I N D E X

FORM "B"

DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES

NORTHERN ADMINISTRATION BRANCH

RESOURCES DIVISION

For the period from January 31st, 1960

to May 25th, 1960

Testing to August 3rd, 1960

REPORT of ~~COMPLETION~~ ~~REWORK~~ ~~RESUSPENSION~~ SUSPENSION ~~ABANDONMENT~~ of a Well

Permit No. NA

Name of well Western Minerals Chance No. 1 M-08 Lease No. NA

Registered owner Peel Plateau Expl. Ltd., Western Minerals Ltd. Operator Drilling Company Co. Rig

Location 66° 7' 52" 45.985" N. Lat. 137° 31' 27.302" W. Long. (corrected 24/10/60)

Survey description, if available Not as yet surveyed Unit M Sec 08

Elevation: Ground 1752' Last previous depth 5204'

Kelly bushing 1769' Present depth 9649'

Spudded May 30th, 1959 Finished drilling May 20/60 Rig Released NA

Deviations from vertical See Attached Sheets P-4

CASING RECORD

	Date	Size O.D.	Weight lbs/ft	Grade	Set at feet	Sacks Cement	Top of Cement
1	June 1/59	18"	87.5	H-40	157	270	Surface
2	July 8/59	13-3/8"	54.5	J-55	2001	1260	Surface
3	Oct. 14/59	9-5/8"	40 & 36	J-55	5104	450	2550
4							

TUBING RECORD

Size	Wt. Lbs/foot	Grade	Amount	Landed Depth	Remarks

Wellhead National (Manufacturer) 13"-9" (Size) 900 (Series)

Status of well on completion of drilling All perfs. squeezed off with cement plug from 4365 - 4373'. Retainer set at 4320'.

Producing ~~Injection~~ Zone Carboniferous and formation Sandstone

Cord intervals See Attached Sheets P-5

Interval logged: E-log See Attached Sheets P-5A Other logs

R-log Sonic

M-log Temperature

Velocity log

The above logs ~~(are)~~ (will be) submitted in accordance with Section 65 of the Regulations.

DRILL STEM TESTS

Test No.	Date	Interval Tested	Duration	Results
		See Attached Sheets P-6-8		

(If space insufficient, attach further sheet)

(Strike out the non-applicable) (Completion) (~~Rework~~) (~~Recompletion~~)

Perforations Bullet Schlumberger Jet Shots

Shootings See Attached Sheets P-9

Hydraulic fracturing

Chemical treatment Acidizing - See Attached Sheets P-10

Date initial production tests June 8th, 1960

Initial production data See Production Test Report

Pumping or flowing . Flowing . . . . . .

Plug back 5115' - 5037' . (Covering bottom of 9-5/8" Casing) . . . . . .

Other . . . . . .

. . . . . .

Removed Blow out preventers and installed tubing spool with all accessory connections on 13-3/8" casing head at platform level . . . . . .

. . . . . .

CEMENT PLUGS SET

Date	Plug set at	Sacks cement	Method	Top found at
. . . .	. . . . .	. . . . .	. . . . .	. . . . .
. . . .	. . . . .	See Attached Sheets P-11	. . . . .	. . . . .
. . . .	. . . . .	. . . . .	. . . . .	. . . . .
. . . .	. . . . .	. . . . .	. . . . .	. . . . .
. . . .	. . . . .	. . . . .	. . . . .	. . . . .

Washed well samples ~~have been~~ sent to Geological Survey of Canada, Calgary will be

Cores will be stored at . Calgary . . . . . .

Core analysis (was made) of the Intervals . See Attached Sheets P. 12-26
(~~to be made~~)

Oil analysis (was made) of the Intervals. See Attached Sheets P. 27-29
(~~to be made~~)

Gas analysis (was made) of the Intervals. See Attached Sheets P. 30-38
(~~to be made~~)

Water analysis (was made) of the Intervals. See Attached Sheets P. 39-43
(~~to be made~~)

The above analyses (are)
(~~will be~~) submitted in accordance with Section 70(2) of the Regulations.

ADDITIONAL DETAILS AND COMMENTS

Drillable retainer set at 5029' and hole filled with mud to within 100 - 500 ft. of surface. It is not known if the well will be re-opened within the foreseeable future, however, abandonment of the well will be just a matter of removing the wellhead and placing of one more cement plug at the surface.

. . . . . .

Signed. W. R. Campbell . Address Western Minerals Limited
91 Federal Building

Date August 31st, 1960

(To be submitted in triplicate in accordance with Sections 68, 69, 70 and 71, of the Territorial Oil and Gas Regulations to the Oil Conservation Engineer at Calgary, Alberta.)

DEVIATION - CHANCE NO. 1

Degrees	Depth	
1/4	60'	
0	210'	
1/2	430'	
3/4	585'	
3/4	740'	
3/4	995'	
1/2	1235'	
1/2	1505'	
3/4	1987'	
1	2155'	- S10W
1-1/4	2395'	
1	2520'	
1-1/4	3023'	
1	3369'	
3/4	3787'	
1-1/2	3927'	- S15W
1-3/4	4140'	
2	4309'	- S45E
2-1/4	4650'	- S30E
2-3/4	4930'	- S25E
2-1/2	5054'	- S20E
2	5300'	
3-3/4	5525'	- N65E
5	5627'	- N55E
4-1/4	5700'	
4	5940'	- N55E
4-3/4	6110'	- N55E
4-3/4	6290'	
4-3/4	6500'	- N60E
4	6680'	
3-1/2	7070'	- N25E
2	7298'	
1-3/4	7500'	- N80E
2	7788'	- S25E
2-1/2	7880'	
3-1/2	7948'	
4-1/2	8155'	- S25E
4-3/4	8250'	- S20E
1-1/2	8587'	

CORES - CHANCE NO. 1

Core No.	Interval
1	1255' - 1279'
2	1280' - 1315'
3	1316' - 1349'
4	2035' - 2048'
5	2326' - 2342'
6	2414' - 2430'
7	3428' - 3458'
8	4050' - 4067'
9	4153' - 4158'
10	4255' - 4277'
11	4278' - 4313'
12	4314' - 4353'
13	4354' - 4374'
14	4387' - 4392'
15	4394' - 4402'
16	4542' - 4548'
17	4568' - 4596'
18	4597' - 4604'
19	4743' - 4753'
20	5190' - 5200'
21	5208' - 5214'
22	5531' - 5536'
23	6033' - 6051'
24	6085' - 6103'
25	6385' - 6410'
26	6571' - 6600'
27	7010' - 7027'
28	7803' - 7829'

LOGGING

LOG INFORMATION UNDER SEPARATE COVERAGE

DRILL STEM TESTS

CHANCE NO. 1

No.	Date	Interval	Duration	Results
1	June 18/59	1357'-1390'	40 Min.	Recovered 10' mud
2	July 11/59	2009'-2035'	--	Misrun
3	July 11/59	2019'-2035'	--	Misrun
4	July 12/59	1992'-2035'	30 Min.	Recovered 10' mud
5	July 15/59	2289'-2326'	90 Min.	Recovered 100' mud. Max. gas blow 812 Mcf/Day
6	July 16/59	2322'-2342'	60 Min.	Recovered 110' mud
7	July 17/59	2360'-2414'	165 Min.	Recovered 95' mud. Gas blow - 300-650 Mcf/Day
8	July 19/59	2410'-2430'	30 Min.	Recovered 93' mud
9	July 19/59	2432'-2537'	60 Min.	Recovered 195' mud
10	Aug. 1/59	4025'-4070'	60 Min.	Recovered 195' mud
11	Aug. 4/59	4070'-4158'	30 Min.	Recovered 100' mud
12	Aug. 7/59	4230'-4278'	30 Min.	Recovered 195' mud
13	Aug. 8/59	4230'-4313'	90 Min.	Max. gas flow 6.1 Mmcf/Day. Recovered 120' Distillate, 80' gassy mud
14	Aug. 10/59	4314'-4354'	60 Min.	Gas flow 7-10 Mmcf/Day. Recovered 30' Distillate
15	Aug. 11/59	4377'-4354'	--	Misrun
16	Aug. 12/59	4353'-4387'	90 Min.	Max. gas flow - 60 Mcf/Day, decreased to T.S.T.M. Recovered 2000' oil
17	Aug. 14/59	4387'-4415'	--	Recovered 100' mud
18	Aug. 23/59	4414'-4597'	65 Min.	Recovered 170' oil, salt water and mud cut. 2580' black, sulphurous, saltwater, slightly muddy
19	Sept. 6/59	4880'-5054'	60 Min.	Recovered 4200' black, sulphurous, salt water.
20	Sept.20/59	5054'-5190'	90 Min.	Max. gas flow - 10 Mmcf/Day, decreased to 500 Mcf/Day. Recovered 950' oil

DRILL STEM TESTS

CHANCE NO. 1

No.	Date	Interval	Duration	Results
21	Sept.12/59	5135'-5205'	60 Min.	Recovered 495' gas cut mud
22 W	Sept.13/59	4590'-4880'	100 Min.	Max. gas flow 500 Mcf/Day, decreased to surges in 45 min., when mud to surface. Recovered 1500' black, sulphurous, salt water.
23	Sept.13/59	4350'-4380'	270 Min.	Recovered 4 bbls. clear oil, 3 bbls. muddy oil
24	Sept.23/59	5190'-5205'	60 Min.	Recovered 18' mud
25	Sept.23/59	5130'-5190'	60 Min.	Recovered 15' gassy mud
26	Sept.23/59	5054'-5130'	180 Min.	Recovered 840' oil, 420' oil cut mud, 1240' water
27	Oct. 4/59	5080'-5130'	180 Min.	Recovered 150' oil, 300' oil cut mud, 2175' water
28	Oct. 4/59	5054'-5080'	120 Min.	Recovered 10' gas cut mud
29	Oct. 5/59	5104'-5130'	120 Min.	Recovered 30' mud
30	Oct. 5/59	5084'-5095'	180 Min.	Recovered 150' oil, 150' oily mud, 2120' water
31	Feb. 3/60	5205'-5320'	60 Min.	Recovered 210' drilling mud, and 800' heavy oil cut mud
32	Feb. 4/60	5205'-5320'	60 Min.	Misrun
33	Feb. 5/60	5205'-5320'	120 Min.	Recovered 1400' heavy oil cut mud, 280' oil cut salt water and 1520' salt water
34	Feb. 11/60	5469'-5531'	--	Recovered 150' Drilling mud (Misrun)
35	Feb. 12/60	5469'-5536'	60 Min.	Recovered 450' Drilling mud
36	Feb. 16/60	5664'-5704'	30 Min.	Recovered 15' mud
37	Feb. 20/60	5755'-5828'	60 Min.	Recovered 1020' mud, and 4540' salty sulphurous water
38	Feb. 28/60	6068'-6103'	60 Min.	Recovered 20' mud
39	Mar. 9/60	6325'-6410'	60 Min.	Recovered 20' mud
40	Mar. 16/60	6529'-6600'	60 Min.	Recovered 110' mud

DRILL STEM TESTS

CHANCE NO. 1

No.	Date	Interval	Duration	Results
41	Mar. 23/60	6680'-6730'	60 Min.	N.G.
42	Apr. 2/60	7165'-7298'	--	Packer seat failed
43	Apr. 3/60	7100'-7298'	--	Packer seat failed
44	Apr. 6/60	7007'-7298'	--	Misrun. Tool would not go to bottom
45	Apr. 7/60	7015'-7298'	--	Packer seat failed
46	May 5/60	7167'-7185'	8 Hours	Used LYNES TEST TOOL with 2 packers (each 4' long and 18' between bottom of top packer and top of bottom packer). Recovered Gas - 8 Mmcf decreasing to 3.5 Mmcf in 8 Hours

PERFORATIONS SCHLUMBERGER (JET SHOTS)

CHANCE NO. 1

June 8th	4364-65 4369-70	- 5 holes
June 21st	4358-59	- 4 holes
June 28th	4380-81	- 4 holes
July 2nd	4364-65	- 4 holes
July 4th	4360.5-62.5	- 8 holes
July 16th	4332-33	- 4 holes
July 20th	4340-41	- 4 holes
July 23rd	4346-47	- 4 holes
July 30th	4370-71	- 4 holes

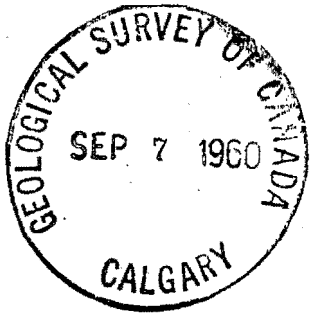
ACIDIZING - CHANCE NO. 1

July 5 - 250 gals. 15% MCA (4360.5-62.5) (4364-54)

July 17 - 250 gals. 15% MCA (4332-33)

July 27 - 200 gals. 15% MCA (4340-41) 4346-47)

July 24 - 200 gals. 15% MCA (4346-47)



PLUGGING RECORD - CHANCE NO. 1

Plug #1	-	May 26 - 35 sacks - 8100 ft. - Felt for Plug - no good
		May 27 - 50 sacks - 8100 ft. - Top of Plug at 8025' - O.K.
Plug #2	-	June 3 - 50 sacks - 7200 ft. - Top of Plug at 7107' - O.K.
Plug #3	-	June 4 - 40 sacks - 5800 ft. - Top of Plug at 5685' - O.K.
Plug #4	-	June 4 - 40 sacks - 5320 ft. - Top of Plug at 5225' - O.K.
Plug #5	-	June 5 - 40 sacks - 5145 ft. - Top of Plug at 5037' - O.K.

CORE LABORATORIES-CANADA LTD.
CALGARY ALBERTA

Company - WESTERN MINERALS LTD.
Well - CHANCE NO. 1
Field - WILDCAT
Province - YUKON

Date Report - AUGUST 31, 1959
Formation -
D. Fluid - WATER BASE MUD
Analysis - SMALL PLUG, PARTIAL SATURATIONS

Page - 1 of 7
File - CNP-4-555
Analysts - SS:BK
Cores - DIAMOND

SAMPLE NUMBER	DEPTH REPRESENTED FEET	FOOTAGE REPRESENTED	PERMEABILITY MILLIDARCYS	POROSITY PER CENT	POROSITY X FEET	RESIDUAL SATURATION OIL % PORE	RESIDUAL SATURATION TOTAL WATER % PORE	VISUAL EXAMINATION
CORED INTERVAL 4255' - 4374'								
CORE NO. 10 4255' - 4277' (Rec. 22.0')								
-	4255.0-4260.0	5.0	-	-	-	-	-	Not received
1	4260.0-4260.3	0.3	<0.01	0.7	0.21	-	-	Fine sand, limy
2	4260.3-4260.7	0.4	<0.01	1.9	0.76	13.0	5.2	Fine sand, limy
3	4260.7-4261.4	0.7	<0.01	1.6	1.12	-	-	Fine sand, limy
4	4261.4-4261.9	0.5	<0.01	2.6	1.30	-	-	Fine sand, limy
5	4261.9-4262.4	0.5	0.03	6.4	3.20	-	-	Fine sand, limy
6	4262.4-4263.6	1.2	44.	13.5	16.20	-	-	Medium sand, limy
7	4263.6-4264.4	0.8	116.	22.3	17.84	0.0	23.7	Medium sand
8	4264.4-4265.5	1.1	78.	23.2	25.52	-	-	Fine sand
9	4265.5-4266.2	0.7	230.	21.3	14.91	-	-	Medium sand
10	4266.2-4266.7	0.5	126.	21.1	10.55	Trace	25.5	Fine sand
11	4266.7-4267.5	0.8	160.	21.5	17.20	-	-	Fine sand
12	4267.5-4268.3	0.8	382.	22.5	18.00	-	-	Medium sand
13	4268.3-4268.8	0.5	805.	21.3	10.65	-	-	Medium sand
14	4268.8-4269.2	0.4	212.	22.4	8.96	-	-	Medium sand
15	4269.2-4269.5	0.3	453.	21.8	6.54	-	-	Medium sand
-	4269.5-4274.4	4.9	-	-	-	-	-	Not received
16	4274.4-4274.7	0.3	337.	17.8	5.34	-	-	Medium sand
17	4274.7-4275.6	0.9	362.	21.5	19.35	-	-	Medium sand
18	4275.6-4276.4	0.8	80.	14.0	11.20	-	-	Conglomerate
19	4276.4-4277.0	0.6	342.	18.9	11.34	0.0	28.1	Very coarse sand
-	4277.0-4278.0	1.0	-	-	-	-	-	Drilled

SAMPLE NUMBER	DEPTH REPRESENTED FEET	FOOTAGE REPRESENTED	PERMEABILITY MILLIDARCYS	POROSITY PER CENT	POROSITY X FEET	RESIDUAL SATURATION OIL % PORE	RESIDUAL SATURATION TOTAL WATER % PORE	VISUAL EXAMINATION
CORE NO. 11 4278' - 4313' (Rec. 35.0')								
20	4278.0-4278.6	0.6	193.	21.3	12.78	-	-	Fine sand
21	4278.6-4279.5	0.9	107.	16.4	14.76	-	-	Medium sand
22	4279.5-4280.5	1.0	161.	19.0	19.00	Trace	14.6	Coarse sand
23	4280.5-4281.5	1.0	193.	17.7	17.70	-	-	Medium sand
24	4281.5-4282.5	1.0	206.	15.8	15.80	-	-	Coarse sand
25	4282.5-4283.5	1.0	187.	17.8	17.80	-	-	Coarse sand
26	4283.5-4284.5	1.0	240.	18.6	18.60	-	-	Coarse sand
27	4284.5-4285.5	1.0	1260.	21.6	21.60	-	-	Coarse sand
28	4285.5-4286.4	0.9	1110.	22.3	20.07	-	-	Coarse sand
29	4286.4-4287.0	0.6	845.	18.0	10.80	-	-	Coarse sand
30	4287.0-4288.0	1.0	1310.	20.9	20.90	0.0	50.6	Coarse sand
31	4288.0-4289.0	1.0	654.	21.1	21.10	-	-	Coarse sand
32	4289.0-4290.2	1.2	1510.	17.8	21.36	-	-	Coarse sand
33	4290.2-4291.2	1.0	1030.	22.3	22.30	-	-	Coarse sand
34	4291.2-4291.9	0.7	478.	18.4	12.88	-	-	Medium sand
35	4291.9-4292.7	0.8	946.	19.2	15.36	0.0	30.0	Coarse sand
36	4292.7-4293.7	1.0	272.	20.0	20.00	-	-	Medium sand
37	4293.7-4294.3	0.6	513.	19.2	11.52	-	-	Medium sand
38	4294.3-4295.3	1.0	603.	19.7	19.70	-	-	Coarse sand
39	4295.3-4296.2	0.9	362.	19.9	17.91	-	-	Medium sand
40	4296.2-4297.2	1.0	508.	20.8	20.80	0.0	23.2	Coarse sand
41	4297.2-4298.2	1.0	299.	19.6	19.60	-	-	Coarse sand
42	4298.2-4299.2	1.0	337.	20.7	20.70	-	-	Coarse sand
43	4299.2-4300.2	1.0	362.	21.7	21.70	-	-	Coarse sand
44	4300.2-4301.4	1.2	744.	20.3	24.36	-	-	Medium sand
45	4301.4-4302.6	1.2	493.	22.3	26.76	-	-	Coarse sand
46	4302.6-4303.6	1.0	634.	19.4	19.40	-	-	Coarse sand
47	4303.6-4304.6	1.0	926.	19.7	19.70	-	-	Coarse sand
48	4304.6-4305.6	1.0	805.	19.5	19.50	0.0	31.0	Coarse sand

SAMPLE NUMBER	DEPTH REPRESENTED FEET	FOOTAGE REPRESENTED	PERMEABILITY MILLIDARCYS	POROSITY PER CENT	POROSITY X FEET	RESIDUAL SATURATION OIL % PORE	RESIDUAL SATURATION TOTAL WATER % PORE	VISUAL EXAMINATION
49	4305.6-4306.6	1.0	724.	19.6	19.60	-	-	Coarse sand
50	4306.6-4307.6	1.0	654.	18.9	18.90	-	-	Coarse sand
51	4307.6-4308.8	1.2	513.	19.2	23.04	Trace	31.2	Coarse sand
52	4308.8-4309.4	0.6	347.	20.7	12.36	-	-	Coarse sand
-	4309.4-4313.0	3.6	-	-	-	-	-	Not received
-	4313.0-4314.0	1.0	-	-	-	-	-	Drilled
CORE NO. 12 4314' - 4353' (Rec. 38.0')								
53	4314.0-4315.0	1.0	80.	13.8	13.80	-	-	Coarse sand
54	4315.0-4316.0	1.0	99.	14.2	14.20	-	-	Coarse sand
55	4316.0-4316.8	0.8	192.	17.3	13.84	-	-	Coarse sand
56	4316.8-4318.0	1.2	347.	18.7	22.44	6.4	23.3	Coarse sand
57	4318.0-4319.0	1.0	139.	15.2	15.20	-	-	Coarse sand
58	4319.0-4320.0	1.0	88.	14.1	14.10	-	-	Coarse sand
59	4320.0-4321.0	1.0	115.	14.3	14.30	-	-	Coarse sand
60	4321.0-4322.0	1.0	104.	13.6	13.60	-	-	Coarse sand
61	4322.0-4323.0	1.0	91.	13.5	13.50	-	-	Coarse sand
62	4323.0-4324.0	1.0	91.	13.7	13.70	-	-	Coarse sand
63	4324.0-4325.0	1.0	71.	15.7	15.70	37.1	11.2	Coarse sand
64	4325.0-4326.0	1.0	48.	13.0	13.00	-	-	Coarse sand
65	4326.0-4327.0	1.0	52.	13.2	13.20	-	-	Coarse sand
66	4327.0-4328.0	1.0	68.	13.1	13.10	-	-	Coarse sand
67	4328.0-4329.0	1.0	58.	12.8	12.80	-	-	Coarse sand
68	4329.0-4330.0	1.0	47.	11.8	11.80	-	-	Coarse sand
69	4330.0-4331.0	1.0	52.	12.6	12.60	42.5	13.5	Coarse sand
70	4331.0-4332.0	1.0	41.	12.3	12.30	-	-	Coarse sand
71	4332.0-4333.0	1.0	35.	11.2	11.20	45.9	12.3	Coarse sand
72	4333.0-4334.0	1.0	49.	11.6	11.60	-	-	Coarse sand
73	4334.0-4335.0	1.0	30.	12.0	12.00	43.8	14.0	Coarse sand
74	4335.0-4336.0	1.0	47.	11.8	11.80	-	-	Coarse sand

SAMPLE NUMBER	DEPTH REPRESENTED FEET	FOOTAGE REPRESENTED	PERMEABILITY MILLIDARCYS	POROSITY PER CENT	POROSITY X FEET	RESIDUAL SATURATION OIL % PORE	RESIDUAL SATURATION TOTAL WATER % PORE	VISUAL EXAMINATION
75	4336.0-4337.0	1.0	41.	12.3	12.30	41.0	17.9	Coarse sand
76	4337.0-4338.0	1.0	38.	11.4	11.40	-	-	Coarse sand
77	4338.0-4339.0	1.0	33.	12.1	12.10	42.2	13.8	Coarse sand
78	4339.0-4339.8	0.8	46.	12.5	10.00	-	-	Coarse sand
79	4339.8-4340.6	0.8	46.	12.6	10.08	-	-	Coarse sand
80	4340.6-4341.5	0.9	47.	12.5	11.25	-	-	Coarse sand
81	4341.5-4342.5	1.0	38.	11.3	11.30	38.5	17.2	Coarse sand
82	4342.5-4343.5	1.0	36.	11.6	11.60	-	-	Coarse sand, limy
83	4343.5-4344.5	1.0	35.	11.2	11.20	-	-	Coarse sand
84	4344.5-4345.5	1.0	25.	10.8	10.80	-	-	Coarse sand
85	4345.5-4346.5	1.0	25.	11.1	11.10	-	-	Coarse sand
86	4346.5-4347.5	1.0	25.	11.3	11.30	41.9	16.0	Coarse sand
-	4347.5-4352.0	4.5	-	-	-	-	-	Not received
-	4352.0-4354.0	2.0	-	-	-	-	-	Drilled
CORE NO. 13 4354' - 4374' (Rec. 20.0')								
87	4354.0-4355.0	1.0	25.	11.7	11.70	-	-	Coarse sand
88	4355.0-4356.0	1.0	35.	12.0	12.00	-	-	Coarse sand, limy
89	4356.0-4357.0	1.0	22.	10.9	10.90	-	-	Coarse sand
90	4357.0-4358.2	1.2	35.	12.3	14.76	41.4	17.9	Coarse sand
91	4358.2-4359.2	1.0	30.	11.8	11.80	-	-	Coarse sand, limy
92	4359.2-4360.2	1.0	12.	10.1	10.10	-	-	Coarse sand, limy
93	4360.2-4361.2	1.0	12.	9.1	9.10	15.0	18.3	Medium sand, limy
94	4361.2-4362.2	1.0	133.	14.5	14.50	-	-	Medium sand, limy
95	4362.2-4363.5	1.3	47.	10.9	14.17	-	-	Medium sand, limy
96	4363.5-4364.2	0.7	15.	11.1	7.77	41.3	19.8	Coarse sand, limy
97	4364.2-4364.8	0.6	125.	11.6	6.96	-	-	Medium sand, limy
98	4364.8-4365.5	0.7	30.	8.8	6.16	-	-	Coarse sand, limy
99	4365.5-4366.4	0.9	0.07	2.9	2.61	12.8	46.1	Medium sand, limy
100	4366.4-4367.2	0.8	0.04	1.7	1.36	-	-	Medium sand, limy

SAMPLE NUMBER	DEPTH REPRESENTED FEET	FOOTAGE REPRESENTED	PERMEABILITY MILLIDARCYS	POROSITY PER CENT	POROSITY X FEET	RESIDUAL SATURATION OIL % PORE	RESIDUAL SATURATION TOTAL WATER % PORE	VISUAL EXAMINATION
101	4367.2-4368.2	1.0	0.19	2.8	2.80	-	-	Coarse sand, limy
102	4368.2-4369.4	1.2	0.04	2.3	2.76	-	-	Coarse sand, limy
103	4369.4-4369.9	0.5	2.1	2.7	1.35	0.0	4.9	Coarse sand, limy
-	4369.9-4374.0	4.1	-	-	-	-	-	Not received

SAMPLES SELECTED BY CLIENT

SAMPLE NUMBER		DEPTH REPRESENTED FEET	PERMEABILITY MILLIDARCYS	POROSITY PER CENT	VISUAL EXAMINATION
Core 10	B	Middle 6'	240.	25.2	Fine sand
	C	Lower 8'	1145.	21.5	Coarse sand
Core 11	A	Upper 8'	273.	17.5	Medium sand
	B	8'	508.	20.9	Medium sand
	C	8'	242.	19.6	Medium sand
	D	Bottom 11'	593.	19.0	Coarse sand

Core with Permeability less than 1.0 Millidarcys

Total footage of core with less than 1.0 millidarcys permeability	6.3'
Weighted average porosity of core with less than 1.0 millidarcys permeability	2.6% (16.12)
Per cent of analyzed core having less than 1.0 millidarcys permeability	6.8%
Weighted average horizontal permeability of core with less than 1.0 md	0.06 md. (0.35)

Core with Permeability 1.0 to 9.9 Millidarcys

Total footage of core with 1.0 to 9.9 millidarcys permeability	0.5'
Weighted average porosity of core with 1.0 to 9.9 millidarcys permeability	2.7% (1.35)
Per cent of analyzed core having 1.0 to 9.9 millidarcys permeability	0.5 %
Weighted average horizontal permeability of core with 1.0 to 9.9 md	2.1 md. (1.05)

Core with Permeability 10 Millidarcys and Greater

Total footage of core with permeabilities 10 md. and greater	86.1'
Weighted average porosity of core with permeabilities 10 md. and greater	15.8% (1359.89)
Per cent of analyzed core having permeabilities 10 md. and greater	92.7%
Weighted average permeability of core with permeabilities 10 md. and greater	279. md. (24006.80)

Cored interval	4255' - 4374'
Total footage	119.0'
Footage analyzed	92.9'
Footage not analyzed---------- Not received 22.1'-------- Drilled 4.0'	26.1'
Weighted average porosity of core analyzed	14.8% (1377.36)
Weighted average horizontal permeability of core analyzed	258. md. (24008.20)

Note: Figures in parentheses indicate porosity feet and permeability feet.

CORE LABORATORIES-CANADA LTD.
CALGARY ALBERTA.

Company - WESTERN MINERALS LTD.
Well - CHANCE NO. 1
Field - WILDCAT,
Province - YUKON

Date Report - OCTOBER 9, 1959
Formation -
D. Fluid - WATER BASE MUD
Analysis - CONVENTIONAL

Page - 1 of 6
File - CNP-4-586
Analysts - BK. DR.
Cores - DIAMOND

SAMPLE NUMBER	DEPTH REPRESENTED FEET	FOOTAGE REPRESENTED	PERMEABILITY MILLIDARCYS	POROSITY PER CENT	POROSITY X FEET	VISUAL EXAMINATION
CORED INTERVAL 4387' - 4402'						
CORE NO. 14 4387' - 4392' (Rec. 4.6')						
1	4387.0-4388.0	1.0	0.34	1.1	1.10	Very coarse sand, limy
2	4388.0-4389.0	1.0	0.23	1.2	1.20	Very coarse sand, limy
3	4389.0-4390.0	1.0	0.19	1.1	1.10	Very coarse sand, limy
4	4390.0-4391.0	1.0	0.08	1.2	1.20	Very coarse sand, limy
5	4391.0-4391.6	0.6	0.33	1.4	0.84	Very coarse sand, limy
-	4391.6-4392.0	0.4	-	-	-	Lost Core
-	4392.0-4394.0	2.0	-	-	-	Drilled
CORE NO. 15 4392' - 4402' (Rec. 0.0')						
-	4394.0-4402.0	8.0	-	-	-	Lost Core

Core with Permeability less than 1.0 Millidarcys

Total footage of core with less than 1.0 millidarcys permeability	4.6'	
Weighted average porosity of core with less than 1.0 millidarcys permeability	1.2%	(5.44)
Per cent of analyzed core having less than 1.0 millidarcys permeability	100. %	
Weighted average horizontal permeability of core with less than 1.0 md.	0.22 md.	(1.03)

Core with Permeability 1.0 to 9.9 Millidarcys ---------- NIL

Core with Permeability 10 Millidarcys and Greater ---------- NIL

Cored Interval	4387 - 4402'
Total footage	15.0'
Footage analyzed	4.6'
Footage not analyzed ---------- Lost Core 8.4' --------- Drilled 2.0' ----------	10.4'
Weighted average porosity of core analyzed	1.2% (5.44)
Weighted average horizontal permeability of core analyzed	0.22 md. (1.03)

Note: Figures in parentheses indicate porosity feet and permeability feet.

SAMPLE NUMBER	DEPTH REPRESENTED FEET	FOOTAGE REPRESENTED	PERMEABILITY MILLIDARCYS	POROSITY PER CENT	POROSITY X FEET	VISUAL EXAMINATION
CORED INTERVAL 4542' - 4548'						
CORE NO. 16 4542.0' - 4548.0' (Rec. 2.0')						
-	4542.0-4542.8	0.8	-	-	-	Dense, limy
6	4542.8-4543.3	0.5	<0.01	2.5	1.25	Fine sand, limy
7	4543.3-4543.5	0.2	0.10	9.2	1.84	Very fine sand, slightly limy
-	4543.5-4543.7	0.2	-	-	-	Dense, no sample
-	4543.7-4543.8	0.1	0.10	9.2	0.92	Very fine sand, slightly limy, appears similar to No. 7
-	4543.8-4544.0	0.2	-	-	-	Dense, no sample
-	4544.0-4548.0	4.0	-	-	-	Lost Core

Core with Permeability less than 1.0 Millidarcys

Total footage of core with less than 1.0 millidarcys permeability	0.8'	
Weighted average porosity of core with less than 1.0 millidarcys permeability	5.0%	(4.01)
Per cent of analyzed core having less than 1.0 millidarcys permeability	100. %	
Weighted average horizontal permeability of core with less than 1.0 md.	0.04 md.	(0.03)

Core with Permeability 1.0 to 9.9 Millidarcys ---------- NIL

Core with Permeability 10 Millidarcys and Greater ---------- NIL

Cored Interval	4542' - 4548'	
Total footage	6.0'	
Footage analyzed	0.8'	
Footage not analyzed ---------- Dense 1.2' -------- Lost Core 4.0' ----------	5.2'	
Weighted average porosity of core analyzed	5.0%	(4.01)
Weighted average horizontal permeability of core analyzed	0.04 md.	(0.03)

Note: Figures in parentheses indicate porosity feet and permeability feet.

SAMPLE NUMBER	DEPTH REPRESENTED FEET	FOOTAGE REPRESENTED	PERMEABILITY MILLIDARCYS	POROSITY PER CENT	POROSITY X FEET	VISUAL EXAMINATION
CORED INTERVAL 4568' - 4604'						
CORE NO. 17 4568' - 4596' (Rec. 21.3')						
8	4568.0-4569.0	1.0	0.22	1.1	1.10	Fine sand, fract. limy
9	4569.0-4570.0	1.0	0.07	1.2	1.20	Fine sand, limy
10	4570.0-4571.0	1.0	0.07	1.3	1.30	Fine sand, limy
11	4571.0-4572.0	1.0	0.03	1.0	1.00	Fine sand, limy
12	4572.0-4573.0	1.0	<0.01	1.0	1.00	Fine sand, limy
13	4573.0-4574.0	1.0	<0.01	0.8	0.80	Fine sand, limy
14	4574.0-4575.0	1.0	0.01	1.1	1.10	Fine sand, limy
15	4575.0-4576.0	1.0	0.01	1.3	1.30	Fine sand, limy
16	4576.0-4577.0	1.0	0.03	1.5	1.50	Fine sand, limy
17	4577.0-4578.0	1.0	0.01	1.3	1.30	Fine sand, limy
18	4578.0-4579.0	1.0	<0.01	1.1	1.10	Fine sand, limy
19	4579.0-4580.0	1.0	<0.01	1.0	1.00	Fine sand, limy
20	4580.0-4581.0	1.0	<0.01	1.0	1.00	Fine sand, limy
21	4581.0-4582.0	1.0	0.02	0.8	0.80	Fine sand, limy
22	4582.0-4583.0	1.0	0.01	0.5	0.50	Fine sand, limy
23	4583.0-4584.0	1.0	<0.01	0.7	0.70	Fine sand, limy
24	4584.0-4585.0	1.0	0.01	0.8	0.80	Fine sand, limy
25	4585.0-4586.0	1.0	0.02	0.9	0.90	Fine sand, limy
26	4586.0-4587.0	1.0	<0.01	0.9	0.90	Fine sand, limy
27	4587.0-4588.0	1.0	0.06	4.2	4.20	Fine sand, limy
28	4588.0-4589.3	1.3	0.01	1.3	1.69	Fine sand, limy
-	4589.3-4596.0	6.7	-	-	-	Lost Core
-	4596.0-4597.0	1.0	-	-	-	Drilled
CORED INTERVAL 4597.0 - 4604.0'						
CORE NO. 18 4597.0' - 4604.0' (Rec. 2,5')						
29	4597.0-4597.8	0.8	5.7	1.1	0.88	Fine sand, limy, fract's
30	4597.8-4598.5	0.7	<0.01	0.5	0.35	Fine sand, limy
31	4598.5-4599.5	1.0	0.01	0.5	0.50	Fine sand, limy
-	4599.5-4604.0	4.5	-	-	-	Lost Core

Core with Permeability less than 1.0 Millidarcys

Total footage of core with less than 1.0 millidarcys permeability	23.0'
Weighted average porosity of core with less than 1.0 millidarcys permeability	1.1% (26.04)
Per cent of analyzed core having less than 1.0 millidarcys permeability	96.6%
Weighted average horizontal permeability of core with less than 1.0 md.	0.03 md. (0.59)

Core with Permeability 1.0 to 9.9 Millidarcys

Total footage of core with 1.0 to 9.9 millidarcys permeability	0.8'
Weighted average porosity of core with 1.0 to 9.9 millidarcys permeability	1.1% (0.88)
Per cent of analyzed core having 1.0 to 9.9 millidarcys permeability	3.4%
Weighted average horizontal permeability of core with 1.0 to 9.9 md.	5.7 md. (4.56)

Core with Permeability 10 Millidarcys and Greater ---------- NIL

Cored Interval	4568 - 4604'
Total footage	36.0'
Footage analyzed	23.8'
Footage not analyzed ---------- Lost Core 11.2' ---------- Drilled 1.0'	12.2'
Weighted average porosity of core analyzed	1.1% (26.92)
Weighted average horizontal permeability of core analyzed	0.22 md. (5.15)

Note: Figures in parentheses indicate porosity feet and permeability feet.

CORE LABORATORIES-CANADA LTD.
CALGARY ALBERTA

Company - WESTERN MINERALS LTD.
Well - WESTERN MINERALS ET AL CHANCE NO. 1
Field - WILDCAT, (EAGLE PLAINS AREA) NORTHWEST TERRITORIES

Date Report - MARCH 10, 1960
Location - 137° 31' 42" W. Long

File - CNP-4-734
Analysts - SS:BK

SAMPLE NUMBER	DEPTH REPRESENTED FEET	FOOTAGE REPRESENTED	PERMEABILITY MILLIDARCYS	POROSITY PER CENT	POROSITY X FEET	VISUAL EXAMINATION
CORED INTERVAL 6085' - 6103'						
CORE NO. 24	6085' - 6103' (Rec. 14.0')					
1	6085.0-6086.5	1.5	0.01	3.6	5.40	Coarse sand, limy
2	6086.5-6087.0	0.5	0.01	3.6	1.80	Fine sand, limy
3	6087.0-6088.0	1.0	0.02	6.2	6.20	Fine sand, limy
4	6088.0-6089.0	1.0	0.04	7.6	7.60	Fine sand, limy
5	6089.0-6089.7	0.7	0.10	8.1	5.67	Medium sand, limy
6	6089.7-6091.0	1.3	0.05	7.1	9.23	Coarse sand, limy
7	6091.0-6091.4	0.4	0.19	10.0	4.00	Medium sand, limy
8	6091.4-6092.5	1.1	0.03	6.7	7.37	Medium sand, limy
9	6092.5-6093.5	1.0	0.35	10.3	10.30	Medium sand, limy
10	6093.5-6094.7	1.2	0.23	12.0	14.40	Medium sand, limy
11	6094.7-6095.7	1.0	0.02	5.8	5.80	Conglomerate, limy
12	6095.7-6096.7	1.0	<0.01	3.2	3.20	Coarse sand, limy
-	6096.7-6099.0	2.3	-	-	-	Dense, no sample
-	6099.0-6103.0	4.0	-	-	-	Lost Core

Core with Permeability less than 1.0 Millidarcys

Total footage of core with less than 1.0 millidarcys permeability	11.7'
Weighted average porosity of core with less than 1.0 millidarcys permeability	6.9% (80.97)
Per cent of analyzed core having less than 1.0 millidarcys permeability	100.%
Weighted average horizontal permeability of core with less than 1.0 millidarcys	0.08 md. (0.97)

Core with Permeability 1.0 to 9.9 Millidarcys - Nil

Core with Permeability 10 Millidarcys and Greater - Nil

Cored interval	6085' - 6103'
Total footage	18.0'
Footage analyzed	11.7'
Footage not analyzed ---- Dense 2.3' ---- Lost Core 4.0'	6.3'
Weighted average porosity of core analyzed	6.9% (80.97)
Weighted average horizontal permeability of core analyzed	0.08 (0.97)

Note: Figures in parentheses indicate porosity feet and permeability feet.

CORE LABORATORIES-CANADA LTD.
PETROLEUM RESERVOIR ENGINEERING
CALGARY, ALBERTA

WATER ANALYSIS

File CNP-4-WA 182

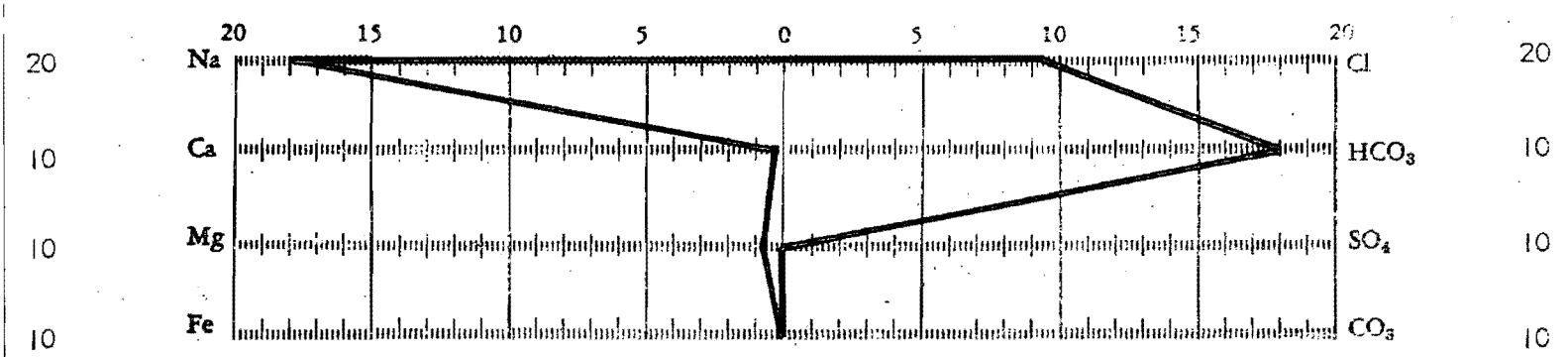
Company Western Minerals Ltd. Well Name Chance No. 1 Sample No. 2

Formation - Depth - Sampled From DST # 22

Location - Field Wildcat Province Yukon Territory

Date Sampled - Date Analyzed Sept. 22, 1959 Engineer TW.

Constituents		*Constituents*	Meq/L	ppm	*Constituents*	Meq/L	ppm
1. Total Solids	26,156 ppm	6. Sodium	360	8,280	11. Chloride	190	6,745
2. pH	7.93	7. Calcium	3	64	12. Bicarbonate	180	10,980
3. Sp. gr	1.0191 @60 °F.	8. Magnesium	7	87	13. Sulfate	-	Absent
4. Resistivity	0.36 @ 74 °F. ohms/M²M	9. Iron	-	Absent	14. Carbonate	-	Absent
5. Hydrogen Sulfide	Present	10. Barium	-	Absent	15. Hydroxide	-	Absent



Scale - Meq. per litre

HYPOTHETICAL COMBINATIONS

Constituent	ppm	*Constituent*	ppm
1. Calcium Chloride	177	4. Sodium Chloride	21,060
2. Magnesium Bicarbonate	13,143	5. Sodium Sulfate	-
3. Magnesium Chloride	-		

CHEMICAL & GEOLOGICAL LABORATORIES LTD.
10568 - 114th Street, Edmonton, Alberta
Phones 25624 - 42562
2706 Centre Street N., Calgary, Alberta
Phone 76149

ANALYTICAL REPORT

From Western Minerals Limited Product Crude DST #16. 16 SAMPLE #1

Address Date Received: August 20, 1959.

Other Pertinent Data Sample #1. DST 16 – 4353 – 87'.

Analyzed by Chemical & Geological Labs. Ltd. Date August 26, 1959. Lab. No. C2350

Color: Dark Brown

Specific Gravity @60/60°F.. 0.8794

°A.P.I. Gravity @60/60°F.. 29.38°

B.S. & W.(total): 10.2 %(vol.)
Water: 1.2 %(vol.)
Sediment: 9.0 %(vol.)

Total Sulphur: 1.13 %(by wt.)

Salt Content: 90. lbs. NaCl/1000 bbl..

Carbon Residue (Conradson): 2.95 %(wt.)

Pour Point: Unheated: +25°F.
Heated: +25°F.

Reid Vapor Pressure: 1.1 psig.

VISCOSITY: °F.	Kinematic Centistokes	Saybolt Universal Seconds
50	41.9	194.2
70	20.2	98.5
100	9.6	54.8

Remarks:

Two samples submitted, only one sample analyzed.

HEMPEL DISTILLATION

Rooms: 72°F. Bar: 664 mm. Mercury.

	°F.
I.B.P.	130
5.0 %	180
7.0 %	212
10.0 %	272
15.0 %	308
20.0 %	352
25.0 %	400
30.0 %	452
35.0 %	486
40.0 %	520
41.0 %	525
45.0 %	562
50.0 %	591
55.0 %	614
Cracked at	615

Distillation Summary

Water		1.0 %
400 F.	Naphtha	24.0 %
525 F.	Kerosine	16.0 %

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ANALYTICAL REPORT

From Western Minerals Limited — Product Crude Oil D.S.T. 16 SAMPLE #2

Address — Date Received: September 1, 1959

4353 ~87

Other Pertinent Data Field: Eagle Plain Area, Yukon.
Western Minerals et al Chance Number 1. 137° 31' 42" W, 66° 7' 42" N.

Analyzed by Chemical & Geological Labs. Ltd. Date September 14, 1959 Lab. No. C 2365

ROUTINE ANALYSIS OF CRUDE OIL

Specific Gravity at 60°/60°F.		0.880
°A.P.I. Gravity at 60°/60°F.		29.30
B.S. & W.		1.3 % (vol)
	Water	0.2 % (vol)
	Sediment	1.1 % (vol)
Total Sulphur		1.16 % (by weight)
Salt Content		10.4 lbs. Na Cl/1000 bbl. after regular run. 1.7 lbs. NaCl/1000 bbl. after sitting 48 hours.
Cetone Index		47.5 (calculated)
Carbon Residue (Conradson)		2.78 % (wt.)
Reid Vapour Pressure		0.8
Pour Point		25 °F.
Color -		dark brown.

VISCOSITY:

Temp. °F.	Kinematic Centistokes	Saybolt Universal Seconds
50	28.31	133.43
70	15.63	79.71
100	8.61	54.17

HEMPEL DISTILLATION

Rooms: 84 F. Bar. 659 mm Hg.

	°F.
I.B.P.	130
4.5 %	212
5.0 %	224
10.0 %	260
15.0 %	304
20.0 %	348
25.0 %	394
25.5 %	400
30.0 %	439
35.0 %	477
40.0 %	515
41.0 %	525
45.0 %	555
50.0 %	578
55.0 %	601
60.0 %	620
Cracked	621

Distillation Summary

400 F Naphtha	25.5 %
525 F Kerosine	15.5 %

CGL-7

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Phone 76149

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ANALYTICAL REPORT

From Western Minerals Limited Product Crude Oil

Address Date Received: September 15, 1959.

Other Pertinent Data D.S.T. #20. 5054' - 5190'.

Analyzed by Chemical & Geological Labs. Ltd. Date September 25, 1959 Lab. No. C2380

CRUDE OIL ANALYSIS

Color:	Greenish Brown.	
Specific Gravity at 60°/60°F.	0.837	
A.P.I. Gravity at 60°/60°F.	37.56	
B. S. & W.	3.2	% (Vol.)
Water:	1.1	% (Vol.)
Sediment:	2.1	% (Vol.)
Total Sulfur	0.94	% ((wt.)
Salt Content	4.1 lbs. NaCl/1000 bbl. 2.3 lbs. NaCl/1000 bbl after sitting 48 hours.	
Carbon Residue (conradson)	0.82	% (wt.)
Pour Point	0°	F.
Reid Vapour Pressure	3.7	
Cetone Index	51	

VISCOSITY:

Temp. °F.	Kinematic Centistokes	Saybolt Univeraal Seconds
50	8.2	52.6
70	5.8	44.9
100	4.0	39.1

Distillation Summary

Water	: --- %
400F Naphtha	:38.5 %
525F Kerosine	:15.5 %
650F Light Gas Oil	: --- %

Hempel Distillation

Rooms: 70°F. Bar: 667 mm Mercury.

I.B.P.	79
5.0 %	146
10.0 %	207
11.0 %	212
15.0 %	236
20.0 %	266
25.0 %	298
30.0 %	334
35.0 %	372
38.5 %	400
40.0 %	412
45.0 %	451
50.0 %	490
54.0 %	525
55.0 %	532
60.0 %	566
65.0 %	612
Cracked	618

CGL-4

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

10568 - 114th Street Edmonton, Alberta Phones: 25624 - 42562

GAS ANALYSIS REPORT

FIELD Peel Plateau Area, Yukon WELL NO. Chance #1

OPERATOR Western Minerals Limited LOCATION

SAND DEPTHS LAB. NO. E 14514

ANALYZED BY Chemical & Geological Labs. Ltd. DATE August 13, 1959

REMARKS D.S.T. #5, 2289 - 2326'

ORSAT ANALYSIS

	% by Volume
Oxygen	
Nitrogen	
Carbon dioxide	
Hydrogen sulfide	
Total hydrocarbons	
Average "n"	

HYDROGEN SULFIDE

(by Tutwiler Method)

Grains of hydrogen sulfide per 100 cu. ft. of gas at 60° F. and

14.7 lbs. per sq. in.

14.4 lbs. per sq. in.

Percentage of Hydrogen sulfide Nil

GROSS B.T.U.

60°F. and 14.7 p.s.i.a. 987

60°F. and 14.4 p.s.i.a. 967

PODBIELNIAK

Low Temperature Fractionation

	% by Volume	G.P.M. in U.S. Gal. @60°F. & 14.696 psi.	G.P.M. in Imp. Gal. @60°F. & 14.4 Psi.
Oxygen	0		
Nitrogen	2.55		
Carbon dioxide	0.14		
Hydrogen sulfide	0		
Methane	96.97		
Ethane	0.24		
Propane	0.04	0.011	0.009
Isobutane	0.04	0.013	0.011
N-butane	0.02	0.006	0.005
Isopentane			
N-pentane			
Hexanes +			
TOTAL	100.00	0.030	0.025

G.P.M.

Actual pentanes +		
Calculated at 12 lbs.		
Calculated at 15 lbs.		
Calculated at 22 lbs.		
Calculated at 26 lbs.		

Vapor pressure (calculated) of actual pentanes +

Specific Gravity Calculated 0.568

Specific Gravity by Weight 0.571

Remarks and Conclusions: This sample contained 4.35% Air Contamination. All figures corrected for this contamination.

This sample contains 0.03% helium and 0.65% Hydrogen.

CGL-4

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

10568 - 114th Street Edmonton, Alberta Phones: 25624 - 42562

GAS ANALYSIS REPORT

FIELD Peel Plateau Area, Yukon WELL NO. Chance #1 Well

OPERATOR Western Minerals Limited LOCATION

SAND DEPTHS LAB. NO. E 14513

ANALYZED BY Chemical & Geological Labs. Ltd. DATE August 13, 1959

REMARKS D.S.T. #7, 2360' - 2414'.

ORSAT ANALYSIS

	% by Volume
Oxygen	
Nitrogen	
Carbon dioxide	
Hydrogen sulfide	
Total hydrocarbons	
Average "n"	

HYDROGEN SULFIDE

(by Tutwiler Method)

Grains of hydrogen sulfide per 100 cu. ft. of gas at 60° F. and

14.7 lbs. per sq. in.

14.4 lbs. per sq. in.

Percentage of Hydrogen sulfide Nil

GROSS B.T.U.

60°F. and 14.7 p.s.i.a. 999

60°F. and 14.4 p.s.i.a. 979

PODBIELNIAK

Low Temperature Fractionation

	% by Volume	G.P.M. in U.S. Gal. @60°F. & 14.696 psi.	G.P.M. in Imp. Gal. @ 60°F. & 14.4 psi.
Oxygen	0		
Nitrogen	1.54		
Carbon dioxide	0.37		
Hydrogen sulfide	0		
Methane	97.55		
Ethane	0.24		
Propane	0.06	0.017	0.013
Isobutane	0.17	0.056	0.045
N-butane	0.02	0.006	0.005
Isopentane	0.05	0.018	0.015
N-pentane			
Hexanes +			
TOTAL	100.00	0.097	0.078

G.P.M.

Actual pentanes +	0.018	0.015
Calculated at 12 lbs.		
Calculated at 15 lbs.		
Calculated at 22 lbs.		
Calculated at 26 lbs.		

Vapor pressure (calculated) of actual pentanes +

Specific Gravity Calculated 0.569

Specific Gravity by Weight 0.568

Remarks and Conclusions: Helium analysis to follow later.

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

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GAS ANALYSIS REPORT

FIELD Peel Plateau Area, Yukon WELL NO. Chance #1

OPERATOR Western Minerals Limited LOCATION

SAND DEPTHS LAB. NO. E14629

ANALYZED BY Chemical & Geological Labs. Ltd. DATE August 26, 1959.

REMARKS D.S.T. #13, 4230' - 4313'

ORSAT ANALYSIS

	% by Volume
Oxygen	
Nitrogen	
Carbon dioxide	
Hydrogen sulfide	
Total hydrocarbons	
Average "n"	

HYDROGEN SULFIDE

(by Tutwiler Method)

Grains of hydrogen sulfide per 100 cu. ft. of gas at 60° F. and

14.7 lbs. per sq. in.

14.4 lbs. per sq. in.

Percentage of Hydrogen sulfide Nil

GROSS B.T.U.

60°F. and 14.7 p.s.i.a. 1029

60°F. and 14.4 p.s.i.a. 1008

PODBIELNIAK

Low Temperature Fractionation

	% by Volume	G.P.M. in U.S. Gal. @60°F.& 14.696 psi.	G.P.M. in Imp. Gal. @60°F.& 14.4 psi.
Oxygen	0		
Nitrogen	2.49		
Carbon dioxide	7.35		
Hydrogen sulfide	0		
Methane	80.70		
Ethane	5.69		
Propane	2.34	0.644	0.526
Isobutane	0.31	0.101	0.083
N-butane	0.56	0.176	0.144
Isopentane	0.18	0.066	0.054
N-pentane	0.17	0.061	0.050
Hexanes +	0.21	0.097	0.079
TOTAL	100.00	1.145	0.936

G.P.M.

Actual pentanes +	0.224	0.183
Calculated at 12 lbs.	0.225	0.184
Calculated at 15 lbs.	0.239	0.195
Calculated at 22 lbs.	0.279	0.228
Calculated at 26 lbs.	0.308	0.252

Vapor pressure (calculated) of actual pentanes + 11.83 11.85

Specific Gravity Calculated 0.711

Specific Gravity by Weight 0.714

Remarks and Conclusions:

CGL-4

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

10568 - 114th Street Edmonton, Alberta Phones: 25624 - 42562

GAS ANALYSIS REPORT

FIELD Peel Plateau Area, Yukon WELL NO. Chance #1

OPERATOR Western Minerals Limited LOCATION

SAND DEPTHS LAB. NO. E14630

ANALYZED BY Chemical & Geological Labs. Ltd. DATE August 26, 1959.

REMARKS D.S.T. #14 / 4314' - 4354'.

ORSAT ANALYSIS

	% by Volume
Oxygen	
Nitrogen	
Carbon dioxide	
Hydrogen sulfide	
Total hydrocarbons	
Average "n"	

HYDROGEN SULFIDE

(by Tutwiler Method)

Grains of hydrogen sulfide per 100 cu. ft. of gas at 60° F. and	
14.7 lbs. per sq. in.	44
14.4 lbs. per sq. in.	43
Percentage of Hydrogen sulfide	0.07

GROSS B.T.U.

60°F. and 14.7 p.s.i.a.	1046
60°F. and 14.4 p.s.i.a.	1025

PODBIELNIAK

Low Temperature Fractionation

	% by Volume	G.P.M. in U.S. Gal. @60°F.& 14.696 psi.	G.P.M. in Imp. Gal. @60°F.& 14.4 psi.
Oxygen	0		
Nitrogen	2.00		
Carbon dioxide	7.19		
Hydrogen sulfide	0.07		
Methane	80.79		
Ethane	5.83		
Propane	2.43	0.669	0.546
Isobutane	0.34	0.111	0.091
N-butane	0.66	0.208	0.170
Isopentane	0.20	0.073	0.060
N-pentane	0.16	0.058	0.047
Hexanes +	0.33	0.152	0.124
TOTAL	100.00	1.271	1.038

G.P.M.

Actual pentanes +	0.283	0.231
Calculated at 12 lbs.	0.293	0.239
Calculated at 15 lbs.	0.312	0.254
Calculated at 22 lbs.	0.366	0.299
Calculated at 26 lbs.	0.406	0.332

Vapor pressure (calculated) of actual pentanes +	10.26	10.27

Specific Gravity Calculated	0.715
Specific Gravity by Weight	0.715

Remarks and Conclusions:

CGL-4

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

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GAS ANALYSIS REPORT

FIELD Peel Plateau Area, Yukon WELL NO. Chance #1

OPERATOR Western Minerals Limited LOCATION

FORMATION DEPTHS LAB. NO E14918

ANALYZED BY Chemical & Geological Labs. Ltd. DATE October 21, 1959.

REMARKS D.S.T. #20 5054 - 5190'.

ORSAT ANALYSIS

	% by Volume
Oxygen	
Nitrogen	
Carbon dioxide	
Hydrogen sulfide	
Total hydrocarbons	
Average "n"	

HYDROGEN SULFIDE

(by Tutwiler Method)

Grains of hydrogen sulfide per 100 cu. ft. of gas at 60° F. and

14.7 lbs. per sq. in. 2709

14.4 lbs. per sq. in. 2655

Percentage of Hydrogen sulfide 4.31

GROSS B.T.U.

60°F. and 14.7 p.s.i.a. 1135

60°F. and 14.4 p.s.i.a. 1112

PODBIELNIAK

Low Temperature Fractionation

	% by Volume	G.P.M. in U.S. Gal. @60°F. & 14.696 psi.	G.P.M. in Imp. Gal. @60°F. & 14.4 psi.
Oxygen	0		
Nitrogen	2.91		
Carbon dioxide	3.27		
Hydrogen sulfide	4.31		
Methane	75.50		
Ethane	7.03		
Propane	3.89	1.070	0.874
Isobutane	0.48	0.157	0.128
N-butane	1.24	0.391	0.319
Isopentane	0.35	0.128	0.104
N-pentane	0.37	0.134	0.109
Hexanes +	0.65	0.299	0.244
TOTAL	100.00	2.179	1.778

	G.P.M.	
Actual pentanes +	0.561	0.457
Calculated at 12 lbs.	0.582	0.474
Calculated at 15 lbs.	0.619	0.504
Calculated at 22 lbs.	0.727	0.593
Calculated at 26 lbs.	0.808	0.659
Vapor pressure (calculated) of actual pentanes +	10.15	10.14

Specific Gravity Calculated 0.754

Specific Gravity by Weight 0.758

Remarks and Conclusions: **This sample arrived with very little pressure and had to be pressured with water for the analysis, therefore the hydrogen sulfide reported in this report may not be correct. All figures were corrected for 2.55% air contamination in the sample. There was insufficient sample for a helium determination.**

CGL-4

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

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10568 - 114th Street Edmonton, Alberta Phones: 25624 - 42562

GAS ANALYSIS REPORT

FIELD Peel Plateau Area, Yukon. WELL NO. Chance #1

OPERATOR Western Minerals Limited LOCATION

FORMATION DEPTHS LAB. NO. E14925

ANALYZED BY Chemical & Geological Labs. Ltd. DATE October 21, 1959.

REMARKS D.S.T. #22. Container number 177.
- 4590' - 4880'

ORSAT ANALYSIS

	% by Volume
Oxygen	
Nitrogen	
Carbon dioxide	
Hydrogen sulfide	
Total hydrocarbons	
Average "n"	

HYDROGEN SULFIDE
(by Tutwiler Method)

Grains of hydrogen sulfide per 100 cu. ft. of gas at 60° F. and	
14.7 lbs. per sq. in.	13
14.4 lbs. per sq. in.	12
Percentage of Hydrogen sulfide	0.02

GROSS B.T.U.

60°F. and 14.7 p.s.i.a.	1044
60°F. and 14.4 p.s.i.a.	1023

PODBIELNIAK
Low Temperature Fractionation

	% by Volume	G.P.M. in U.S. Gal. @60°F.& 14.696 psi.	G.P.M. in Imp. Gal. @60°F.& 14.4 psi.
Oxygen	0		
Nitrogen	2.27		
Carbon dioxide	7.60		
Hydrogen sulfide	0.02		
Methane	79.69		
Ethane	6.00		
Propane	2.76	0.759	0.620
Isobutane	0.33	0.108	0.088
N-butane	0.79	0.249	0.203
Isopentane	0.11	0.040	0.033
N-pentane	0.08	0.029	0.024
Hexanes +	0.35	0.161	0.131
TOTAL	100.00	1.346	1.099

G.P.M.		
Actual pentanes +	0.230	0.188
Calculated at 12 lbs.	0.252	0.206
Calculated at 15 lbs.	0.269	0.220
Calculated at 22 lbs.	0.319	0.261
Calculated at 26 lbs.	0.358	0.292

Vapor pressure (calculated) of actual pentanes +	7.49	7.54

Specific Gravity Calculated	0.723
Specific Gravity by Weight	0.725

Remarks and Conclusions: **Insufficient sample for Helium determination.**

CGL-3

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

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10568 - 114th Street, Edmonton, Alberta — Phones: GA 2-5624 - GA 4-2562
428 - 35 Ave. N.E., Calgary, Alberta — Phones: CR 7-6149 - CR 7-0305

GAS ANALYSIS REPORT

FIELD (Wildcat), Yukon — WELL NO. Western Minerals Chance #1
OPERATOR Western Minerals Limited — LOCATION 66-7-42 Lat. 137-31-42 Long.
FORMATION (Shale) ≠ S.S. — DEPTHS — LAB. NO. C 2991
ANALYZED BY Chemical & Geological Labs. Ltd. — DATE June 17, 1960
REMARKS Sampled from flare line D.S.T. #46. Interval 7167'-7185'. Sampled in C&G Lab. Container.

ORSAT ANALYSIS

	% by Volume
Oxygen	
Nitrogen	
Carbon dioxide	
Hydrogen sulfide	
Total hydrocarbons	
Average "n"	

HYDROGEN SULFIDE
(by Tutwiler Method)

Grains of hydrogen sulfide per 100 cu. ft. of gas at 60° F. and

14.7 lbs. per sq. in.

14.4 lbs. per sq. in.

Percentage of Hydrogen sulfide: Nil

GROSS B.T.U.

60°F. and 14.7 p.s.i.a.: 1198

60°F. and 14.4 p.s.i.a.: 1174

PODBIELNIAK
Low Temperature Fractionation

	% by Volume	G.P.M. in U.S. Gal. @ 60° F. & 14.696 PSI	G.P.M. in Imp. Gal. @ 60° F. & 14.4 PSI
Oxygen	0		
Nitrogen	0.05		
Carbon dioxide	0.37		
Hydrogen sulfide	0		
Methane	85.34		
Ethane	7.59		
Propane	3.98	1.095	0.894
Isobutane	0.47	0.154	0.125
N-butane	1.14	0.359	0.293
Isopentane	0.40	0.146	0.119
N-pentane	0.24	0.087	0.071
Hexanes	0.22	0.090	0.074
Heptanes +	0.20	0.102	0.083
TOTAL	100.00	2.033	1.659

G.P.M.		
Actual pentanes +	0.425	0.347
Calculated at 12 lbs.	---	---
Calculated at 15 lbs.	0.448	0.366
Calculated at 22 lbs.	0.523	0.427
Calculated at 26 lbs.	0.578	0.472

Vapor pressure (calculated) of actual pentanes +: 12.31 | 12.30

Specific Gravity Calculated: 0.681
Specific Gravity by Weight: 0.678

Remarks and Conclusions: **Note this sample contained 15.50% air contamination, all figures corrected for this contamination.**

OIL AND GAS CONSERVATION BOARD (PROVINCE OF ALBERTA)

36-A

STANDARD SAMPLE INFORMATION SHEET

INFORMATION TO BE FORWARDED WITH EACH SAMPLE OF WATER, OIL OR GAS (Please supply as much of the following information as possible. Please Print Clearly.)

Kind of sample (water, oil or gas): Gas

Marks on sample container: Chemical & Geological Laboratories Limited

Sample obtained by: **Date:**

Operator: Western Minerals Limited

Mailing address for results: 31 Michael Building

Well name and No. Western Minerals Chance #1 **Field or Area:** (Wildcat)

Located in: L.S.D. **Sec.** **Twp.** **Rge.** **W** **Mer.** **Elev:** **K.B.**
66-7-42 Lat. 137-31-42 Long. **Grd.**

Sample obtained from (line, tubing, separator, etc.): Flare Line

Pressure: (a) at point of sampling psig. **(b) Gas Bomb pressure** ? psig.

Temperature: (a) at point of sampling °F **(b) Separator** °F

Name of Zone and Formation: (Shale)

Method of Production: **D.S.T.,** **Pump,** **Flowing,** **Swabbing,** D.S.T. #46

Other (specify)

If D.S.T. sample, D.S.T. results: **Interval** 7167' - 7185'

Recovery

Well production at sampling time: Oil Bpd; **Gas** MCFD; **Water** Bpd.

Perforations or open hole interval:

Pressures: **Reservoir** , **Tubing** , **Casing** , **Separator**

REMARKS:

Complete.
8 copies .

.....
(Signed)

.....
(Company)

CGL-7

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

10568 - 114th Street, Edmonton, Alberta
Phones 25624 - 42582

2706 Centre Street N., Calgary, Alberta
Phone 76149

ANALYTICAL REPORT

From Western Minerals Limited Product Condensate

Address Date Received: August 13, 1959.

Other Pertinent Data Field: Peel Plateau, Yukon.
Chance #1. D.S.T. #13 -4230'-4313'.

Analyzed by Chemical & Geological Labs. Ltd. Date August 20, 1959. Lab. No. C2336-1

Color: Clear
Specific Gravity at 60/60°F.: 0.728
°A.P.I. Gravity at 60/60°F.: 62.87°

Total Sulphur: 0.28 %(wt.)

Distillation Summary

400 F. Naphtha	96.8 %
525 F. Kerosine	2.2 %

Remarks and Conclusions:

Distillation flask remained moist after distillation.

Engler Distillation:
Rooms: 77°F. Bar: 668 mm. Mercury.

	°F.
I.B.P.	112
5.0 %	136
10.0 %	147
15.0 %	156
20.0 %	166
25.0 %	173
30.0 %	180
35.0 %	187
40.0 %	196
45.0 %	203
50.0 %	210
51.0 %	212
55.0 %	218
60.0 %	226
65.0 %	235
70.0 %	245
75.0 %	257
80.0 %	271
85.0 %	288
90.0 %	312
95.0 %	350
96.8 %	400
F.B.P.	465

CGL-7

CHEMICAL & GEOLOGICAL LABORATORIES LTD.
10568 - 114th Street, Edmonton, Alberta — Phones 25624 - 42562
2706 Centre Street N., Calgary, Alberta — Phone 76149

ANALYTICAL REPORT

From Western Minerals Limited Product Condensate

Address Date Received: August 13, 1959.

Other Pertinent Data Field: Peel Plateau, Yukon.

Chance #1 D.S.T. #14 - 4314' - 4354'.

Analyzed by Chemical & Geological Labs. Ltd. Date August 20, 1959. Lab. No. C2336-2

Color: Light Yellow.
Specific Gravity at 60/60°F.: 0.740
°A.P.I. Gravity at 60/60°F.: 59.72°

Total Sulphur: 0.30 %(wt.)

Distillation Summary

400 F.	Naphtha	96.2 %
525 F.	Kerosine	2.8 %

Remarks and Conclusions:

Distillation flask remained moist after distillation.

Engler Distillation:
Rooms: 73°F. Bar: 668 mm. Mercury.

	°F.
I.B.P.	128
5.0 %	151
10.0 %	172
15.0 %	180
20.0 %	188
25.0 %	194
30.0 %	200
35.0 %	207
39.9 %	212
40.0 %	213
45.0 %	220
50.0 %	227
55.0 %	234
60.0 %	242
65.0 %	251
70.0 %	260
75.0 %	273
80.0 %	288
85.0 %	295
90.0 %	332
95.0 %	382
96.2 %	400
F.B.P.	434

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

10568 - 114th Street, Edmonton, Alberta
Phone GA 2-5624 and GA 4-2562

2706 Centre Street N., Calgary, Alberta
Phone CR 7-6149

WATER ANALYSIS REPORT

Field Eagle Plains Area, Yukon. Well No. Western Minerals et al Chance #1.

Operator Western Minerals Limited Location 137° 31' 42" W, 66° 7' 42" N.

Sampled by Date Received September 1, 1959

Formation Depths How Sampled D.S.T.

Other pertinent data D.S.T. #10, Sample #1

Analyzed by Chemical & Geological Labs. Ltd. Date September 18, 1959 Lab. No. C 2364-1

PARTS PER MILLION (MILLIGRAMS PER LITER)

Na & K	Ca	Mg	Fe	SO_4	Cl	CO_3	HCO_3	OH	H_2S
6,549	26	36	Nil	2	5,420	1,110	6,050		Present

MILLIGRAM EQUIVALENTS

284.90	1.30	2.96	Nil	0.04	152.84	36.96	99.32		Present

MILLIGRAM EQUIVALENTS IN PERCENT

49.26	0.23	0.51	Nil	0.01	26.43	6.39	17.17		Present

Total Solids in Parts per Million

By evaporation 18,360
After ignition 14,580
Calculated 16,126

Specific Gravity 1.018
Observed pH 8.7
Resistivity 0.45 ohm meters @ 68° F.

Properties of Reaction in Percent

Primary salinity 52.88
Secondary salinity ---
Primary alkalinity 45.64
Secondary alkalinity 1.48
Chloride salinity 99.96
Sulfate salinity 0.04

Remarks and conclusions

GL-6

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

10568 - 114th Street, Edmonton, Alberta
Phone GA 2-5624 and GA 4 2562

2706 Centre Street N., Calgary, Alberta
Phone CR 7-8149

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WATER ANALYSIS REPORT

Field Eagle Plains Area, Yukon Well No. Western Minerals et al Chance #1

Operator Western Minerals Limited Location 137° 31' 42" W, 66° 7' 42" N.

Sampled by ..... Date Received September 1, 1959.

Formation ..... Depths ..... How Sampled D.S.T.

Other pertinent data Sample #2. D.S.T. #18

Analyzed by Chemical & Geological Labs. Ltd. Date September 18, 1959 Lab. No. C 2364-2

PARTS PER MILLION (MILLIGRAMS PER LITER)

Na & K	Ca	Mg	Fe	SO_4	Cl	CO_3	HCO_3	OH	H_2S
6,157	47	58	Nil	2	5,270	1,060	5,550		Nil

MILLIGRAM EQUIVALENTS

267.85	2.35	4.77	Nil	0.04	148.61	35.30	91.02		Nil

MILLIGRAM EQUIVALENTS IN PERCENT

48.71	0.43	0.86	Nil	0.01	27.02	6.42	16.55		Nil

Total Solids in Parts per Million

By evaporation 17,420
After ignition 12,530
Calculated 15,327

Specific Gravity 1.016
Observed pH 8.7
Resistivity 0.46 ohm meters @ 68° F.

Properties of Reaction in Percent

Primary salinity 54.06
Secondary salinity ---
Primary alkalinity 43.36
Secondary alkalinity 2.58
Chloride salinity 99.96
Sulfate salinity 0.04

Remarks and conclusions

CORE LABORATORIES-CANADA LTD.

PETROLEUM RESERVOIR ENGINEERING

CALGARY, ALBERTA

WATER ANALYSIS

File CNP-4-WA 181

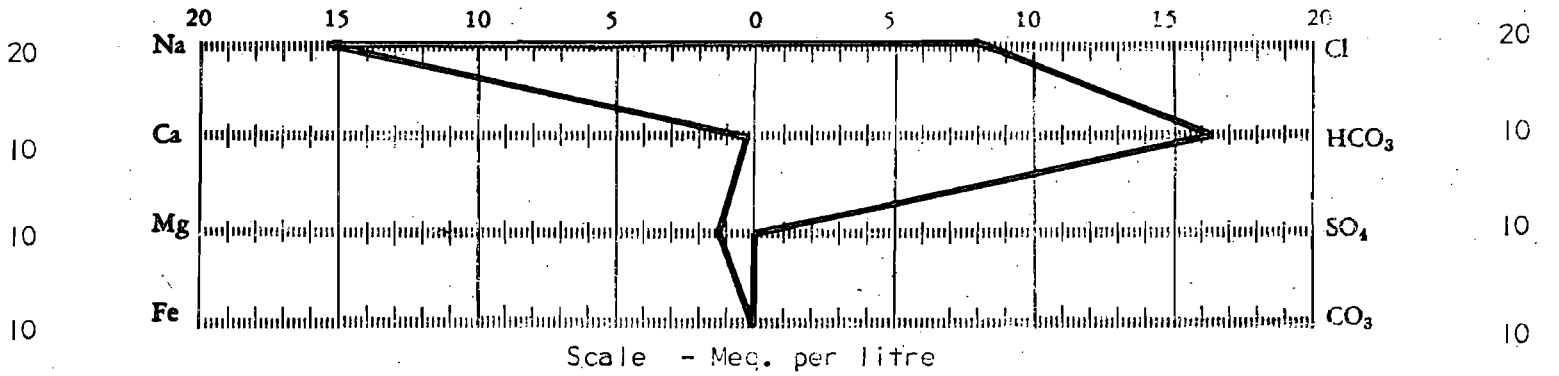
Company Western Minerals Ltd. Well Name Chance No. 1 Sample No. 1

Formation - Depth - Sampled From DST # 19

Location - Field Wildcat Province Yukon Territory

Date Sampled - Date Analyzed Sept. 22, 1959 Engineer TW.

Constituents	*Constituents*	Meq/L	ppm	*Constituents*	Meq/L	ppm
1. Total Solids 22,960 ppm	6. Sodium	309	7,107	11. Chloride	160	5,680
2. pH 7.80	7. Calcium	2	48	12. Bicarbonate	163	9,979
3. Sp. gr 1.0170 @ 60 °F.	8. Magnesium	12	146	13. Sulfate	-	Absent
4. Resistivity 0.40 @ 74 °F. ohms/M²M	9. Iron	-	Absent	14. Carbonate	-	Absent
5. Hydrogen Sulfide Present	10. Barium	-	Absent	15. Hydroxide	-	Absent



Scale - Meq. per litre

HYPOTHETICAL COMBINATIONS

Constituent	ppm	*Constituent*	ppm
1. Calcium Chloride	133	4. Sodium Chloride	18,076
2. Magnesium Bicarbonate	11,945	5. Sodium Sulfate	-
3. Magnesium Chloride	-		

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

Edmonton — Fort St. John — Calgary

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WATER ANALYSIS REPORT

Field ..... Well No. Western Minerals Limited Chance #1.

Operator Western Minerals Limited ..... Date Received March 2, 1960.

Formation ..... Depths .....

Other pertinent data D.S.T. #37.

Date March 10, 1960. Lab. No. C-2737

PARTS PER MILLION (MILLIGRAMS PER LITER)

Na & K	Ca	Mg	Fe	SO_4	Cl	CO_3	HCO_3	OH	H_2S
9,009	86	16	---	153	7,500		11,150		Present

MILLIGRAM EQUIVALENTS

391.93	4.29	1.32		3.18	211.50		182.86		

MILLIGRAM EQUIVALENTS IN PERCENT

49.29	0.54	0.17		0.40	26.60		23.00		

Total Solids in Parts per Million

By evaporation	27,500
After ignition	18,270
Calculated	22,255
Specific Gravity	1.018
Observed pH	8.0
Resistivity	0.432 ohm meters @ 68° F.

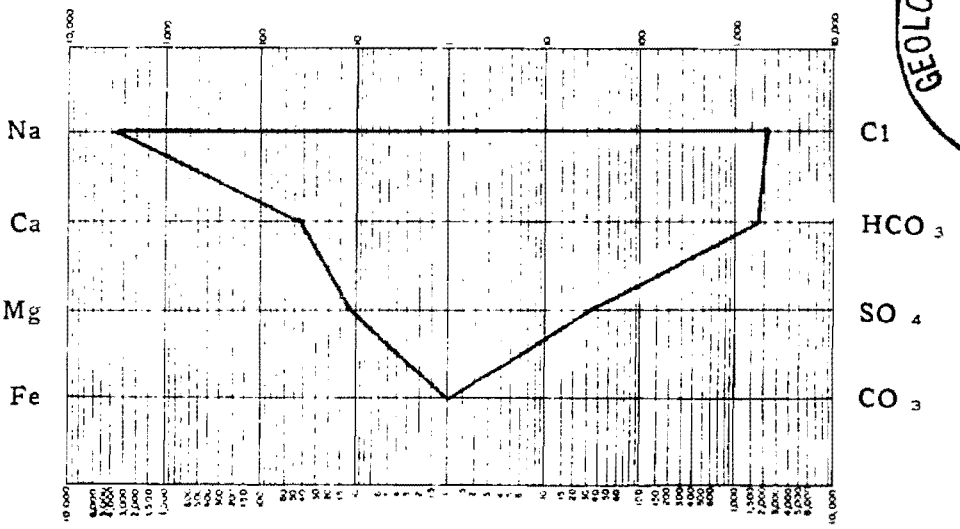
Properties of Reaction in Percent

Primary salinity	54.00
Secondary salinity	---
Primary alkalinity	44.58
Secondary alkalinity	1.42
Chloride salinity	98.52
Sulfate salinity	1.48

Remarks and conclusions .....

Milligram equivalents multiplied by 10 on the graph.

LOGARITHMIC PATTERN
MEQ per unit



FORM "E"

C A N A D A

DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES

NORTHERN ADMINISTRATION BRANCH

RESOURCES DIVISION

PRODUCTION TEST REPORT

Date . . September 13th . . 19 60 . .

Name of well . . Western Minerals Chance No. 1 . . .

Classification of well #Suspended Oil Well . . Permit or Lease No. . N.A. . . . .

Owners name . . Peel Plateau Exploration Ltd. . . . .

Operators name . . Western Minerals Ltd. . . . .

Location Eagle Plains - Yukon . . . . N.Lat. 66° 7' 12" . . W.Long. 137° 31' 12"

Survey description, if available . . . Not as yet surveyed . . . . .

Field Name . . . N.A. . . . . District name Eagle Block - Yukon

Spudded . . May 30th, 1959 . . . . . completed Suspended - May 30th/60 . . . Elevation, -

Ground . . 1732' . . . .

K.B. . . 1769' . . . .

CASING AND TUBING RECORD

	Size	Weight	Grade	Amount Set at	Sacks Cement	Calculated top of cement	Measured top of cement
1	18"	48	H-40	157'	200	Surface	Surface
2	13-3/8"	54.5	J-55	2001'	1260	Surface	Surface
3	9-5/8"	40 & 36	J-55	5101'	450	3600'	2550'
4							
5							

Name of productive zone . . Carboniferous . . . .

Formation . . Sandstone . . . .

Depths: Top of formation . . 4033' . . . Gas/oil Interface . . 4325' - 4330' (by log)

Bottom of formation . . 5210' . . . Oil/water " . . 4405' - 4433' (by log)

Top of producing zone . . 4259' . . . Gas/water " . . N.A. . . .

Bottom of producing zone 4371' . . . " . . N.A. . . .

Total depth . . . 8618' . . . Present depth Plugged back to 5037' . .

e.g. producing oilwell, suspended gaswell, etc.

Method of producing . . Swab tests through tubing and drill pipe . . . . . .

Gravity of Oil at 60/60°F. . . . . 29.30° - 29.38° . . . . . .Gravity of Gas 0.569 - 0.758 .

PRODUCTION DATA

Date	No. of hrs. on Prod.	Oil Prod'd Barrels	Water Prod'n % cut Barrels	Gas Prod'n MCF	GOR cfpb	Choke size
....	. . . . .	. . . . .	. . . . .	. . . . .	. . .	. . . .
. . .	. . . . .	(See Attached Sheet on 'Production Data')				. . . .
. . .	. . . . .	. . . . .	. . . . .	. . . . .	. . .	. . . .
. . .	. . . . .	. . . . .	. . . . .	. . . . .	. . .	. . . .
. . .	. . . . .	. . . . .	. . . . .	. . . . .	. . .	. . . .
. . .	. . . . .	. . . . .	. . . . .	. . . . .	. . .	. . . .
. . .	. . . . .	. . . . .	. . . . .	. . . . .	. . .	. . . .

PRESSURE DATA

Date	Reservoir Press psig	Reservoir Depth feet	Wellhead Pressures Tubing psig	Wellhead Pressures Casing psig	Choke Size	Separator Pressure psig	Separator Temp °F.
June 14/60	1900	4369-70	220/220	0	1/8"	N.A.	N.A.
June 15/60	1900	4369-70	0/20	0	1/2"	N.A.	N.A.
June 20/60	1900	4364-65	250/275	0	1/8"	N.A.	N.A.
June 20/60	1900	4364-65	520/535	0	11/64"	N.A.	N.A.
June 23/60	1900	4353-59	700/820	0	11/64"	N.A.	N.A.
June 23/60	1900	4353-59	800/850	0	11/64"	N.A.	N.A.
July 31/60	1900	4371-72	25/125	0	1/2"	N.A.	N.A.
Aug. 1/60	1900	4371-72	50/75	0	1/8"	N.A.	N.A.

GAS MEASUREMENT DATA (Flange or Tap)

Date	Orifice Plate size	Meter-Run Pressures (Psig) Static	Meter-Run Pressures (Psig) Differential	Meter-Run Temp. °F. (Ave.)	Remarks
. . . .	. . . .	. . . . .	. . . . .	. . . . .	. . . . .
. . . .	. . . .	(See Attached Statement)		. . . . .	. . . . .

Estimates of gas produced during the testing program were made. These tests were based, where possible, on 'U' tube readings, using both water and mercury as the differentiating fluid. Therefore, the gas volumes indicated are approximate.

Sampled by . . . . . D. G. Deedman . . . . . .

Samples obtained from . . . . Flow line trap . . . . . .

. . . . . .

Core, oil, gas and water analyses required by Section 70 (2) of the Regulations.

have been forwarded

~~Are attached~~

~~Will be forwarded~~

Remarks . . . . . .

. . . . . .

. . . . . .

. . . . . .

This form is submitted in ~~duplicate~~ triplicate to the Oil Conservation Engineer "in accordance with Sections 71 and 72 of the Regulations.

Signed by . . W. G. Campbell . . . . . .
W. G. Campbell

Title . . . . Project Manager . . . . . .

Company . . . Western Minerals Ltd. . . . . .

Date . . . . September 13th, 1960 . . . . .

PRODUCTION DATA

Date	Perforated Zone Tested	Hours on Production	Oil Produced Bbls.	Water Production % Cut	Water Production Bbls.	Gas Mcf/Day	Gor Cfpb	Choke Size
STAGE I								
June 8th/60	4361-65 & 4369-70	Perforated simultaneously with 5 shots in each zone.						
June 9th/60	4362-70	Testing. Packer set too low and covering perforations.						
June 10-11/60	4362-70	12-1/2	53	7	4	20-30 Est.*	200-300	1/4" & 1/2"
June 11-13/60	4361-65	46	235	-	-	20-30 Est.*	150-225	1",1/2",1/4"
June 14th/60	4369-70	15	52	19	12	20-30 Est.*	200-300	1/4"
June 15-17/60	4369-70	34-3/4	143	7	10-1/2	20-30 Est.*	200-300	1/2" & 1/4"
June 17th/60	4369-70	5	6	25	2	20-30 Est.*	650-1000	1/4"
June 18th/60	4369-70	Testing to flare pit. Oil and Water.						
June 19th/60	4361-65	Testing to flare pit. Oil and Water.						
June 20th/60	4361-65	4-1/4	21.12	28	8.23	20-30 Est.*	170-250	1/4"
June 20th/60	4361-65	6-1/4	20.5	23	6.2	20-30 Est.*	200-300	11/64"
June 20th/60	4361-65	3-1/4	20.1	24	6.2	20-30 Est.*	130-200	1/4"
June 21st/60	4361-65	3-1/4	21.8	18	4.8	20-30 Est.*	120-200	1/4"
June 21st/60	4361-65	2	11.7	18	2.56	20-30 Est.*	150-225	1/4"
June 22-23/60	4358-59	5-3/4	21.24	20	5.31	2000-5000	24,000-60,000	11/64"

Date	Perforated Zone Tested	Hours on Production	Oil Produced Bbls.	Water Production % Cut	Water Production Bbls.	Gas Mcf/Day	Gor Cfpb	Choke Size
June 23rd/60	4358-59	5-3/4	20.77	19	5.19	2000-5000	24,000-60,000	11/64"
June 23-24/60	4358-59	5	20.9	23	6.2	2000-5000	24,000-60,000	14/64"
June 24th/60	4358-59	6	21.1	12	2.85	2000-5000	24,000-60,000	14/64"
June 25th/60	4364-65 & 4369-70	Testing to flare pit. Gas and Water (Salt)						
June 26-27/60	4358-59 & 4364-65	12	11.4	53	12.8	Gas produced from Gas Cap channeling behind casing.		1/8" & 10/64"
June 27th/60	4380-81	Perforated with 4 shots.						
June 28th/60		Set packer at 4376' and found there was communication behind casing between perforations at 4380-81', and perforations at 4369-70', 4364-65', 4350-59'.						
June 29th/60		Cement squeezed all perforations.						

STAGE II

June 29th - July 2nd/60		Waiting on cement.
July 2nd/60	4364-65	Perforated with 4 shots. Recovered 1500-1700' clean oil and 300' oil cut mud in tubing after waiting 12 hours.
July 3rd/60	4364-65	Testing to flare pit. Packer not seating properly. No fluid.
July 4th/60	4360-1/2 & 4362-1/2	Perforated with 9 shots. Testing, but packer not seating properly. No fluid.

Date	Perforated Zone Tested	Hours on Production	Oil Produced Bbls.	Water Production % Cut Bbls.	Gas Mcf/Day	Gor Cfpb	Choke Size
July 5th/60	4360-1/2 - 4362-1/2 & 4364-65	Testing to flare pit. Recovered gas and oil cut mud. Gas T.S.T.M.					
July 5th/60	4360-1/2 - 4362-1/2 & 4364-65	Acidized.					
July 5-8/60	4360-1/2 - 4362-1/2 & 4364-65	Testing to flare pit. Recovered gas with small amounts of fresh water (Spent acid).					
July 8-10/60	4364-65 & 4360-1/2 - 4362-1/2	47-1/2	3 (Distillate)	- -	Gas produced from gas cap channeling behind casing. Estimates 3-5 mmcf/day.		11/64", 13/64" & 1/8"
July 11th/60		Circulating.					
July 12th/60	4360-1/2 - 4362-1/2 & 4364-65	Cement squeezed. W.O.C.					
STAGE III							
July 13-15/60		W.O.C. & W.O.O.					
July 16th/60	4332-33	Perforated.					
July 16-17/60	4332-33	Swabbing to flare pit. Traces of gas and distillate.					
July 17th/60	4332-33	Testing to flare pit. Gas and distillate. Swabbing to test tank. Collected 1.6 barrels distillate in 9 hours. Acidized. Gas 10-20 Mmcf/Day.					

Date	Perforated Zone Tested	Hours on Production	Oil Produced Bbls.	Water Production % Cut Bbls.	Gas Mcf/Day	Gor Cf/b	Choke Size
July 18th/60	4332-33	Cement squeezed.					
July 19-20/60		W.O.C.					
July 20th/60	4340-41	Perforated with 4 shots.					
July 20-21/60	4340-41	Testing to flare pit. Gas and distillate. Gas T.S.T.M.					
July 22nd/60	4340-41	Swabbing to test tank. Collected 1.75 barrels distillate in 3 hours. Gas T.S.T.M.					
July 23rd/60	4346-47	Perforated with 4 shots. Recovering 1/2 barrel fluid (fresh ruddy water) per hour on swab. Gas T.S.T.M.					
July 24th/60	4346-47	Acidized. Testing to flare pit. Recovering 1-1/2 to 3 barrels fluid per pull on swab. Fresh water and gas. Estimated 25-50 mcf/day.					
July 25th/60	4346-47	Testing to flare pit. Recovering 1 to 2 barrels fluid per pull. Water (spent acid).					
July 26-27/60		Circulating.					
July 27th/60	4340-41 & 4346-47	Acidized. Communication between 4332-33' and 4346-47' established.					
July 28th/60	4332-33 & 4340-41 & 4346-47	Cement squeezed.					
STAGE IV							
July 29th/60		W.O.C.					

Date	Perforated Zone Tested	Hours on Production	Oil Produced Bbls.	Water Production % Cut	Water Production Bbls.	Gas Mcf/Day	Gor Cf/b	Choke Size
July 30th/60	4371-72	Perforated with 4 shots. Testing to flare pit. Tubing unloaded 2 to 3 barrels fluid (oil) every 2 to 2-1/2 hours. Trace of sediment and oil cut mud.						
July 31st/60	4371-72	8	22.9	0.4	0.1	20-30 Est.*	250-350	1/2", 26/64" & 1/4"
July 31st - Aug. 3rd/60	4371-72	60	166.6	-	-	20-30 Est.*	250-350	1/2"

* Solution Gas

9/13/60
tfh