Thin shale breaks with polished surfaces. Structure resembling amphipora 0.2' from top.
The dip of the shale bands is roughly 20°.

Diamond Core #4

Porco-Penn Alder formation

6355 - 6362' Recovered 5.0'

Coring times

120, 150, 270, 184, 276, 260, 347, minutes per foot.

6355 - 6362'

0.1'

Chert, dark gray, banded.

4.0'

Silicified fragmental limestone gray with fossil porosity, mainly spicular. Wavy banded, rubbly fracturing, shale bands, gas bleeding. Carbonaceous speckling throughout.

0.9'

More dolomitic with sand grains, fossil fragments, carbonaceous speckling. Rubbly appearance and gas bleeding. No visible porosity.

Diamond Core #5

Porco-Penn Alder formation

6363 - 6370' Recovered 3.4'

Coring times

75, 163, 202, 185, 134, 121, 178, minutes per foot.

6363 - 6370'

3.4'

Silicified fragmental limestone, gray to dark gray with spicules and corall fragments.

Disseminated argillaceous and carbonaceous material with irregular pyritic nodules and silty to very fine grained subround sandy bands. Thin stylolites and shale bands. Occasional gypsum.

The whole appears to be rubbly fractured, possibly before silicification. Porosity in solution of fossils and fracture throughout. Gas bleeding.

The shale bands indicate that the dip may be between 10 - 20°.

Diamond Core #6

Penns-Fort Alder formation

6400 - 6409' Recovered 6.8'

Coring times

185, 90, 65, 90, 65, 40, 45, 100, 90, minutes per foot.

6400 - 6409'

6.8'

Siltstone, buff, very calcareous and argillaceous.

No porosity.

Solitary fossils (orbiculoidea) and pyritic worm casts occur throughout.

Thin isolated structures are calcite and pyrite filled.

No bedding or dip is evident.

Diamond Core #7

Penns-Penn Alder Formation

6523 - 6525' Recovered 0.7'

Coring time

60, 66, minutes per foot.

6523 - 6525'

0.7'

Siltstone, buff, calcareous with many orinoid fragments and calcite-filled cracks. A thin shale band at the top has a dip of approximately 15°.

There is no visible porosity save for occasional small cracks in the cracks with pyrobitumen.

Diamond Core #8

Penns-Penn Alder Formation

7020 - 7023' Recovered 2.8'

Coring time

75, 81, 85, minutes per foot.

7020.0 - 7022.8'

2.8'

Shale, dark brown to black, slightly calcareous, moderately calcareous at bottom, silty, predominantly quartz silt, lesser micaceous material, scattered subround to subangular quartz and chert grains, up to fine grained grade size; calcite patches, sulphurous odour, vertical fractures, minor horizontal, all calcite filled, massive, fissile.

7020.0 - 7021.4' (1.4')

Vertical fracture, up to 1/20" wide, calcite filled, abundant minor calcite filled fractures, very

minor brecciation? and calcite infill and/or replacement at 7091.1'.

7091.5 - 7092.2' (.7')

Several crinoid horizons, ossicles of coarse buff calcite, bedding approximately horizontal, as defined by crinoid bands.

6 - 8 fragments of new shale jammed up core barrel, shale, brown to black, silty, non-calcareous, micromicaceous, pyritic, fissile, quartz grains savings or picked up while running in with core barrel. Only 3 feet cut since blocks of New shale above the Alder core jammed the core barrel.

Diamond Core #9

Fermo-Fenn Alder Formation

7477 - 7485' Recovered 9'

Coring times

82, 33, 68, 70, 67, 45, 40, 36, 39, minutes per foot.

7477 - 7479'

2'

Shale, black, slightly calcareous and carbonaceous, micromicaceous, fissile, soft, scattered quartz silt grains; irregular fine silty stringers, slightly pyritic; limestone lenses, bands and pads, brown to black, microcrystalline, moderately argillaceous, pyritic with minute bryozoan? tubules, orbiculoides and other carbonaceous fossil fragments.

Minor vertical fracturing and abundant generally horizontal fractures infilled with calcite.

Fractures are distorted around the more competent limestone beds.

Facility is approximately horizontal and core has slight sulphurous odor.

7479 - 7481.7'

2.7'

Shale, as above, non-carbonaceous, blocky, with abundant fossils from 7479-7480; crinoidal bands define the approximately horizontal bedding and abundant flattened brachiopods are present.

7481.7 - 7483.8'

2.1'

Shale as above with crinoids and orbiculoidea in bottom 0.5'.

7483.8 - 7485'

2.2'

Shale as above with minor horizontal, calcite filled fractures, pyrite stringers and scattered crinoid and brachiopod fragments.

NOTE: Drilling rates indicate the top of the shale unit cored is at 7476 lying below a chert and siltstone unit.

Diamond Core #10

Permo-Penn Alder formation

7477 - 7478' Recovered 0.4'

Coring times 90 minutes per foot.
Lost diamond bit. No core description.

Diamond Core #11 Penno-Penn Alder formation
7912.0 - 7912.5' Recovered 0.2'

Coring times 90 minutes per foot.

7912.0 - 7912.5'

0.2'

Sandstone, dark gray, salt and peppery, medium grained, gray and white chert, minor dark chert, clear quartz, slightly calcareous, C-1, pyritic, silty matrix, siliceous cement, minor calcareous infill, SP = 8, abundant bituminous infill and coatings, moderately to poorly sorted, subangular to subrounded, tight to very poor intergranular porosity, trace oil stain; 5 - 8% chert pebbles, up to 1/5", black, white, rounded.

Diamond Core 12 Penno-Penn Alder formation & Mississippian Parkin Creek
7912.5 - 7913.0' Recovered 30.5'

Coring times 17, 31, 20, 21, 19, 12, 12, 18, 31, 52, 23, 17, 15,
13, 16, 19, 26, 36, 31, 28, 31, 28, 31, 26, 28, 26,
26, 28, 27, 29, 24, minutes per foot.

7912.5 - 7912.6'

0.1'

Thin shale laminae, very fissile, very pyritic, pyritic beds and stringers, discontinuous lenses; polished cleavage surfaces; overlies sandstone,

buff, grey, fine grained to medium grained, predominantly clear quartz, grey and black chert, calc and pepper, poorly sorted, subangular, slightly calcareous, C 1, silty matrix, siliceous cement, SP = 8, dense, hard, tightly cemented, trace bituminous, tight to very poor intergranular porosity, trace oil stain.

7912.6 - 7912.8'

0.2'

Pebble conglomerate band, pebbles average 1/10", up to 1/5", subrounded, grey, black, imbricated, matrix of sandstone, fine grained to medium grained, quartz, chert, slightly calcareous, C 1, pyritic, often after chert, silty matrix, siliceous cement, bituminous coatings, moderately sorted, angular to subangular, tight.

7912.8 - 7915.0'

1.2'

Sandstone, medium grey, buff, fine grained, locally medium grained, passing down into fine grained quartz, chert, non-calcareous, moderately sorted, subangular to subrounded, hard, dense, siliceous cement, silty matrix, pyritic, minor bituminous, local trace intergranular porosity, trace oil stain; lower contact resembles diastem, stylolitic-type break, argillaceous films, scouring.

7914.0 - 7914.8'

0.8'

Sandstone, fine grained to medium grained, quartz, chert, as above, poorly sorted, subangular, pyrite, finer bituminous, locally abundant, salt and pappy, white chert predominant, very poor intergranular porosity, trace oil stain.

7914.8 - 7915.2'

0.4'

Conglomerate, chert pebbles up to 3/10", gray, black, subangular to subrounded, in sandstone matrix, medium grained, as above; conglomerate characterized by elongate flattened brown, dense, chert pebbles up to 1"; argillaceous films.

7915.2 - 7916.5'

1.3'

Sandstone, fine grained to medium grained, as above, varicoloured chert, ranging to coarse grain, coarser and finer beds, pyrite often after chert, tight to very poor intergranular porosity, trace oil stain.

15.9 - 16.1 Pebble conglomerate band, pebbles up to 1/2", average 1/10", varicoloured chert in medium grained sandstone matrix, as above, beryll?

7916.5 - 7918.1'

1.6'

Sandstone, fine grained to medium grained, quartz, white chert, silty matrix, siliceous cement, as above,

W = 0, pyrite, minor bituminous, poor intergranular porosity, trace oil stain. Dip horizontal.

7918.1 - 7921.4'

3.3'

Extremely variable.

7918.1 - 7918.5' Sandstone, very coarse grained to pebble conglomerate.

7918.5 - 7919.2' Sandstone, very coarse grained.

7919.2 - 7919.5' Sandstone, fine grained to medium grained.

7919.5 - 7919.7' Flotting chert pebble conglomerate, black and grey pebbles in fine grained sandstone matrix, as above, W = 0, poor intergranular porosity, poor oil stain.

7919.7 - 7920.1' Sandstone, medium grained.

7920.1 - 7920.7' Chert pebble conglomerate, in coarse grained sandstone matrix.

7920.7 - 7921.1' Sandstone, fine grained to medium grained.

7921.1 - 7921.4' Chert pebble conglomerate, as above.

Samples all with poor oil stain, very poor intergranular porosity. Apparent dip 6° - 10° in pebble conglomerate bands, horizontal dip above 7918.1'.

7921.4 - 7922.0'

0.6'

Sandstone, light to medium grey, fine grained, coarse,

hard, clear quartz, light coloured chert, siliceous cement, tight, minor fine fractures with calcite infill at top, minor bituminous, no oil stain.

7922.0 - 7924.3'

2.3'

Sandstone, uniform, buff, medium grey, fine grained to medium grained, clear quartz, white chert pyrite, siliceous cement, moderately sorted, subangular, porosity, poor to fair oil stain.

7924.3 - 7925.5'

2.2'

Sandstone, uniform, fine grained to medium grained, quartz, white chert, as above, moderately sorted, subangular, poor intergranular porosity, minor bituminous, trace oil stain.

Shaly lens at 7925.0', dip 6° - 10° . Very fine vertical fracture with calcite infill at 7925.5'.

7925.5 - 7928.1'

1.6'

Sandstone, medium grey, buff, medium grained, quartz, varicoloured, chert, pyrite, moderately sorted, subangular, abundant bituminous, FF = 6, tight to trace intergranular porosity, apparent dip 0° .

7928.1 - 7928.3'

0.2'

Sandstone, fine grained to medium grained as above,

with pebble conglomerate bands, pebbles up to 3/10", varicoloured, rounded chert, dip 0°.

7928.3 - 7929.7'

0.4'

Sandstone as above, fine grained, dense, hard, minor bituminous, moderately sorted, subangular, poor intergranular porosity, good oil stain. One-half inch shale band at bottom, black, soft, very fissile, pyrite.

7929.7 - 7929.4'

0.7'

Sandstone, occasional shale partings, rare black chert beds, fine grained, medium grey, moderately to well sorted, subangular, dense, tight, locally very fine grained, locally medium grained, carbonaceous patches, pyrite.

Mississippian Forkin Creek formation 7929 - 564

7929.4 - 7937.5'

8.1'

15 - 20%, Shale, black, micaceous, slightly carbonaceous, lenses, partings, thin beds, very fissile, carbonaceous patches (plant imprints?), polished cleavage planes; contains lenses and beds, thin bands of very fine grained sandstone, grading siltstone, very argillaceous, pyritic, tight.

80 - 85%, Sandstone, medium-dark grey, fine grained to medium grained, moderately to well sorted,

angular to subangular, quartz, chert, very abundant pyrite grains, silty matrix, siliceous cement, well indurated (quartzitic), hard, dense, $SP = 8$, carbonaceous patches, locally slightly calcareous, plant imprints, occur and fill structures.

At 33.7 - 34.3) Shale, very sandy, brown, greeny

36.0 - 36.5) Luster, slightly carbonaceous,

micaceous, gritty, chert grains, fine grained up to medium grained, carbonaceous patches, plant imprints, pyrite stringers, patches. Cleavage at $6^{\circ} - 10^{\circ}$.

7937.5 - 7943.0'

5.5'

Shale, black, micaceous, fissile, platy, pyritic, carbonaceous plant imprints, pyrite (after tube, plant?), rare crinoid, rare rounded black to brown chert pebbles, up to $1/2''$, ss sandstone lenses, bands, on above.

Sandstone: Gas bleeding when removed from core barrel.

Sandstone plus Shale: General petroliferous odour.

(d) Sample Descriptions

- 0 - 110' Interbedded shale, dark grey to black with bituminous coatings, and sandstone, salt and pepper, very fine to fine grained, kaolin infill with minor carbonaceous plant remains, slightly calcareous.
- 110 - 210' Interbedded shale as above with sandstone very fine grained as above and siltstone grey micaceous.
- 210 - 240' Shale as above.
- 240 - 280' Sandstone very fine to fine grained, salt and pepper, with shale as above and minor coal.
- 280 - 520' Shale grey to black, micaceous with minor interbeds of sandstone very fine grained, and siltstone grey, slightly calcareous.
- 520 - 550' Sandstone salt and pepper, very fine to fine grained kaolin infill.
- 550 - 580' Shale as above.
- 580 - 610' Sandstone, salt and pepper to grey, very fine to medium grained, kaolin infill.
- 610 - 660' Shale as above.
- 660 - 695' Sandstone salt and pepper, very fine to fine grained, kaolin infill, trace coal.

- 695 - 720' Shale as above.
- 720 - 755' Sandstone fine to medium grained, salt and pepper, with siltstone light grey, tight.
- 755 - 840' Shale as above with very minor sandstone as above.
- 840 - 895' (Very poor samples). Sandstone grey, salt and pepper, very fine to medium grained, tight.
- 895 - 1010' Shale, light grey to brown to black, very minor sandstone and siltstone.
- 1010 - 1025' Sandstone grey, salt and pepper, very fine to fine grained, kaolin infill, and minor siltstone.
- 1025 - 1050' Sandstone, grey, salt and pepper, very fine to fine grained, kaolin infill, minor siltstone.
- 1050 - 1240' Shale grey to black, micromicaceous, very carbonaceous, very minor grey siltstone.
- 1240 - 1300' Sandstone, salt and pepper, very fine to coarse grained, subrounded, medium to well sorted, kaolin infill, minor coal and glauconite, trace pyrite, very minor porosity indicated.
- 1300 - 2690' Shale grey to black, carbonaceous micromicaceous, very minor siltstone and sandstone stringers trace siderite, minor coal in part, and ironstone concretions.

- 2695 - 3020' Sandstone, white, quartzose to milky with black chert grains, very fine to medium grained in part, subangular to subrounded, well to medium sorted, kaolin infill, trace glauconite, tight. Minor siltstone, gray, shale black and rare coal interbedded.
- 3020 - 3390' Sandstone as above, very fine grained with interbedded dark gray to brown and black shale and minor siltstone gray; trace silica cement trace porosity 3160 - 3180'.
- 3390 - 3540' Shale black, micaceous with interbedded siltstone gray, micaceous in part.
- 3540 - 4100' Shale black, micaceous with very minor carbonaceous flecks.
- 4100 - 4700' Shale as above with minor pyrite.
- 4700 - 5010' Shale gray to black, micaceous trace carbonaceous flecks with interbedded siltstone, pyritic, and glauconitic; trace bentonite.
- 5010 - 5220' Shale, gray to black, micaceous, pyritic, minor beds of silt, gray and bentonite, gray to tan throughout; carbonaceous flecks throughout.
- 5220 - 5610' Shale, gray to black, micaceous, pyritic, with thin interbeds of siltstone, gray, argillaceous,

occasionally grading to sandstone, very fine grained, tight; carbonaceous streaks and buff ironstone (concretions?) throughout.

5610 - 5750'

Shale, as above with minor beds of silt, grey, argillaceous.

5750 - 5900'

Shale, as above with interbedded siltstone, grey and buff ironstone; rare floating chert pebbles from 5850'.

5900 - 6120'

Shale, as above with minor beds of silt, grey, argillaceous; floating chert pebbles to 6150'; minor bentonite, blue-grey throughout.

6120 - 6342'

Interbedded shale, dark grey and siltstone, dark grey, argillaceous, micaceous with minor coal and carbonaceous streaks throughout.

P. 22
Pass

6342 - 6385'

Limestone, grey, silicified, fragmental, fossiliferous with small amounts of fracture and fossil solution porosity; contains thin shale bands throughout and a band of dolomite, tan, silicified, with floating sand grains and bedded chert; grey at the top (see core reports, 3, 4, & 5).

6385 - 6500'

Siltstone buff, very calcareous, argillaceous, tight, with very fine grained sandstone, tight in top 10'; minor silicified limestone bands and crinoid stems from 6500 - 6530'.

- 6890 - 6810' Siltstone, buff, very calcareous, argillaceous, tight, with limestone, silty and chert tan to grey.
- 6810 - 6845' Limestone, buff, silty to sandy, with minor siltstone, very calcareous and chert.
- 6845 - 6860' Limestone, buff, silty to sandy, with minor siltstone, very calcareous and chert.
- 6860 - 6880' Siltstone - sandstone, buff, very calcareous with limestone as above and chert.
- 6880 - 6920' Siltstone, brown, slightly to moderately calcareous and argillaceous, dense, hard; grades in places to limestone, very silty, slightly argillaceous; occasional sandstone grains throughout.
- 6920 - 6930' Siltstone, dark brown, dense, platy, very slightly calcareous and argillaceous; scattered sandstone grains.
- 6930 - 6950' Siltstone, brown, slightly calcareous, blocky.
- 6950 - 6970' Siltstone, light brown to brown, slightly argillaceous, moderately calcareous.
- 6970 - 6990' Limestone, brown to light brown, slightly silty, very argillaceous, fragmental, scattered sandstone grains with siltstone grading to shale, silty, very calcareous, brown - black, pyritic, minor quartz grains.

- 6990 - 7025' Shale, silty, micaceous, moderately calcareous, erinoid fragments, pyritic, with sub-rounded sandstone grains.
- 7025 - 7040' Shale, silty, micaceous, moderately calcareous, pyritic, erinoid fragments with siltstone, medium to dark brown, slightly argillaceous, slightly to moderately calcareous and minor sandstone grains.
- 7040 - 7070' Siltstone, brown, quartzose, moderately argillaceous and calcareous, minor very fine grained quartz grains, platy, grading to shale, calcareous at bottom.
- 7070 - 7130' Siltstone, brown, quartzose, moderately argillaceous and calcareous, minor very fine grained quartz grains, platy, grading to shale, minor limestone streaks dark brown to grey mottled.
- 7130 - 7180' Siltstone, dark brown, moderately calcareous, moderately argillaceous, pyritic, minor calcite filled fractures, with minor scattered quartz grains.
- 7180 - 7185' Siltstone brown to black as above, very argillaceous, grading to shale silty with chert.
- 7185 - 7190' Siltstone dark brown, moderately argillaceous as above with siltstone, buff to brown, mottled very calcareous, pyritic with chert as above.

- 7190 - 7195' Siltstone dense as above, pyritic cherty, grading to chert.
- 7195 - 7240' Siltstone, brown, slightly calcareous and argillaceous with minor chert.
- 7240 - 7250' Siltstone, medium to dark brown, slightly calcareous and argillaceous with minor chert.
- 7250 - 7285' Siltstone, dark brown to black, slightly calcareous, moderately argillaceous, pyritic, very dense, hard with siltstone moderately dark brown, soft.
- 7285 - 7300' Siltstone, medium dark brown, very to slightly dense, minor brown chert.
- 7300 - 7315' Siltstone, black, dark brown, slightly calcareous, moderately argillaceous, very dense.
- 7315 - 7330' Siltstone, brown to black, very dense slightly calcareous, moderately argillaceous.
- 7330 - 7335' Siltstone as above with siltstone buff to brown, mottled, moderately calcareous and argillaceous, in part sandy.
- 7335 - 7365' Siltstone buff to dark brown, moderately calcareous, pyritic, argillaceous with patches of very fine grained quartz, some chert.

- 7365 - 7375' Siltstone as above with chert, gray to buff, bedded
operculos with some siltstone as above with limestone.
- 7375 - 7380' Chert gray to buff with limestone brown, mottled
with trace quartz microcrystalline with siltstone
grading to chert.
- 7380 - 7390' Chert with siltstone as above.
- 7390 - 7405' Chert as above with siltstone brown to very dark
brown generally very dense.
- 7405 - 7445' Chert, light to dark brown, very thin, interbedded
1" - 2" with siltstone, variable, brown to black,
very dense, as above, light to dark brown, locally
grading to limestone.
- 7445 - 7475' Siltstone, brown, very dense with limestone, buff,
silty, grading to siltstone, brown to black, shaly,
grading to limestone with chert interbedded, fracturing
noted at 7466 feet.
- 7475 - 7535' Shale, black, fissile, carbonaceous, slightly
calcareous, pyritic, silty stringers with siltstone
content increasing at end of interval, minor lime-
stone bands, brown to black, some orbiculites and
calcite filled fractures.

- 7535 - 7538' Siltstone, brown to dark brown, dense, slightly calcareous, abundant calcite filled fractures, minor chert.
- 7538 - 7543' No samples. Lost circulation.
- 7543 - 7562' Siltstone, brown to black, variably dense, argillaceous and calcareous, grading to limestone, calcite filled fractures, minor shale and chert.
- 7562 - 7574' Shale, brown to black, slightly calcareous, minor siltstone.
- 7574 - 7625' Siltstone, as above, very calcareous with a limestone band at 7593-7615, buff to light brown, silty, trace of sandstone, buff, quartz and chert grains, very fine grained, silty tight.
- 7625 - 7639' Shale black with limestone, brown, very argillaceous, grading to silty shale and argillaceous siltstone, trace of sandstone, white, calcareous, fine to medium grained.
- 7639 - 7700' Shale, brown to black, silty, platy to blocky, micromicaceous; minor pyrite; with minor siltstone, brown, dense, hard, slightly calcareous but grading to very calcareous in places at top of interval, slightly to moderately argillaceous, minor calcite filled fractures.

- 7700 - 7750' Siltstone, brown to black, dense, slightly calcareous, slightly to moderately argillaceous.
- 7750 - 7770' Shale, silty, black, slightly calcareous, pyritic, hard, minor calcite patches and fragments with minor siltstone grading to sandstone at 7765', very fine grained, very calcareous, gray, tight.
- 7770 - 7785' Siltstone, as above.
- 7785 - 7795' Siltstone, light brown, very slightly argillaceous, moderately calcareous, trace pyrite; with thin interbeds from 7790', silty, black, pyritic, moderately calcareous, crinoid fragments.
- 7795 - 7848' Shale, brown to black, dense, slightly calcareous, silty to sandy, scattered erinoids and brachiopods, interbedded with and grading to sandstone; buff, very fine grained and silty, tight, moderately calcareous, pyritic, well sorted, rounded to angular, quartzose, argillaceous patches.
- 7848 - 7863' Shale, black, minor crinoid fragments, silty to sandy with thinly interbedded sandstone, brown to black, argillaceous, dense, slightly calcareous, very fine grained to silty, pyritic, siliceous cement, tight.
- 7863 - 7870' Siltstone, brown, slightly calcareous, pyritic, medium to very argillaceous, trace of sandstone as above.

- 7870 - 7883' Sandstone, brown to dark grey to black, very fine grained to fine grained, silty, chert and quartz grains, slightly to moderately calcareous, slightly argillaceous, pyritic, tight, siliceous cement; grades to shale, black sandy to silty.
- 7883 - 7900' Siltstone, brown to dark brown, blocky, moderately to very calcareous, quartzose, moderately argillaceous with sandstone, as above.
- 7900 - 7907' Sandstone, black, silty, slightly argillaceous, tight, grading to shale, black.
- 7907 - 7912' Sandstone, dark grey to black, salt and pepper, clear quartz and varicoloured chert grains, locally slightly dolomitic, fine grained to very coarse grained, grey to black chert pebbles, siliceous cement, tight.
- Towards bottom of interval - Bituminous infill, trace of intergranular porosity, trace of oil staining.
- 7912 - 7912.5' Sandstone, dark grey, salt and pepper, medium grained, clear quartz and grey to black chert grains, slightly calcareous, pyritic, grey and black chert pebbles, tight, abundant bituminous infill and coatings.
- 7912.5 - 7929' Sandstone, medium to dark grey, fine to medium grained, pebble conglomerate bands throughout, quartz and chert grains, subangular to subrounded, medium to poorly

sorted, siliceous cement matrix, pyritic, tight to poor intergranular porosity, gas bleeding, no oil or salt water.

7929 - 7937'

Sandstone, as above, pyritic with 15% shale, black, micaceous, fissile, pyritic, carbonaceous patches (plant imprints?); argillaceous sandstone bands grade to shale, sandy.

7937 - 7943'

Shale, as above, with 5% sandstone, as above, rare crinoid, thin pyrite replaced tubes (plants?).

7943 - 7947'

Shale, as above, (samples are poor due to caving).

7947 - 8005'

Shale, black, fissile, pyritic, with sandstone, quartz and chert grains, fine to coarse grained with minor pebble conglomerate bands, pyritic, silty matrix, siliceous cement, tight, locally argillaceous and calcareous.

SECTION III - Engineering Summary

(a) Report of Drill Stem Tests.

No.	Date	From	To	Formation
	27-4-64	3175		Blackie Member

When drilling with air recovered gas at 460 Mcf/d decreasing to 139 Mcf/d in 48 hrs.

1	26-5-64	6351	6363 M.R.	Alder
2	29-5-64	6355	6371	Alder
3	2-8-64	7895	8085 M.R.	Alder
4	2-8-64	7895	8085 M.R.	Alder
5	3-8-64	7895	8085 M.R.	Alder
6	4-8-64	7895	8085 M.R.	Alder
7	4-8-64	7895	8085	Alder

*Company advises
charts lost*

(b) Casing Record

Casing (inches)	Weight	Amount	Set At	Cement (bar)
18"	47.4 lbs/ft	81'	80'	100 + 35 CaCl ₂
13 3/8"	54.5 lbs/ft	33 joints	1018'	750 + 25 CaCl ₂

BIT RECORD

Well White stone FN-26

Date Spudded April 7/64

Area Y.T.

Date Completed A

DATE	BIT No.	BIT SIZE	TYPE	SERIAL No.	JET SIZE	DEPTH		FOOT AGE	TIME HRS.	ACCUMULATED DRILLING TIME	ACCUMULATED STAMMING TIME	CONDITION	REMARKS
						FROM	TO						
Apr 7/64	1	8 5/8	YHWG	E14382	cutout	0	242	242	17	17		2-2-1	
Apr 8/64	2	8 5/8	YHWG	E14384	cutout	242	522	280	20 1/4	37 1/4		2-2-1	
Apr 9/64	3	15"	Pilot Reamer			0	83	83	6 3/4	4 1/4	6 3/4	3-2-1	
Apr 10/64	4	24"	Pilot Reamer			0	80	80	11 1/4	6 3/4	18	2-2-1	
Apr 11/64	5	12 1/4	O.W.C.	drill cement									
Apr 12/64	1	8 5/8	YHWG	Acron		83	522	439	23 3/4		43 1/2	4-2-1	Iron
Apr 13/64	6	8 5/8	YHWG	E24362	Rep	522	1025	503	37 1/4	74 1/2		3-2-1	
Apr 14/64	7	12 1/4	CP	Pilot Reamer		83	1025	942	25 1/4		66 3/4	11-4-1	
Apr 15/64	8	12 1/4	CP	Pilot Reamer		76	5786	502	28		94 3/4	Locked	
Apr 16/64	9	12 1/4	CP	Pilot Reamer		578	980	402	29 1/4		124	Locked	
Apr 17/64	10	12 1/4	CP	Pilot Reamer		980	1017	37	5 1/4		129 1/4	2-2-1	
Run in April 21/64													

Page 1

BIT RECORD

Well *Whitstone #1*

Date Spudded *April 7/64*

Area *F.T.*

Date Completed

DATE	BIT No.	BIT SIZE	TYPE	SERIAL No.	JET SIZE	DEPTH		FOOT AGE	TIME HRS.	ACCUMULATED DRILLING TIME	ACCUMULATED REAMING TIME	CONDITION	REMARKS
						FROM	TO						
Apr 23	1	8 5/8 8 5/8	YHWR	14385	cut out	1025	2257	1232	39 1/4	39 1/4		3-4-1	using Air
Apr 25	2	8 5/8	DWC	38432	cut out	2257	2698	441	12 1/2	51 3/4		3-4-0	Air
Apr 26	3	8 5/8	RB7X5	34674	cut	2698	3516	812	29 1/2	81 1/4		1-1-1	pull to core
Apr 28	4	6 1/2	A	3332	Koebel	3516	3520	9	2	83 1/4	2	1-1-1	Air
Apr 28	5	8 5/8	RB7X5	69877	cut	3520	5073	1561	41 3/4	125		1-1-1	pull to core
Apr 30	6	6 1/2	A	3332	Koebel	5073	5071	9	1 1/2	126 1/2	3 1/2	1-1-1	Air
May 1	7	8 5/8	RB7X5	69875	R.A.	3520	5190	1678	48 3/4	133 1/2		1-1-1	Air
May 2	8	8 5/8	W7	35003	cut out	clean out		fill				1-1-1	change over to mud
May 4	9	8 5/8	DWC	50122	cut out	clean out		fill				1-4-1	get to bottom
May 6	10	8 5/8	DWC	59032	cut out	5190	5247	57	15 1/4	128 3/4		3-3-1	Bit's stuck
May 9	11	8 5/8	W7	41411	"	5247	5270	23	13 3/4	202 1/2		2-3-1	viscosity
May 10	12	8 5/8	DWC	23761	"	5270	5348	78	15	217 1/2		1-2-1	above 400
May 12	13	8 5/8	S6C	18044	"	5348	5477	129	23 3/4	241 1/4		2-3-1	
May 13	14	8 5/8	DWC	61937	"	5477	5605	128	20	261 1/4		2-3-1	
May 14	15	8 5/8	DWC	65921	"	5605	5701	96	14 1/4	275 1/2		2-4-1	
May 15	16	8 5/8	DWC	65854	"	5701	5785	84	13 3/4	289 1/4		2-3-1	
May 16	17	8 5/8	DWC	63735	"	5785	5860	75	10 1/2	299 3/4		2-3-1	vis under 300
May 17	18	8 5/8	DWC	66461	"	5860	5968	108	21 1/2	321		2-3-1	
May 18	19	8 5/8	DWC	26395	"	6068	6067	99	19 3/4	340 3/4		3-3-1	
May 19	20	8 5/8	DWC	16638	"	6067	6130	63	17 3/4	358 1/2		3-3-1	
May 20	21	8 5/8	DWC	37608	"	6130	6220	90	18 1/4	376 3/4		3-3-1	
May 21	22	8 5/8	DWC	58722	"	6220	6302	82	16 1/2	393 1/4		3-3-1	
May 22	23	8 5/8	W7	68332	"	6302	6348	46	10 1/4	403 1/2		4-2-0	Top of Alder
May 23	30	6 1/2	A	ReRun 3332		6348	6355	7	2 1/2		25		
May 24	40	6 1/2	A	ReRun 3332		6355	6363	8	31		56		
May 25	21	8 5/8	YHW6	E34536	cut out	6348	6363	15	14 3/4	Reaming		3-3-0	
May 26	22	8 5/8	YHW6	E34537	con	6363	6371	8	1/2	Reamed 7' dild 1'			

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

SOCONY MOBIL OIL OF CANADA, LTD.

Page 2

BIT RECORD

Well Whitestone-Mobil Oil Date Spudded April 7/64

Area Yukon Date Completed _____

DATE	BIT No.	BIT SIZE	TYPE	SERIAL No.	JET SIZE	DEPTH		FOOT AGE	TIME HRS.	ACCUMLATED DRILLING TIME	ACCUMLATED REAMING TIME	CONDITION	REMARKS
						FROM	TO						
May 27	54	6 3/8	F	4650		6363	6376	7	19		75	Loss of 1 1/2" de diamond	
May 31	23	8 5/8	RG7X3	24877	3/4	6370	6400	29	2 1/4	424 3/4		1-1-1	
May 31	61	6 7/8	S	3332		6400	6409	9	5 1/4		87 1/4	1-1-1	
June 1	24	8 5/8	YHWG	E54058	CON	6409	6421	12	5	429 3/4		2-4-0	Reamed 9'
June 2	25	8 5/8	YHWG	E54252	CON	6421	6484	63	20 3/4	450 1/2		3-2-1	
June 3	26	8 5/8	YHWG	E34539	"	6484	6523	39	13 3/4	464 1/4		2-3-1	
June 4	70	6 1/8	Koebel	333-2		6523	6525	2	2		89 1/4	1-1-1	Core Jammed
June 5	27	8 5/8	YHWG	E54253		6525	6577	54	21	485 1/4		3-2-1	Reamed 9'
June 6	28	8 5/8	YM	E24356		6577	6635	58	15 1/2	500 3/4		3-2-1	
June 7	29	8 5/8	YM	E24351		6635	6649	14	5 3/4	506 1/2		3-2-1	
June 7	30	8 5/8	YHWG	E54081		6649	6667	20	11 1/4	517 3/4		3-2-1	
June 8	31	8 5/8	YHWG	E54534		6667	6690	21	10 1/4	528		2-2-1	
June 9	32	8 5/8	YM	1102900	CON	6690	6740	50	15 1/2	543 1/2		3-2-1	
June 10	33	8 5/8	YM	E24349		6740	6782	42	15 1/2	559		3-2-1	
June 10	34	8 5/8	YM	E24348		6782	6821	39	14 1/2	573 1/2		3-2-1	
June 11	35	8 5/8	YM	E24350		6821	6860	39	16	589 1/2		3-2-1	
June 12	36	8 5/8	YM	E24353		6860	6890	30	14 1/2	604		2-2-1	
June 12	37	8 5/8	OWC	95410		6890	6918	28	10 3/4	614 3/4		2-2-1	
June 13	38	6 5/8	YH	E24355		6918	6946	29	12	626 3/4		2-2-1	
June 14	39	8 5/8	W7	71339		6946	6961	15	10	636 3/4		2-2-1	
June 14	40	8 5/8	YCGR8-2998			6961	6963	2	2	638 3/4		1-1-1	
June 15	41	8 5/8	OWC	38304		6963	6955	22	11 3/4	650 1/2		3-3-1	
June 16	42	8 5/8	OWC	49971		6955	7037	54	14 1/2	665		2-2-1	
June 17	43	8 5/8	OWC	64372		7037	7090	51	17 1/2	682 1/2		3-2-1	
June 18	44	6 1/8	Koebel	333-2		7090	7093	3	5 1/4	687 3/4	94 1/2	Good	
June 19	44	8 5/8	OWC	66632		7093	7126	33	13	700 3/4		3-2-1	
June 20	45	8 5/8	YH	991555		7126	7168	42	16 1/2	717 1/2		3-2-1	

BIT RECORD

well Whitestone

Date Spudded _____

Area _____

Date Completed _____

DATE	BIT No.	BIT SIZE	TYPE	SERIAL No.	JET SIZE	DEPTH		FOOT AGE	TIME HRS.	ACCUMULATED DRILLING TIME	ACCUMULATED REMAINING TIME	CONDITION	REMARKS
						FROM	TO						
June 20	46	8 5/8	OWC	14211	CON	7168	7183	15	8 1/2	725 3/4		4-2-1	
" 21	47		YH	892571	CON	7183	7195	12	8 1/4	734		4-2-1	
22	48		YCG	3998	R.P. Run	7195	7254	59	33	767		3-4-1	
23	49		RG15	689		24 1/2	7254	7278	24	19 1/4	786 1/4		
25	50		YHWG	E54250	Con		7317	39	21 3/4	808		3-2-1	
25	51		YHWG	E54255	Con		7342	25	15 1/2	823 1/2		3-2-1	
26	52		M4L	743287	Con		7351	9	8 1/2	832		4-2-0	
27	53		YCG	RB-13415	Con		7407	56	32 3/4	864 3/4		4-2-1	
28	54		YCG	RB-3999	Con		7450	43	17 3/4	882 1/2		4-2-1	
29	55		H9J	705603	3/4		7477	27	11	893 1/2		2-3-0	
30	56	6 1/8	◇	333-2		7477	7486	9	8 1/4		102 3/4	Good.	
July 1	56	8 5/8	RG3	RR-6522	Con	Reamed 6' - 5 1/2 hrs						Good.	
2	57	8 5/8	YHWG	E54254	Con	7486	7512	26	12	905 1/2		3-2-1	
2	58	8 5/8	OWC	38299	Con		7532	20	12 1/4	917 1/4		3-2-1	
4	59	8 5/8	OWU	45856	Con		7538	6	2	919 3/4		3-2-1	Lost Circ.
6	60	8 5/8	W7	35003	C/O		7591	23	16 1/2	936 1/2		3-2-1	
7	61	8 5/8	YM	N94914	C/O		7618	27	14 3/4	951		3-2-1	
8	62	8 5/8	W7	17054	C/O		7639	21	9 1/4	960 1/2		3-2-1	Stuck - 1 1/2 hrs
10	63	8 5/8	YHWG	293271	C/O		7689	50	17 1/2	977 3/4		3-2-1	
10	64	8 5/8	YM	N94917	C/O		7721	32	14 3/4	992 1/2		3-2-1	
11	65	8 5/8	YHWG	E-24713	C/O		7736	15	6	998 1/2		4-2-0	Pinched
12	66	8 5/8	W7R	74632	C/O		7741	5	1 1/4			1-2-0	Pinched
12	66	8 5/8	YHWG	E24011	C/O		7741	5	1 1/4	999 3/4		1-2-0	Pinched
12	67	8 5/8	W7R	74632	C/O		7764	23	9 1/4	1009		2-1-1	
13	68	8 5/8	YM	N94915	C/O		7794	30	14	1023		3-2-1	
15	69	8 5/8	W7	68838	C/O		7820	26	12	1035		3-2-1	
16	70	8 5/8	YHWG	N54085	C/O		7848	28	10 1/2	1045 1/2		3-2-1	

BIT RECORD

Well Whitestone

Date Spudded April 7/64

Area Eagle Plains

Date Completed July 27/64

DATE	BIT No.	BIT SIZE	TYPE	SERIAL No.	JET SIZE	DEPTH		FOOT AGE	TIME HRS.	ACCUMULATED DRILLING TIME	ACCUMULATED REAMING TIME	CONDITION	REMARKS
						FROM	TO						
July 16	71	8 5/8	YHWG	E54251	C/O		7863	15	6 1/2	1052		3-2-1	
July 17	72	8 5/8	YHWG	E54086	C/O		7877	14	7 1/4	1059 1/4		3-2-1	
18	70	6 1/8	◇	333-2			7878	1	1 1/2		104 1/2		Lost core bit in hole
19	73	8 7/8	WTR	74630	C/O		Clean out						Back to Top of Fish.
19	74	8 1/4	Servico	C850-41	Shoe		wash over						Fish.
21	75	8 5/8	WTR	36510	C/O	7878	7888	10	5 1/4	1064		3-2-1	
22	76	8 7/8	YHWG	E34535	C/O		7912	24	11 1/2	1086		3-2-1	Pulled to Cor.
23	11	6 1/8	◇	19515			7913	1	2 1/2		106 3/4		Would not run
24	12	6 1/8	◇	5632		7912	7943	31	15 3/4		120 1/2		Now
25	77	8 7/8	W7	74509	C/O	7943	7947	4	3 1/4	1089 1/2			Reamed - 31' Rathole 8 1/2"
26	78	8 7/8	YHWG	E54084	C/O	7947	8003	56	19 1/4	1108 1/2			
27	79	8 7/8	WVU	66633	C/O	8003	8085	82	18 3/4	1127 1/2			
80	80	8 7/8	YM	N94926	C/O		Clean out						Trips to Log -

TD 8085 - 6:30 AM - July 27/64

Total Drilling hrs - 1127 1/4
 Total Coring hrs - 120 1/2

(c) Drilling Mud Report

The mud used on this hole was a normal gel-chemical system.

The materials consumed or expended in the Drilling of this well were:

Aquagel	179800	1798	Bags
Caustic	8800	88	Drums
Clay	16300	326	Bags
Dextrin	7650	153	Bags
Collox	700	14	Bags
Tannox	1950	31	Bags
Prisecore	350	7	Bags
Carbenox	3150	63	Bags
Baroid	69000	69	Bags
Fibortox	10200	204	Bags
Collophane	2150	43	Bags
Walnut	7100	142	Bags

(a) Deviation Records

<u>North</u>	<u>Deviation</u>	<u>North</u>	<u>Deviation</u>
60'	1/4°	4510'	5°
100'	1/4°	4540'	0 1/2°
211'	1/2°	4570'	7 3/4°
304'	1/4°	4635'	0°
423'	1/2°	4657'	7 1/2°
490'	1/4°	4792'	7 1/2°
548'	1/2°	4854'	7 1/2°
640'	1/2°	4918'	7 1/2°
765'	1/2°	4930'	0°
821'	1/2°	5042'	7 1/2°
1025'	1/8°	5150'	0°
1100'	1/2°	5220'	0 1/2°
1200'	1/2°	5290'	7 1/2°
1635'	3/4°	5321'	0 1/2°
1900'	1°	5416'	0 1/2°
2289'	3/4°	5500'	0°
2570'	1°	5655'	0°
2900'	1 1/2°	5760'	7 1/2°
3000'	1/2°	5845'	7°
3130'	3/4°	6030'	7 1/2°
3530'	1°	6220'	7 1/2°
3820'	1/2°	6475'	6 1/2°
3945'	3/4°	7120'	6 1/2°
4240'	3 1/2°	7475'	6°
4400'	0°	7045'	6°

(F) Abandonment Plugs

- Plug #1 8085-7880 67 max cement with 125 Gal
Plug #2 6393-6592 67 max cement with 25 Gal $CaCl_2$ salt at 6690
Plug #3 2743-2543 67 max cement with 25 Gal $CaCl_2$ salt at 2645
Plug #4 1053-953 70 max cement with 25 Gal $CaCl_2$ salt at 945
Plug #5 5 max cement at surface and install steel plate.

(G) Lost Circulation Zones

Depth 7533 Hours Lost 493

Material Used: 37700 Gal

10000 Fibertex

4000 Walnut

500 Plugbit

550 Collophane

625 Cellox

300 Chromia

(h) Report of Elements

M21

SECTION IV - Logs

Run No.	Date	Type of Log	From	To
1	30-7-64	Induction Electrical	8090	1018
1	30-7-64	Sonic Gamma Ray-Linear	8084	00
1	30-7-64	Velocity Survey	8084	1018

SECTION V - Analysis

(a) Core Analysis

Nil

(b) Water Analysis

Nil

(c) Gas Analysis

Lab No.	Sample From	To	Source	Remarks
CEL-2-21-1268	#1	oppral.	3175'	Elcoco Line Gas Analysis shows 94.72% by Volume: minor Carbon Dioxide, Ethane, Propane, Isobutane, n-Butane, Isopentane, Hexanes and Heptanes

(d) Oil Analysis

Nil

SECTION VI - Completion Summary

Not applicable.



CORE LABORATORIES-CANADA LTD
 PETROLEUM RESERVOIR ENGINEERING
 CALGARY, ALBERTA
 GAS ANALYSIS



Company Socony Mobil Oil of Canada, Ltd. Page 1 of 1
 Well Socony Mobil W Minerals Whitestone YT N-26 File CBH-2-GA-1268
 Field Eagle Plains Area, Yukon Analysts D.R.
 Location 66° 05' 59" N.L., 138° 20' W.L. Date June 9, 1964

SAMPLING CONDITIONS

Formation _____ Depths Approx. 3175' K.B.
 Sampled from _____ By Client of _____
 Date Sampled April 29/64 Date Received June 4/64 Date Analyzed June 5/64
 Pressure 30 psig Temperature _____ °F. Atmospheric Temp. _____ °F.

~~AST~~ ~~Flowrate~~ @ time of sampling - 139 mcf/d
 Method of Analysis Chromatograph

COMPONENT	MOL. %	Pressure in Container <u>20</u> psig @ <u>72° F</u> when received in laboratory	
NITROGEN			
CARBON DIOXIDE	<u>0.18</u>		
HYDROGEN SULFIDE	<u>-</u>		
METHANE	<u>94.72</u>	U.S. Gal. at 14.696 and 60° F.	Imp. Gal. at 14.65 and 60° F.
ETHANE	<u>3.50</u>		
PROPANE	<u>1.05</u>	<u>0.289</u>	<u>0.240</u>
ISOBUTANE	<u>0.15</u>	<u>0.049</u>	<u>0.041</u>
N-BUTANE	<u>0.23</u>	<u>0.072</u>	<u>0.060</u>
ISOPENTANE	<u>0.06</u>	<u>0.022</u>	<u>0.018</u>
N-PENTANE	<u>0.04</u>	<u>0.014</u>	<u>0.012</u>
HEXANES	<u>0.03</u>	<u>0.012</u>	<u>0.010</u>
Heptanes+	<u>0.04</u>	<u>0.018</u>	<u>0.015</u>
TOTAL	<u>100.00</u>	<u>0.476</u>	<u>0.396</u>
	Actual Pentanes +	<u>0.066</u>	<u>0.055</u>
	Vapor pressure (Calculated) of actual Pentanes +	<u>11.9 Psia @ 100° F</u>	
Hydrogen Sulphide—Grains per 100 cu. ft.			
Gross Heating Value B.T.U. per SCF		<u>1,068.4</u> psia & 60° F at 14.696	<u>1,065.1</u> psia & 60° F at 14.65
Specific Gravity—Measured		Calculated	<u>0.592</u>

REMARKS:

The above datum complies with requirements of the Alberta Oil and Gas Conservation Board.