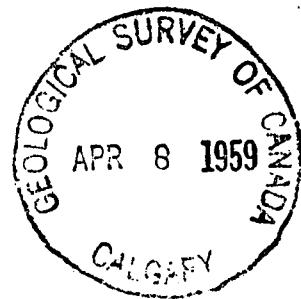


EAGLE PLAIN

1



WESTERN MINERALS LTD.

March 26 1959

WESTERN MINERALS LTD.

MICHAEL BUILDING

CALGARY, ALBERTA

TELEPHONE AMHERST 9-6941

December 12, 1958

The Officers & Directors,
Peel Plateau Exploration Ltd.,
1001 Federal Building,
85 Richmond Street,
Toronto, Ontario.



Gentlemen:

During this last year, Eagle Plains No.1 in the Yukon Territory was deepened to a depth of 9,589 ft. at which point the well was suspended.

Supplementary reports discussing this deepening have been added to the original Stratigraphic Test Hole Report. Additional remarks regarding geological information, is supplied by Mr. E.H. Vallat in his supplement. The operational aspects of the deepening is dealt with by an addenda added by W.G. Campbell. All pertinent data with respect to the deepening of the well, has been added to the original report.

Additional prints of new logs run in the hole are contained in a separate package and include an Electric Log, Micro Log, and a Radio Active Log.

Respectively submitted,

WESTERN MINERALS LTD.

W.G. Campbell

W.G. CAMPBELL.
Operations Manager.

GEOLOGICAL SURVEY OF CANADA
406- CUSTOMS BUILDING
CALGARY, ALBERTA

E. H. VALLAT LTD.

8 MICHAEL BUILDING
3RD STREET WEST AT 9TH AVENUE
CALGARY, ALTA.

GEOLOGICAL SURVEY OF CANADA
406 CUMMING ST.
CALGARY, ALBERTA

December 4th 1957

Officers and Directors, Peel Plateau Exploration Ltd.
1001 Federal Building,
85 Richmond Street West,
TORONTO, Ontario.

Gentlemen:

The attached reports are assembled to provide complete comprehensive records of drilling stratigraphic test hole Eagle Plains No. 1, Yukon Territory.

This location is approximately 200 air miles north of Dawson City, by tractor train trail it was approximately 300 miles. A number of special operational problems due to location and terrain character had to be overcome. Transportation of heavy supplies and equipment constituted the most costly and troublesome phase of the operations. A discussion of these phases is provided by W.G. Campbell. Significant exploratory information obtained in this drilling test is summarized by E.H. Vallat.

A separate package contains prints of logs run by Schlumberger of Canada, which are an essential part of the presentation:

Electric Log,
Micro Log,
Radio Activity Log,
Temperature Surveys.

Respectfully submitted,

E.H. Vallat

EMV.r

P E E L P L A T E A U E X P L O R A T I O N L T D

Report
on
Stratigraphic Test Hole

GEOLOGICAL SURVEY OF CANADA
406- CUSTOMS BUILDING
CALGARY, ALBERTA

E A G L E P L A I N S N o . 1

Y U K O N T E R R I T O R Y

1956 - 1957

and

1958

E. H. Vallat Ltd. - - - - Consultant
W. G. Campbell - - - - Operations Manager
Wm. F. Wuest - - - - Wellsite Control

PEEL PLATEAU EXPLORATION LTD.

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Letter of Transmittal - by E. H. Vallat
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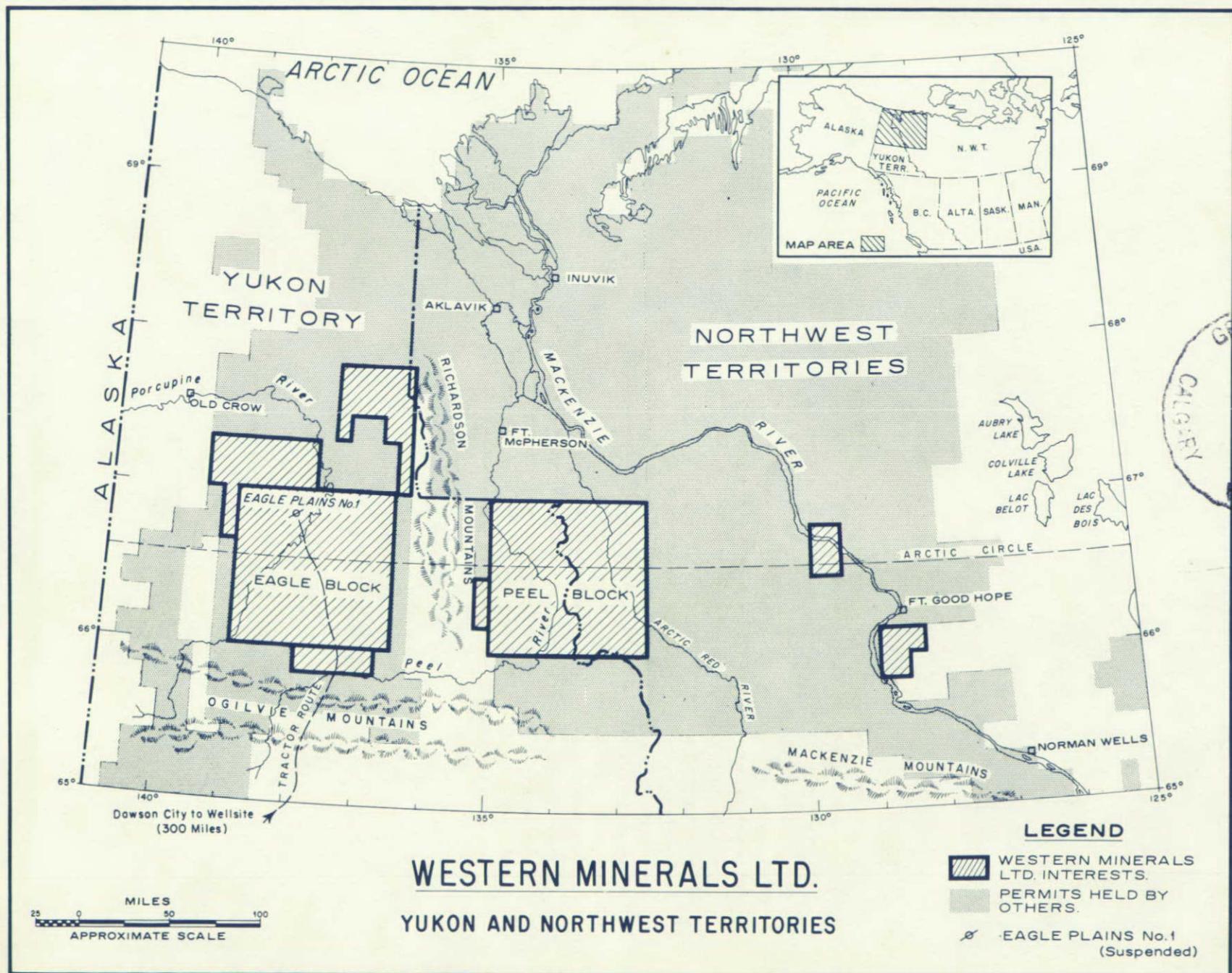
In Pocket:

Well History Log
Deviation Survey Map
Cross Sections (2)
Survey Plat, Well Location

Accompanying Package:

| | |
|-------------------------------|--|
| Electric Log to | 8730 ft. |
| Micro Log to | 8730 ft. |
| Gamma Ray-Neutron Log to | 8730 ft. |
| Temperature Logs to | 598 ft. May 2nd 1957 905 ft. May 10th 1957 4000 ft. June 22nd 1957 |

GEOLOGICAL SURVEY OF CANADA
406-CUSTOMS BUILDING
CALGARY, ALBERTA



E. H. VALLAT LTD.

B MICHAEL BUILDING
3RD STREET WEST AT 9TH AVENUE
CALGARY, ALTA.

GEOLOGICAL SURVEY OF CANADA
406-CUSTOMS FUNDING
CALGARY, ALBERTA

EXPLORATION SUMMARY - EAGLE PLAINS NO. 1

The stratigraphic test hole, Eagle Plains No. 1, $138^{\circ}8'30'' - 66^{\circ}48'54''$, Yukon Territory, in drilling completed during the period April to October 1957, contributed the following significant exploratory data:

- (1) It proved the presence of gas in minor amounts in Cretaceous sandstones and shales and in Devonian carbonates. Minor evidence of oil staining was noted in the Devonian sequence. Drill stem tests proved these hydro carbons did not exist in producible amounts, a sample of the gas showed it to be predominantly methane.
- (2) It showed some limited reservoir capacity in Cretaceous shales and excellent reservoir capacity, at intervals, in carbonate rocks of Devonian, Silurian and Ordovician (?) ages.
- (3) Position of stratigraphic contacts encountered in the hole proved the existence of a large structural feature as indicated by photogeologic interpretation, regional geologic control and finally by gravity and seismic results. A structural high with several thousand feet of relief is indicated well out in the geologic basin constituting Eagle Plains. Comparison of geologic cross sections, revised by Wm. F. Wuest, included in this volume with those presented in 1956 by B.R. Pelletier provide further information showing the uplift to be of greater magnitude than earlier interpretations suggested. The placing of stratigraphic contacts is based on reports by Dr. C.R. Stelck, copies of which are also included herein.
- (4) The stratigraphic sequence consisting of Cretaceous, Devonian, Silurian and upper members of Ordovician (?) was examined and evaluated. This is best illustrated on the combined electric and lithologic log by Wm. F. Wuest that is in the pocket of this report. A particular carbonate rock member found present in

outcrop in upper part of Silurian sequence was not specifically identified, although all evidence indicates its equivalent was penetrated. This had been tentatively selected as the lowest member with potentially promising reservoir characteristics that Eagle Plains No. 1 might evaluate in the course of its drilling. Conclusive proof was provided that Mississippian age rocks were not present at this location. Overall consideration of stratigraphic control suggests that even though local evidence of faulting in cores was indicated, there is no significant repetition of section such as would occur with the thrust faulting expected as a result of the geophysical interpretation. This matter is further discussed in the reports by Dr. C.R. Stelck.

It is this writer's opinion that Eagle Plains No. 1 constituted an adequate test at this location. Possibilities for productive oil and gas zones in the normal stratigraphic sequence below the bottom of the hole do exist, but they are somewhat nebulous. Structural interpretation of gravity and seismic data, particularly the latter, leads to the prediction that further drilling would encounter thrust faulting of considerable displacement.

Drilling into the underlying fault block might provide partial evaluation of structural conditions controlled by an older system of faulting which, as suggested by J.A. Legge in his Geophysical Interpretation Report of 1956, could be governed by an earlier period of hydro carbon migration and accumulation. Estimating the depth to which this suspended hole would have to be carried to adequately accomplish such an objective is difficult, but based on control now available it would appear likely that the upper part of Devonian might not be encountered again above 12,000 ft.

No recommendation is made at this time as to whether such a deepening project should be attempted. Operational costs might well be the controlling factor in such an undertaking.

L.T. Vallat

December 2nd 1957

E. H. VALLAT LTD
8 MICHAEL BUILDING
3RD STREET WEST AT 9TH AVENUE
CALGARY, ALTA.

GEOLOGICAL SURVEY OF CANADA
406, CUSTOMS BUILDING
CALGARY, ALBERTA

EXPLORATION SUPPLEMENT1958 DRILLING - EAGLE PLAINS NO.1

The stratigraphic test hole, Eagle Plains No.1, Yukon Territory, was deepened from 8,409 to 9,589 feet in the period from May 28th to July 15th, 1958. The project is now suspended with a fish in the hole up to 8,735 feet. Details on these operations are covered in the supplement to the 1957 report.

When drilling was suspended in 1957, the hole was bottomed in limestone, identified by Dr. C. R. Stelck as Upper Ordovician in age.

In the 1958 deepening operation, little fossil evidence was noted in the cuttings but a Streptelasma form considered to be Upper Ordovician age, was found in the core taken from 9,079 to 9,102 feet. The lower part of this core and the core, 9,327 to 9,343 feet, had lithologic characteristics that led Dr. Stelck to correlate this interval with a breccia found at the whirlpool in Peel River Canyon. This breccia is a sedimentary breccia as distinguished from a fault breccia, and on the basis of recent field evidence is known to separate Upper Ordovician from Middle Ordovician. Assuming this correlation is correct, it suggests that a facies change occurs from non-porous, shaly rock cropping out in the Peel Canyon locality, to a limestone series in Eagle Plains No.1 which has potential reservoir capacity as indicated in the drillstem test recovery of salt water from 8,897 to 9,102.

The increase in deviation from about 6° to 12° that occurred at 9,220 feet, might be inferred to be due to steeper dips in the strata. It is possible that the steeper dips could be associated with or influenced by a fault zone, although no conclusive data to substantiate this became available. It has previously been pointed out that a thrust fault of some magnitude was thought to exist at depth below the Eagle Plains No.1 location, and that oil and gas might accumulate across this fault. However, control is insufficient to support this suggestion as anything more than a hope.

Geologically, Eagle Plains No.1 constitutes an adequate test of a reasonably normal, if incomplete, stratigraphic sequence found at the location as far down as Middle Ordovician age rocks. The deepening job did not contribute materially pertinent information but has certainly opened possibilities of interpretation as mentioned.

GEOLOGICAL SURVEY OF CANADA
406- CUSTOS TULUS
CALGARY, ALBERTA

OPERATIONAL AND DRILLING SUMMARY

Operations commenced actively in September of 1956 and continued steadily until October of 1957, at which time Eagle Plains No. 1 was suspended.

During this period of approximately one year a National 55 drilling rig was purchased, moved to a location just east of Edmonton where a "shakedown" well was drilled; 2,600 tons of drilling supplies and equipment was gathered and shipped by truck from Edmonton, by boat and train from Vancouver, to Whitehorse and thence all by truck to Piat Creek, 35 miles west of Dawson City, Yukon Territory, transferred to sleighs and freighted by cat train over 300 miles of winter trails to a well location 12 miles inside the Arctic Circle in the Yukon Territory. The rig was erected, the well spudded in and drilled to a depth of 8409 ft., at which point it was suspended.

Generally speaking the complete operation ran smoothly from beginning to end, but not without problems being encountered.

Transportation was organized and planned to meet the seasons in which the ice bridges over rivers between Dawson and Whitehorse were available and in which trails through the Ogilvie Mountains and across the Peel and Porcupine Rivers could be constructed. Freighting over these trails is curtailed by the event of breakup occurring, usually in April. Under the capable management of H. Gritzuk, all supplies and equipment was successfully freighted from Piat Creek to the wellsite. Using equipment purchased by Peel Exploration Ltd., consisting of International Harvester TD 24 crawlers and heavy sleighs, made up into two separate operating units, seven round trips of freighting were required to complete the operation.

During this period the camp at the drill site was established, piling holes were drilled and pilings set on which the rig was eventually erected. On completion of the freighting operation, Parker drill crews were brought in to rig up the drilling equipment and to set the conductor pipe. On April 17th Eagle Plains No. 1 was spudded in.

Pilings of 10" diameter and averaging 18 ft. in length were placed beneath the rig proper. 12-1/4" holes were first drilled, using the G.S.I. seismic rig, and water was used to remove the bit cuttings. The pilings were subsequently frozen in these holes. It was proved later that these piles were

most successful in that the rig did not settle, in spite of the softening of the surface to a depth of 3 to 4 ft. during the warm season.

30 ft. of double walled 20" I.D. conductor pipe was set before actual drilling got underway. Dry drilling, using a "rat hole digger", was employed to make the conductor pipe hole. The conductor pipe was then cemented around the outside for the full length of 30 ft. However, drilling surface hole below the conductor pipe was hampered considerably in that the conductor pipe had to be recemented four times before the surface hole was completed at 1007 ft. A change in the method of setting the conductor pipe is, therefore, required in future drilling.

Generally speaking, the drilling operation was carried out in a successful and satisfactory manner. Initially drilling was very hard and slow, but with depth the rate of penetration increased. However, care had to be taken in keeping the hole straight and, where deviation seemed to be increasing, the rate of penetration was reduced to keep deviation to a minimum. The average daily footage drilled was approximately 50 ft. but previous to encountering a lost circulation section at approximately 1500 ft. the daily drilling rate averaged near 60 ft. and this figure may be considered as a more normal average for a well drilled in the various rock formations encountered at Eagle Plains No. 1.

Lost circulation proved to be the most problematical from the drilling point of view; because of it, our drilling mud and lost circulation supplies were soon depleted and quantities of these items were flown in, at great cost, enabling the well to continue down to 8409 ft. At this point, having again run out of these materials and because freezeup occurred and, therefore, the use of fixed wing aircraft not being possible, it was felt more economical to suspend the well until such time as drilling supplies could be taken in by cat trains.

The well was therefore suspended, the drilling rig left intact and completely winterized. The actual suspension program was so designed and carried out that it is possible to reopen the hole and drill to greater depth or, without additional work, to leave it as abandoned.

It was found that perma frost was indicated down to a depth of 1500 ft. and that this perma frost obviously affected the cement bond around the surface casing. The surface casing was set at 1007 ft. but in drilling past the bottom of the casing the perma frost, because of the warm drilling fluids, came out

of the formation and the hole was thus enlarged. In effect, the surface casing thereby became unanchored and insecure at the bottom and it was, therefore, necessary to set an intermediate string of 9-5/8" casing, bottomed at 2510 ft. It is felt, therefore, that for future drilling operations consideration should be given to set surface casing to a depth of at least 2,000 ft.

The condition of the hole was at all times good, although some sloughing did occur within a perma frost section. Only during the last few weeks of drilling, when mud conditions were poor, did any trouble occur with regard to stuck drill pipe or tools. In one case only was it necessary to use "jars" to break loose a packer.

Some difficulties did occur initially with our heavy drill collars, and a failure of these was attributed for the most part to faulty use, rather than to physical failure. Three drill collars require repair before being used again.

The drilling rig motors, pumps and all various component parts operated most efficiently. Approximately half of the spare parts taken in for repairs and maintenance were used. The rig motors and pumps are in good enough shape to easily drill another deep test without a major overhaul. Some replacements and additions will be required for a second well, or for deepening the present well, but these will be for the most part of minor nature. However, supplies such as mud, cement and lost circulation materials will be required in greater amounts than had been used for Eagle Plains No. 1.

Fuel consumption averaged 730 gallons of diesel fuel per day. This average was lower than we had calculated, but the drilling did occur during the warmer months of the year and the boilers were used sparingly. If drilling were to occur during the extreme low temperature periods of winter, fuel consumption could be expected to be 1,000 gallons per day, or higher. It is expected that approximately 20,000 gallons of diesel fuel will be left in storage at Eagle Plains Camp.

Water supply was easily obtained during the summer months by pipeline and pump from a stream 2,300 yards distant. Previous reports mentioned successful use of dams during the run-off at breakup. In the late fall (last of September/early October) a pit was dug out of the perma frost at the campsite, using a TD 24 equipped with a blade and an attached ice point. The pit, when filled with water, held perfectly and a reservoir sufficient in volume to supply water for the rig and camp for 3 - 4 weeks was made available. It was intended to use this

water if drilling was to be continued through ~~brea~~^{breast} and into the winter months.

Summer transportation of drill supplies, camp supplies and personnel became problematical because of the rough terrain that developed between the wellsite and the landing lake 6 miles away. The terrain became extremely rough and wet and was impassable during the months of August and September. Even the bombardiers could not cross the ground and the use of a helicopter was found not only convenient, but most economical in shuttling equipment from Eagle Plains Camp to the rig.

Camp facilities were quite adequate and comfortable; no complaints were received from any of the permanent employees. The cooking staff can be highly recommended for their job well done. Some consideration may be given for increased recreational facilities in future camps, for during the summer months it is not possible to leave the camp area even for short distances, because of the extremely wet conditions under foot.

The drill crews completed two, three-month work periods. Only 3 men of this group quit their work before the well was suspended. The toolpush of the rig was replaced during the month of July and his replacement proved to be satisfactory and remained until operations ceased. All drill crew members expressed desire to return if operations were to continue in the future. The supporting labour gang including the work force, cooks, radio operators and clerks numbered roughly 10 men and, therefore, the average total of permanent camp personnel was 25 men. At times, due to specialised work such as electro-logging, cementing being required, plus personnel of associated operations such as gravimeter crews and helicopter crews, the number of men in camp reached a figure as high as 35 to 40.

It is felt that more field supervision is required on the senior level. Drilling will probably be continued on a labour contract and common labour employed from local sources, resulting in two groups of men working for different employers. It was found that under such conditions unless a senior supervisor was present to whom both parties were responsible, the coordination of the work tends to fall apart and the labour force in particular becomes disorganized. Certain limited action has been taken in this respect in that serious consideration is being given to obtaining senior supervision in the field when the next well is drilled.

7.

GEOLOGICAL SURVEY OF CANADA
406- CUSTODIAN OF RECORDS
CALIFORNIA

Due to the fact that any operation in the Yukon is dependent upon good communications and transportation facilities weather, therefore, becomes a very significant factor. Our experience shows that when planning projects a normal year's program usually requires approximately two seasons to complete, when applied to northern operations.

W.G. Campbell
W.G. Campbell.

December 5th 1957

APPENDIX A

DEEPENING OF EAGLE PLAINS NO.1

After the decision was made to deepen Eagle Plains No.1, materials and supplies were ordered and assembled in preparation for freighting by the tractor trains which would operate during the months of February and March of 1958. Additional fuels, drilling muds, sanddust, cement, drill pipe, casing, tubing and other items were assembled, sufficient to take the hole down an additional 2,000 feet if it were so required. Approximately 500 tons of new supplies were freighted into the Eagle Plains No.1 wellsite.

Camp facilities were cut to a bare minimum as at this time seismic operations were also being contemplated requiring some of the equipment used at the wellsites. Four new cabooses were constructed at Flat Creek to support both operations.

A change in supervision in the field was adopted, and a senior field supervisor with broad experience in drilling was employed to supervise all operations conducted in the field. This move was made as a result of the recommendations made with regard to supervision after the 1957 season of operations. Mr. F.H. Allen was employed to fill this position; and all field personnel, including Parker Drilling, Camp and Dawson offices were placed under his jurisdiction.

Reconditioning of the Eagle Plains No.1 hole and the drilling out of the bridging plug set the previous year, commenced on May 28, 1958. By June 12th, drilling had reached the depth of 9,589 feet, at which point the well was suspended. Up to this time the drilling rate averaged 74 feet a day, representing an increase over the previous year of 15 to 20 feet a day. Suspension of the well was brought about by the loss in the hole of some 854 feet of "fish." The suspension program was completed on July 16th.

On June 12th, while taking the first foot of core, the core head and core barrels became stuck at the bottom of the hole. Fishing operations continued for 3½ weeks, at which time the wash-over pipe itself became stuck over the "fish." With the limited amount of equipment at the wellsites it was felt impossible to continue operations, and the well was suspended. The top of the fish was left at 8,735 feet and consisted of the following:

- 1 Coring head
- 2 20-ft. inner and outer core barrels
- 13 6" drill collars
- 1 Set of jars and subs
- 9 Joints of 3½" drill pipe,
All totalling 854 feet

In the process of deepening the well, our 4½" drill pipe failed during two different situations. After the last cement

plug had been drilled out but before actual deepening of the hole commenced, 7 drillstem at the bottom of the drill string exhibited a failure of such a nature as to suspect hydrostatic collapse of the drill pipe. However, at the depth of 3,400 feet, hydrostatic pressure should not be sufficient to collapse Grade "E" 18.1-pound drill pipe. A cross-section of the drillstem showed very little surface wear on either the inner or outer surfaces, and no defect in the steel was apparent. After a further investigation and inquiry, no specific cause for the failure of the drill pipe could be found. One reasonable theory is that some foreign body was lodged outside the drill pipe in the hole at the point of failure. Pressure exerted against the side of the drillstem, caused by the foreign body being squeezed against the side of the hole when pulling out with the drill pipe, may have caused this failure. It is impossible to determine if such did actually occur.

On another occasion, during the time of fishing operations, considerable tensile force was exerted on the pipe, and on three separate occasions tool joints failed at the point of the last engaged thread. The drill pipe which was included in the original inventory of the rig at the time of purchase, was fitted with old type, single seal, threaded tool joints. This old type of tool joint has exhibited, in the past, fatigue failure at the last engaged thread when drilling in crooked hole. Similar failures may occur with our present tool joints if we continue to use them where crooked hole conditions exist.

Other than the drill pipe, all rig components proved very satisfactory in operation. It is not anticipated that any major overhauls or repairs will be required if further drilling is undertaken. It is doubtful from a technical point of view if Eagle Plains No.1 should be deepened again, however, there is no reason to be anything but confident in the ability of our present drilling equipment to drill further holes to equivalent depths.

It is worth noting that the pilings placed beneath the rig in 1957 held absolutely firm during the two drilling seasons. Although surface conditions around and under the rig became extremely soft during the summer months, no settlement of the rig itself was observed.

The rig mast was lowered and as much as possible was done to dismantle the rest of the equipment in such a manner as to make it readily movable from the well location, but without removing any of the main component parts from the matting.

No change in the basic planning or techniques would be recommended at this time for future drilling operations.

W.G. Campbell
W. G. Campbell

December 9th, 1958

SUMMARY OF WELL DATA**General Data:**Company Peel Plateau Exploration Ltd.Well Eagle Plains No. 1 Field Stratigraphic Test HoleLocation: Lsd. Section Twp. RangeCo-ordinates 66° 48' 54" N. 138° 8' 30" W.Elevations: Ground 1457.4 ft. Kelly Bushing 1469.4 ft. (All depths measured from Kelly Bushing)Dates: Spudded April 17th 1957 Finished Drilling Suspended Oct. 6, 1957 at 3409' Commenced drilling again on May 26/58 and suspendedCasing Set 13³/₈" - 1006.72 K.B. Rig Released on July 15, 1958 at 9589'Drilling Contractor 95¹/₈" - 2510.0 K.B.Total Depth 9589 ft. Plugged Back to --- ft.Hole Record: 17¹/₈" inch 0 to 1010 12¹/₈" inch 1010 to 2510
9" inch 2510 to 4002 15¹/₈" inch 4002 to 9589

Producing Horizon

Producing Interval

Initial 24 Hr. Potential: Date Method

Bbls. Oil Choke Size B.S. & W. %

Gas..... Mcf. G.O.R..... Oil Gravity °A.P.I.

Pressures: Casing..... Tubing..... Separator

Casing and Tubing Record:

| Size O.D. | Weight lbs./ft. | Grade | Make | Type | Shoe Depth | Sacks Cement | No. Joints | Thread |
|-------------------------------------|--------------------|-------------|--------------|---------------------|----------------|-----------------|---------------|-------------|
| <u>13³/₈"</u> | <u>54.5</u> | <u>J.8.</u> | <u>Spang</u> | <u>S.T. & C</u> | <u>1006.72</u> | <u>860</u> | <u>34</u> | <u>8 RD</u> |
| <u>95¹/₈"</u> | <u>36</u> | <u>J.55</u> | <u>Spang</u> | <u>S.T. & C</u> | <u>2510</u> | <u>600</u> | <u>78</u> | <u>8 RD</u> |

Perforations:

| INTERVAL | Type of Perforations | No. of Holes | Holes per ft. | Size Holes | PERFORATING COMPANY |
|----------|-------------------------|-----------------|------------------|---------------|--|
| | | | | | GEOLOGICAL SURVEY OF CANADA 406- CUSTOMS BUILDING CALGARY, ALBERTA |

ABANDONMENT SUSPENSION

RECORD

Well Name & No. Eagle Plains No.1

Location Yukon Territory, 138° 8' 30" W, 68° 48' 54" N

| DATE | PLUGS | | No. Sax Cement | Pounds CaCl_2 | REMARKS |
|---|-------|------|-------------------|---------------------------|---|
| | From | To | | | |
| Oct. 3/57 | 8409 | 8309 | 40 | | Commenced Suspension Oct. 3 |
| Oct. 4/57 | 5040 | | 3 | | Cement Plug on McCullough bridge |
| Oct. 4/57 | 4425 | | 3 | | plug Cement Plug on McCullough bridge |
| Oct. 5/57 | 2615 | | 60 | | plug. Cement Plug on McCullough bridge |
| Oct. 6/57 | 200 | | 3 | | plug. Cement Plug on McCullough bridge |
| | | | | | Drilled out above plugs in 1958. |
| | | | | | Drilled to 9589. Lost fish in hole. |
| | | | | | Top of fish 8735 |
| July 13/58 | 8735 | 8685 | 20 | | Bottom hole plug |
| July 14/58 | 5040 | | 3 | | Cement Plug on McCullough bridge |
| July 14/58 | 4425 | | 3 | | plug " " " " |
| July 15/58 | 2560 | 2410 | 60 | | Straddles bottom of 95/8" csg. at 2510 |
| July 15/58 | 1200 | | 3 | | Cement Plug on McCullough bridge |
| | | | | | plug Left modified well head on csg. for purposes of taking pressure and ease of re-entry if desired. |
| GEOLOGICAL SURVEY OF CANADA 406 - CUSTOMS BUILDING CALGARY, ALBERTA | | | | | |

DRILL STEM TEST SUMMARY

Company Peel Plateau Exploration Ltd.

Well Eagle Plains No.1

GEOLOGIC
40 Field Stratigraphic Test Hole

| Test No. | FORMATION TESTED | INTERVAL TESTED | RESULT |
|----------|------------------|-----------------|--|
| 1957 | | | |
| 1 | Ls. | 3580 - 3918 | Misrun |
| 2 | Ls. | 3515 - 3918 | Recovered 200ft. drilling mud |
| 3 | Ls. | 4695 - 4720 | Rec'd. 480' g. mud, 3860' S.W. |
| 4 | Ls. = | 4750 - 4785 | Rec'd. 160' mud, 4235' S.W. |
| 5 | Ls. | 4450 - 4690 | Rec'd. 656' W mud, 1868' M S.W. |
| 6 | Ls. | 4810 - 4950 | Rec'd. 160' mud, 3976' S.W. gassy |
| 7 | Ls. | 6904 - 7040 | Rec'd. 887' M S.W. |
| 8 | Ls. | 6790 - 6904 | Rec'd. 664' S.W. |
| 9 | Ls. | 6246 - 6485 | Rec'd. 1691' S.W.M. |
| 10 | Ls. | 7040 - 7264 | Rec'd. 5561' S.W. |
| 11 | Ls. | 7264 - 7533 | Rec'd. 998' M.S.W. |
| 12 | Ls. & sh. | 7650 - 7688 | Rec'd. 140' W (Fresh) Mud |
| 13 | | | Misrun |
| 14 | Ls. | 7636 - 7696 | Rec'd. 140' Drilling Mud |
| 15 | Sh. & Ls. | 7531 - 7721 | Misrun, tool plugged |
| 16 | Ls. | 7527 - 7721 | Rec'd. 155' Drilling Mud |
| 17 | Ls. | 8338 - 8402 | Rec'd. 796' S... & 572' water cushion |
| 18 | Ls. | | Misrun |
| 19 | Ls. | 4085 - 4423 | Rec'd. 190' mud, V.O. 60 min |
| 1958 | | | |
| 20 | Ls. | 8297 - 9102 | Rec'd. 1764 Salt Water + Water Cushion |
| 21 | Ls. | 9102 - 9343 | Rec'd. 225ft. Drilling Mud |

FORMATION RECORD

Company Reel Plateau Exploration Ltd.,

Well Eagle Plains Mo.1 Field Stratigraphic Test Hole

Formation Information Taken from Sample Descriptions, F & Micro Logs, Stack Report

CORE SUMMARY

Company Peel Plateau Exploration Ltd.

Well Eagle Plains No. 1

GEOLOGICAL SURVEY OF CANADA
406. CUSTOMS BUILDING
EDMONTON, ALBERTA
TYPE OF EQUIPMENT

| Core No. | INTERVAL | Feet Cut | Feet Rec. | % Rec. | TYPE OF EQUIPMENT |
|-------------|-------------|----------|-----------|--------|-------------------|
| <u>1957</u> | | | | | CANADA ALBERTA |
| 1 | 2101 - 2122 | 21 | 21 | 100% | Diamond bit |
| 2 | 3611 - 3658 | 47 | 20 | 42% | Diamond bit |
| 3 | 3659 - 3678 | 20 | 20 | 100% | Diamond bit |
| 4 | 3920 - 3940 | 20 | 20 | 100% | Diamond bit |
| 5 | 4827 - 4847 | 20 | 2 | 10% | Diamond bit |
| 6 | 4891 - 4912 | 21 | 3 | 14% | Diamond bit |
| 7 | 4913 - 4950 | 37 | 2 | 5% | Diamond bit |
| 8 | 5590 - 5600 | 10 | 10 | 100% | Diamond bit |
| 9 | 6047 - 6087 | 40 | 40 | 100% | Diamond bit |
| 10 | 6792 - 6821 | 32 | 32 | 100% | Diamond bit |
| 11 | 7040 - 7048 | 8 | 8 | 100% | Diamond bit |
| 12 | 7048 - 7069 | 21 | 21 | 100% | Diamond bit |
| 13 | 7069 - 7097 | 28 | 28 | 100% | Diamond bit |
| 14 | 7337 - 7377 | 40 | 40 | 100% | Diamond bit |
| 15 | 7678 - 7698 | 10 | 10 | 100% | Diamond bit |
| 16 | 7696 - 7706 | 10 | 8 | 80% | Diamond bit |
| 17 | 7874 - 7906 | 32 | 32 | 100% | Diamond bit |
| <u>1958</u> | | | | | |
| 18 | 9079 - 9102 | 23 | 12 | 52% | Diamond Bit |
| 19 | 9327 - 9343 | 16 | 3 | 20% | Diamond Bit |

DRILL STEM TEST REPORT

Company Peel, Plateau Exploration Ltd. Date June 19/57 Test No. 1
 Well Eagle Plains No.1 Field Stratigraphic Test Hole
 Testing Company United Testers Ltd. Operator Les Whitnack

Hole Data:

13³/₈" " casing to 1,000 ft. Interval tested 3,580 ft. to 3,918 ft.
9⁵/₈" " hole to 2,515 ft. Formation tested Devonian
 " hole to ft. Formation top 3,586

Test Data:

| | | | |
|------------------------------|--------|-------------------|------------------|
| Started in | (a.m.) | Oil to surface | 406 |
| On bottom | (p.m.) | Shut-In | CUSTOMS BUILDING |
| Tool open | | Pulled loose | CALGARY ALBERTA |
| Gas to surface | | Out of hole | |
| Bottom Hole Choke size | inch | Packer size | inches |

Pipe Recovery:

..... ft. oil ft. water ft. mud
 Remarks

Seat Failure**Gas Flow:**

Flow Rate (max.) Mcf./day How Measured

Size Flare Line (I.D.) inches Odor of gas

Remarks

Oil Flow:

Flow Rate Bbls./day How Measured

Gravity °A.P.I. at 60°F. Shake out % water % mud

Remarks

Pressures:**Rec. No. 5:**

I. Shut-in

I. Flow

F. Flow

F. Shut-in

Hyd. Pressure 2,130

Rec. No. 6:

I. Shut-in

I. Flow

F. Flow

F. Shut-in

Hyd. Pressure 2,120

Engineer W. F. Wuest

DRILL STEM TEST REPORT

Peel Plateau Exploration Ltd. Date June 19/57 Test No. 2
 Company Eagle Plains No.1 Stratigraphic Test Hole
 Well United Testers Ltd. Field L. Whitnack
 Testing Company Operator

Hole Data:

| | | | | | | | | |
|------------------|-----------|-------|-----|------------------|----------|--------|-------|-----|
| $1\frac{3}{8}$ " | casing to | 1,006 | ft. | Interval tested | 3,515 | ft. to | 3,910 | ft. |
| $\frac{9}{8}$ " | " hole to | 2,515 | ft. | Formation tested | Devonian | | | |
| | " hole to | | ft. | Formation top | 3,506 | | | |

Test Data:

| | | | | |
|------------------------|-----------|--------|--------|--|
| Started in | 3:50 P.M. | (a.m.) | (p.m.) | GEOLOGICAL SURVEY OF CANADA 406-C CUSTOMS BUILDING CALGARY ALBERTA |
| On bottom | 4:05 P.M. | | | |
| Tool open | | | | |
| Gas to surface | | | | |
| Bottom Hole Choke size | 1/2 | inch | | |

| | | | |
|----------------|--------|-----------|---------|
| Oil to surface | 15 min | ft. water | ft. mud |
| Shut-In | | | |
| Pulled loose | | | |
| Out of hole | | | |
| Packer size | | | inches |

Pipe Recovery:

ft. oil ft. water ft. mud
 Remarks G.I.P. weak blow increasing for 1/2 hour, dying slowly to 0,60 min.
 Seat leaked during Initial Shut in

Gas Flow:

Flow Rate (max.) Mcf./day How Measured
 Size Flare Line (I.D.) inches Odor of gas
 Remarks

Oil Flow:

Flow Rate Bbls./day How Measured
 Gravity °A.P.I. at 60°F. Shake out % water % mud
 Remarks

Pressures:**Rec. No. 5:**

I. Shut-in 2,100
 I. Flow 360
 F. Flow 360
 F. Shut-in 410
 Hyd. Pressure 2,105

Rec. No. 6:

I. Shut-in 1,900
 I. Flow 150
 F. Flow 170
 F. Shut-in 230
 Hyd. Pressure 1,910 to 1,810

Engineer W. F. West

DRILL STEM TEST REPORT

Company Peel Plateau Exploration Ltd. Date July 8 & 9, 1957 Test No. 3
 Well Eagle Plains No.1 Field Stratigraphic Test Hole
 Testing Company United Testers Ltd. Operator L. Whitnack

Hole Data:

" casing to ft. Interval tested 4,695 ft. to 4,720 ft.
 " hole to ft. Formation tested Devonian
 " hole to ft. Formation top 3,586

GEOLOGICAL SURVEY OF CANADA
406- CUSTOMS BUILDING
CALGARY, ALBERTA

Test Data:

| | | |
|----------------------------|----------|------------------------|
| Started in | (a.m.) | Oil to surface |
| ..... | (p.m.) | Shut-In 15 Mins. |
| On bottom 11:50 P.M. | | Pulled loose 1:35 A.M. |
| Tool open 12:05 P.M. | 60 Mins. | Out of hole |
| Gas to surface 15 Mins. | | Packer size |
| Bottom Hole Choke size 1/2 | inch | inches |

Pipe Recovery:

ft. oil 3,860 ft. salt ft. water 480 ft. gassy ft. mud
 Remarks
 G.I.P.

Gas Flow:

Flow Rate (max.) Mcf./day How Measured
 Size Flare Line (I.D.) inches Odor of gas
 Remarks
 G.T.S. 15 Mins. Too small to measure, decreasing

Oil Flow:

Flow Rate Bbls./day How Measured
 Gravity °A.P.I. at 60°F. Shake out % water % mud
 Remarks

Pressures:**Rec. No. 5:**

I. Shut-in 1,910
 I. Flow 1,870
 F. Flow 1,880
 F. Shut-in 2,350
 Hyd. Pressure 2,520 - 2,515

Rec. No. 6:

I. Shut-in 1,950
 I. Flow 1,830
 F. Flow 1,930
 F. Shut-in 1,950
 Hyd. Pressure 2,530 - 2,400

DRILL STEM TEST REPORT

Company Peel Plateau Exploration Ltd. Date July 9 & 10/57 Test No. 4
 Well Eagle Plains No. 1 Field Stratigraphic Test Hole
 Testing Company United Testers Ltd. Operator L. Whitbeck

Hole Data:

" casing to ft. Interval tested 4,750 ft. to 4,784 ft.
 " hole to ft. Formation tested Devonian
 " hole to ft. Formation top 3,586

Test Data:

| | | |
|------------------------------|--------|----------------------|
| Started in | (a.m.) | Oil to surface |
| ..... | (p.m.) | Shut-In |
| On bottom | | Pulled loose |
| Tool open | | Out of hole |
| Gas to surface | | Packer size |
| Bottom Hole Choke size | inch | inches |

Pipe Recovery:

820 ft. muddy salt water
 ft. oil 3415 ft. salt water ft. water 160 ft. mud
 Remarks

Gas Flow:

Flow Rate (max.) Mcf./day How Measured

Size Flare Line (I.D.) inches Odor of gas

Remarks G.T.S. 35 mins. Too small to measure

Oil Flow:

Flow Rate Bbls./day How Measured

Gravity °A.P.I. at 60°F. Shake out % water % mud

Remarks

Pressures:**Rec. No. 5:**

I. Shut-in 1,990
 I. Flow 1,960
 F. Flow 1,930
 F. Shut-in 1,910
 Hyd. Pressure 1,910
 2,420 - 2,350

Rec. No. 6:

I. Shut-in 1,980
 I. Flow 1,940
 F. Flow 1,950
 F. Shut-in 1,940
 Hyd. Pressure 1,940
 2,365 - 2,330

Engineer W. R. Muett

GEOLOGICAL SURVEY OF CANADA
 406- CUSTOMS BUILDING
 CALGARY, ALBERTA

DRILL STEM TEST REPORT

Company Peel Plateau Exploration Ltd. Date July 12/57 Test No. 5
 Well Eagle Plains No.1 Field Stratigraphic Test Hole
 Testing Company United Testers Ltd. Operator L. Whitnack

Hole Data:

" casing to ft. Interval tested 4,450 ft. to 4,690 ft.
 " hole to ft. Formation tested Devonian
 " hole to ft. Formation top 3,586

Test Data:

| | | |
|-----------------------------------|--------|--------------------------------------|
| Started in | (a.m.) | Oil to surface <u>406</u> ft. |
| ..... | (p.m.) | |
| On bottom | | SHUT-IN <u>CUSTOMS BUILDING</u> |
| Tool open <u>60mins. 6:40A.M.</u> | | Pulled loose <u>CALGARY, ALBERTA</u> |
| Gas to surface | | Out of hole |
| Bottom Hole Choke size | inch | Packer size |

GEOLOGICAL SURVEY OF CANADA
106 CUSTOMS BUILDING
CALGARY, ALBERTA

Pipe Recovery:

water
ft. oil 1,868 ft. muddy salt ft. water 656 ft. watery mud ft. mud
Remarks G.I.P. blowing towards end of Test.
Tool partially plugged due to sandust

Gas Flow:

Flow Rate (max.) Mcf./day How Measured
 Size Flare Line (I.D.) inches Odor of gas
 Remarks

Oil Flow:

Flow Rate Bbls./day How Measured
 Gravity °A.P.I. at 60°F. Shake out % water % mud
 Remarks

Pressures:**Rec. No. 5:**

I. Shut-in 1,775
 I. Flow 190
 F. Flow 1,325
 F. Shut-in 1,790
 Hyd. Pressure 2,150 - 2,090

Rec. No. 6:

I. Shut-in 1,790
 I. Flow 215
 F. Flow 1,310
 F. Shut-in 1,810
 Hyd. Pressure 2,160 - 2,140

Engineer W. F. Must

DRILL STEM TEST REPORT

Company Peel Plateau Exploration Ltd. Date July 14/57 Test No. 6
 Well Eagle Plains No.1 Field Stratigraphic Test Hole
 Testing Company L. Whitnack Operator L. Whitnack

Hole Data:

| | | | | | | |
|------------------------|-----|------------------------|----------|--------------|-------|-----|
|" casing to | ft. | Interval tested | 4,810 | ft. to | 4,950 | ft. |
|" hole to | ft. | Formation tested | Devonian | | | |
|" hole to | ft. | Formation top | 3,586 | | | |

Test Data:

| | | | |
|------------------------------|--------|----------------------|----------------------|
| Started in | (a.m.) | Oil to surface | 406 CALGARY, ALBERTA |
| On bottom | (p.m.) | Shut-In | 30 mins. |
| Tool open | | Pulled loose | BUILDING |
| Gas to surface | | Out of hole | |
| Bottom Hole Choke size | inch | Packer size | inches |

*GEOLOGICAL SURVEY OF CANADA
406 CUSTOMS BUILDING
CALGARY, ALBERTA*

Pipe Recovery:

| | | | | |
|---------------|----------------------|-----------------|-----|---------------|
| ft. oil | 3,776 ft. salt water | ft. water | 160 | ft. mud |
| Remarks | Strong blow 30 mins | | | |

Gas Flow:

| | | |
|------------------------------|----------|--------------------|
| Flow Rate (max.) | Mcf./day | How Measured |
| Size Flare Line (I.D.) | inches | Odor of gas |
| Remarks | | |

Oil Flow:

| | | | | |
|-----------------|------------------|--------------------|---------------|-------------|
| Flow Rate | Bbls./day | How Measured | | |
| Gravity | °A.P.I. at 60°F. | Shake out | % water | % mud |
| Remarks | | | | |

Pressures:**Rec. No. 5:**

I. Shut-in 2,030
 I. Flow 1,140
 F. Flow 1,975
 F. Shut-in 2,020
 Hyd. Pressure 2,400 ... 2,310

Rec. No. 6:

I. Shut-in 2,025
 I. Flow 1,100
 F. Flow 1,930
 F. Shut-in 1,995
 Hyd. Pressure 2,370 ... 2,280

DRILL STEM TEST REPORT

Company Peel Plateau Exploration Ltd. Date Aug. 14/57 Test No. 7
 Well Eagle Plains No. 1 Field Stratigraphic Test Hole
 Testing Company United Testers Ltd. Operator L. Whitnack

Hole Data:

" casing to ft. Interval tested 6,904 ft. to 7,040 ft.
 " hole to ft. Formation tested Silurian
 " hole to ft. Formation top 6,802

GEOLOGICAL SURVEY OF CANADA
406-CUSTOMS BUILDING
CALGARY, ALBERTA

Test Data:

| | | |
|------------------------------|--------|----------------------|
| Started in | (a.m.) | Oil to surface |
| ..... | (p.m.) | Shut-In |
| On bottom | | Pulled loose |
| Tool open | | Out of hole |
| Gas to surface | | Packer size |
| Bottom Hole Choke size | inch | inches |

Pipe Recovery:

..... ft. oil 887 ft. water ft. mud
 Remarks
 weak I.P. fair blow 60 mins.

Gas Flow:

Flow Rate (max.) Mcf./day How Measured
 Size Flare Line (I.D.) inches Odor of gas
 Remarks

Oil Flow:

Flow Rate Bbls./day How Measured
 Gravity °A.P.I. at 60°F. Shake out % water % mud
 Remarks

Pressures:**Rec. No. 5:**

I. Shut-in 2,780
 I. Flow 210
 F. Flow 500
 F. Shut-in
 Hyd. Pressure 2,970
 3,375 - 3,385

Rec. No. 6:

I. Shut-in 2,765
 I. Flow 200
 F. Flow 490
 F. Shut-in 2,950
 Hyd. Pressure 3,400 - 3,405

Engineer W. H. West

DRILL STEM TEST REPORT

Company Peel Plateau Exploration Ltd. Date Aug. 14/57 Test No. 8
Well Eagle Plains No.1 Field Stratigraphic Test Hole
Testing Company _____ Operator L. Whitnack

Hole Data:

..... " casing to ft. Interval tested 6,790 ft. to 6,904 ft.
 " hole to ft. Formation tested Silurian
 " hole to ft. Formation top 6,802

Test Data:

| | | | |
|------------------------------|-----------|--|--------|
| Started in | (a.m.) | 406-CUSTOMS BUILDING CALGARY, ALBERTA | |
| ..... | (p.m.) | | |
| On bottom | | | |
| Tool open | 9:55 P.M. | | |
| Gas to surface | | | |
| Bottom Hole Choke size | inch | Packer size | inches |

GEOLOGICAL SURVEY OF CANADA
406-CUSTOMS BUILDING
to surface CALGARY, ALBERTA
t-In 11:25
led loose

Pipe Recovery:

ft. oil 664 ft. Salt Water ft. water ft. mud
Remarks
G.I.P. Fair blow 60 mins.

Gas Flow:

Flow Rate (max.) Mcf./day How Measured
Size Flare Line (I.D.) inches Odor of gas
Remarks

Oil Flow:

Flow Rate Bbls./day How Measured
Gravity °A.P.I. at 60°F. Shake out % water % mud
Remarks

Pressures:

Rec. No. 5:

| | |
|---------------|---------------|
| I. Shut-in | 2,975 |
| I. Flow | 0 |
| F. Flow | 500 |
| F. Shut-in | 2,975 |
| Hyd. Pressure | 3,425 - 3,425 |

Rec. No. 6:

| | | |
|---------------|-------|----------------------|
| I. Shut-in | ..... | 2,965 |
| I. Flow | ..... | 0 |
| F. Flow | ..... | 490 |
| F. Shut-in | ..... | 2,975 |
| Hyd. Pressure | ..... | 3,430 - 3,420 |

Engineer
.....

DRILL STEM TEST REPORT

Company Peel Plateau Exploration Ltd. Date Aug. 15/57 Test No. 9
 Well Eagle Plains No. 1 Field Stratigraphic Test Hole
 Testing Company United Testers Ltd. Operator L. Whitnack

Hole Data:

" casing to ft. Interval tested 6,246 ft. to 6,485 ft.
 " hole to ft. Formation tested Devonian
 " hole to ft. Formation top 3,586

Test Data:

| | | | |
|------------------------------|--------|-------------------|-----------------------|
| Started in | (a.m.) | Oil to surface | 406. CUSTOMS BUILDING |
| On bottom | (p.m.) | Shut-In | CALGARY, ALBERTA |
| Tool open <u>6:45 A.M.</u> | | Pulled loose | <u>8:15</u> |
| Gas to surface | | Out of hole | |
| Bottom Hole Choke size | inch | Packer size | inches |

Pipe Recovery:

..... ft. oil ft. water 1691 ft. watery mud ft. mud
 Remarks

Gas Flow:

Flow Rate (max.) Mcf./day How Measured

Size Flare Line (I.D.) inches Odor of gas

Remarks

Oil Flow:

Flow Rate Bbls./day How Measured

Gravity °A.P.I. at 60°F. Shake out % water % mud

Remarks

Pressures:**Rec. No. 5:**

I. Shut-in 2,700
 I. Flow 0
 F. Flow 900
 F. Shut-in 2,695
 Hyd. Pressure 3,225 - 3,100

Rec. No. 6:

I. Shut-in 2,690
 I. Flow 0
 F. Flow 885
 F. Shut-in 2,680
 Hyd. Pressure 3,000 - 2,970

Engineer W. F. Huast

DRILL STEM TEST REPORT

Company Peel Plateau Exploration Ltd. Date Aug. 21/57 Test No. 10
 Well Eagle Plains No. 1 Field Stratigraphic Test Hole
 Testing Company United Testers Ltd. Operator L. Whitmack

Hole Data:

" casing to ft. Interval tested 7,040 ft. to 7,264 ft.
 " hole to ft. Formation tested Silurian
 " hole to ft. Formation top 6,802

Test Data:

| | | | |
|------------------------------|-----------|-------------------------|-----------------------------|
| Started in | (a.m.) | Oil to surface | GEOLOGICAL SURVEY OF CANADA |
| On bottom | (p.m.) | 403- CUSTODIES BUILDING | CALGARY, ALBERTA |
| Tool open | 3:25 P.M. | Shut-In | |
| Gas to surface | 45 Mins | Pulled loose | 4:35 P.M. |
| Bottom Hole Choke size | inch | Out of hole | |
| | | Packer size | inches |

Pipe Recovery:

ft. oil 5,561 ft. Saltwater ft. water ft. mud
 Remarks
G.I.P. Strong blow decreasing to fair at end of 45 mins.

Gas Flow:

Flow Rate (max.) Mcf./day How Measured
 Size Flare Line (I.D.) inches Odor of gas
 Remarks

Oil Flow:

Flow Rate Bbls./day How Measured
 Gravity °A.P.I. at 60°F. Shake out % water % mud
 Remarks

Pressures:**Rec. No. 5:**

I. Shut-in 3,200
 I. Flow 1,300
 F. Flow 2,890
 F. Shut-in 3,225
 Hyd. Pressure 3,800 - 3,775

Rec. No. 6:

I. Shut-in 3,190
 I. Flow 1,290
 F. Flow 2,880
 F. Shut-in 3,215
 Hyd. Pressure 3,690 - 3,660

DRILL STEM TEST REPORT

Company Peel Plateau Exploration Ltd. Date Aug. 26/57 Test No. 11
 Well Eagle Plains No.1 Field Stratigraphic Test Hole
 Testing Company United Testers Ltd. Operator L. Whitnack

Hole Data:

" casing to ft. Interval tested 7,264 ft. to 7,533 ft.
 " hole to ft. Formation tested Silurian
 " hole to ft. Formation top 6,802

Test Data:

Started in (a.m.) (p.m.)
 On bottom
 Tool open 3 A.M. 60 mins.
 Gas to surface
 Bottom Hole Choke size inch
 Oil to surface 406- CUSTOMS BUILDING
 Shut-In CALGARY ALBERTA
 Pulled loose 4:30 A.M.
 Out of hole
 Packer size inches

GEOLOGICAL SURVEY OF CANADA
 406- CUSTOMS BUILDING
 CALGARY ALBERTA

Pipe Recovery:

ft. oil 996 ft. muddy salt water ft. mud
 Remarks
 G.I.P. Fair blow. Decreasing

Gas Flow:

Flow Rate (max.) Mcf./day How Measured
 Size Flare Line (I.D.) inches Odor of gas
 Remarks

Oil Flow:

Flow Rate Bbls./day How Measured
 Gravity °A.P.I. at 60°F. Shake out % water % mud
 Remarks

Pressures:**Rec. No. 5:**

I. Shut-in 3,390
 I. Flow 500
 F. Flow 950
 F. Shut-in 3,350
 Hyd. Pressure 3,350
 4,100 - 3,950

Rec. No. 6:

I. Shut-in 3,325
 I. Flow 300
 F. Flow 750
 F. Shut-in 3,340
 Hyd. Pressure 3,950 - 3,800

Engineer W. T. Huett

DRILL STEM TEST REPORT

Company Peel Plateau Exploration Ltd. Date Sept. 3/37 Test No. 12
 Well Eagle Plains No. 1 Field Stratigraphic Test Hole
 Testing Company United Testers Ltd. Operator L. Whitnack

Hole Data:

" casing to ft. Interval tested 7,650 ft. to 7,688 ft.
 " hole to ft. Formation tested Silurian
 " hole to ft. Formation top 6,802

Test Data:

Started in (a.m.)
 On bottom (p.m.)
 Tool open 11:55 55 Mins.
 Gas to surface
 Bottom Hole Choke size inch

406-C CUSTOMS BUILDING
 CALGARY ALBERTA

Oil to surface
 Shut-In
 Pulled loose
 Out of hole
 Packer size inches

GEOLOGICAL SURVEY OF CANADA**Pipe Recovery:**

ft. oil ft. water 140 watery ft. mud
 Remarks 650 ft. water cushion

Gas Flow:

Flow Rate (max.) Mcf./day How Measured
 Size Flare Line (I.D.) inches Odor of gas
 Remarks W.I.P. dead in 5 mins. reset 4 times; weak puffs. Pulled loose
 w/40,000# rubber damaged.

Oil Flow:

Flow Rate Bbls./day How Measured
 Gravity °A.P.I. at 60°F. Shake out % water % mud
 Remarks

Pressures:**Rec. No. 5:**

I. Shut-in
 I. Flow 475
 F. Flow 500
 F. Shut-in 0
 Hyd. Pressure 3,725 = 3,550

Rec. No. 6:

I. Shut-in 0
 I. Flow 350
 F. Flow 385
 F. Shut-in 0
 Hyd. Pressure 3,600 = 3,400

Engineer W. P. West

DRILL STEM TEST REPORT

Company Peel Plateau Exploration Ltd. Date Sept. 7/57 Test No. 73
 Well Eagle Plains No. 1 Field Stratigraphic Test Hole
 Testing Company United Testers Ltd. Operator L. Whitnack

Hole Data:

" casing to ft. Interval tested ft. to ft.
 " hole to ft. Formation tested
 " hole to ft. Formation top

Test Data:

Started in (a.m.) (p.m.)
 On bottom
 Tool open
 Gas to surface
 Bottom Hole Choke size inch
 Oil to surface CALGARY, ALBERTA
 Shut-In
 Pulled loose
 Out of hole
 Packer size inches

Pipe Recovery:

ft. oil ft. water ft. mud
 Remarks
 Misrun. Packer failed

Gas Flow:

Flow Rate (max.) Mcf./day How Measured
 Size Flare Line (I.D.) inches Odor of gas
 Remarks

Oil Flow:

Flow Rate Bbls./day How Measured
 Gravity °A.P.I. at 60°F. Shake out % water % mud
 Remarks

Pressures:**Rec. No. 5:**

I. Shut-in
 I. Flow
 F. Flow
 F. Shut-in
 Hyd. Pressure

Rec. No. 6:

I. Shut-in
 I. Flow
 F. Flow
 F. Shut-in
 Hyd. Pressure

DRILL STEM TEST REPORT

Company Peel Plateau Exploration Ltd. Date Sept. 7/57 Test No. 14
 Well Eagle Plains No. 1 Field Stratigraphic Test Hole
 Testing Company United Testers Ltd. Operator L. Whitmack

Hole Data:

" casing to ft. Interval tested 7,636 ft. to 7,696 ft.
 " hole to ft. Formation tested Silurian
 " hole to ft. Formation top 6,862

Test Data:

| | | |
|------------------------------|--------|------------------------|
| Started in | (a.m.) | Oil to surface |
| ..... | (p.m.) | Shut-In |
| On bottom | | Pulled loose 6:30 a.m. |
| Tool open 5 a.m. | | Out of hole |
| Gas to surface | | Packer size |
| Bottom Hole Choke size | inch | inches |

Pipe Recovery:

..... ft. oil ft. water 140 ft. mud

Remarks

V.I.P. weak blow 1 hour. Stuck 1 hour.

Gas Flow:

Flow Rate (max.) Mcf./day How Measured

Size Flare Line (I.D.) inches Odor of gas

Remarks

Oil Flow:

Flow Rate Bbls./day How Measured

Gravity °A.P.I. at 60°F. Shake out % water % mud

Remarks

Pressures:**Rec. No. 5:**

I. Shut-in 0
 I. Flow 0
 F. Flow 150
 F. Shut-in 0
 Hyd. Pressure 3,375 = 3,000

Rec. No. 6:

I. Shut-in 0
 I. Flow 200
 F. Flow 200
 F. Shut-in 0
 Hyd. Pressure 3,775 = 3,650

Engineer W. F. West

*PHOTOLOGICAL SURVEY OF CANADA
406-CUSTOMS BUILDING
CALGARY, ALBERTA*

DRILL STEM TEST REPORT

Company PEEL PLATEAU EXPLORATION LTD., Date September 15, 1957 Test No. 15
 Well Eagle Plains No. 1 Field Stratigraphic Test Hole
 Testing Company United Testers Ltd. Operator L. Whitnack

Hole Data:

" casing to ft. Interval tested ft. to ft.
 " hole to ft. Formation tested
 " hole to ft. Formation top

Test Data:

| | | | |
|------------------------------|--------|--------------------|----------------------|
| Started in | (a.m.) | Oil to surface | 406-CUSTOMS BUILDING |
| On bottom | (p.m.) | Shut-In | EDMONTON ALBERTA |
| Tool open | | Pulled loose | |
| Gas to surface | | Out of hole | |
| Bottom Hole Choke size | inch | Packer size | inches |

Pipe Recovery:

ft. oil ft. water ft. mud

Remarks

Misrun, Tool Plugged.

Gas Flow:

Flow Rate (max.) Mcf./day How Measured

Size Flare Line (I.D.) inches Odor of gas

Remarks

Oil Flow:

Flow Rate Bbls./day How Measured

Gravity °A.P.I. at 60°F. Shake out % water % mud

Remarks

Pressures:**Rec. No. 5:**

- I. Shut-in
- I. Flow
- F. Flow
- F. Shut-in
- Hyd. Pressure

Rec. No. 6:

- I. Shut-in
- I. Flow
- F. Flow
- F. Shut-in
- Hyd. Pressure

DRILL STEM TEST REPORT

Company Peel Plateau Exploration Ltd. Date Sept. 16/57 Test No. 16
 Well Eagle Plains No. 1 Field Stratigraphic Test Hole
 Testing Company United Testers Ltd. Operator L. Whitnack

Hole Data:

" casing to ft. Interval tested 7,527 ft. to 7,721 ft.
 " hole to ft. Formation tested Silurian
 " hole to ft. Formation top 6,802

Test Data:

Started in (a.m.) (p.m.)
 On bottom
 Tool open 2 P.M.
 Gas to surface
 Bottom Hole Choke size inch
 Out of hole
 Packer size inches

Pipe Recovery:

ft. oil ft. water 155 ft. mud
 Remarks
W.I.P. - Very weak blow, 60 mins.

Gas Flow:

Flow Rate (max.) Mcf./day How Measured
 Size Flare Line (I.D.) inches Odor of gas
 Remarks

Oil Flow:

Flow Rate Bbls./day How Measured
 Gravity °A.P.I. at 60°F. Shake out % water % mud
 Remarks

Pressures:**Rec. No. 5:**

I. Shut-in 360
 I. Flow 275
 F. Flow 275
 F. Shut-in 250
 Hyd. Pressure 3,750 - 3,625

Rec. No. 6:

I. Shut-in 315
 I. Flow 0
 F. Flow 0
 F. Shut-in 150
 Hyd. Pressure 3,550 - 3,485

Engineer W. T. Wuest

*GEOLOGICAL SURVEY OF CANADA
406, CUSTOMS BUILDING
EDMONTON, ALBERTA*

DRILL STEM TEST REPORT

Company Peel Plateau Exploration Ltd. Date Oct. 2/57 Test No. 17
 Well Eagle Plains No. 1 Field Stratigraphic Test Hole
 Testing Company United Testers Ltd. Operator L. Shitnack

Hole Data:

" casing to ft. Interval tested 8,338 ft. to 8,409 ft.
 " hole to ft. Formation tested Silurian
 " hole to ft. Formation top 6,802

Test Data:

| | | | |
|------------------------------|--------|--------------------|-----------------------|
| Started in | (a.m.) | Oil to surface | 406 CUCUMBER BUILDING |
| ..... | (p.m.) | Shut-In | EDMONTON ALBERTA |
| On bottom | | Pulled loose | |
| Tool open <u>60 mins.</u> | | Out of hole | |
| Gas to surface | | Packer size | inches |
| Bottom Hole Choke size | inch | | |

GEOLOGICAL SURVEY OF CANADA
406 CUCUMBER BUILDING
EDMONTON ALBERTA

Pipe Recovery:

ft. oil 796 ft. Saltwater ft. water ft. mud
 Remarks
Strong i.p. fair blow 60 mins.

Gas Flow:

Flow Rate (max.) Mcf./day How Measured
 Size Flare Line (I.D.) inches Odor of gas
 Remarks

Oil Flow:

Flow Rate Bbls./day How Measured
 Gravity °A.P.I. at 60°F. Shake out % water % mud
 Remarks

Pressures:**Rec. No. 5:**

I. Shut-in 3,600
 I. Flow 625
 F. Flow 625
 F. Shut-in 3,425
 Hyd. Pressure 4,210 - 4,150

Rec. No. 6:

I. Shut-in
 I. Flow
 F. Flow
 F. Shut-in
 Hyd. Pressure

Sheet No.

DRILL STEM TEST REPORT

Company Peel Plateau Exploration Ltd. Date Stratigraphic Test No. 1
 Well Eagle Plains No. 1 Field Whitecourt
 Testing Company United Testers Ltd. Operator

Hole Data:

" casing to ft. Interval tested ft. to ft.
 " hole to ft. Formation tested
 " hole to ft. Formation top

Test Data:

Started in (a.m.) (p.m.)
 On bottom
 Tool open
 Gas to surface
 Bottom Hole Choke size inch
 Oil to surface
 Shut-In
 Pulled loose
 Out of hole
 Packer size inches

GEOLOGICAL SURVEY OF CANADA
406-CUSTOMS BUILDING
CALGARY, ALBERTA

Pipe Recovery:

ft. oil ft. water ft. mud

Remarks
Marvin, Dings failed to break, dropped 2 darts which hang up in jars

Gas Flow:

Flow Rate (max.) Mcf./day How Measured
 Size Flare Line (I.D.) inches Odor of gas
 Remarks

Oil Flow:

Flow Rate Bbls./day How Measured
 Gravity °A.P.I. at 60°F. Shake out % water % mud
 Remarks

Pressures:**Rec. No. 5:**

I. Shut-in
 I. Flow
 F. Flow
 F. Shut-in
 Hyd. Pressure 1,870 - 1,960

Rec. No. 6:

I. Shut-in
 I. Flow
 F. Flow
 F. Shut-in
 Hyd. Pressure 1,860 - 1,960

W. F. Root
Engineer

DRILL STEM TEST REPORT

Company Peel Plateau Exploration Ltd. Date Oct. 5/27 Test No. 19
 Well Eagle Plains No. 1 Field Stratigraphic Test Hole
 Testing Company United Testers Ltd. Operator L. Whitnack

Hole Data:

" casing to ft. Interval tested 4,085 ft. to 4,423 ft.
 " hole to ft. Formation tested Devonian
 " hole to ft. Formation top 3,586

Test Data:

| | | | |
|------------------------------|--------|--------------------|------------------|
| Started in | (a.m.) | Oil to surface | CALGARY, ALBERTA |
| On bottom | (p.m.) | Shut-In | |
| Tool open 12.50. 60 mins. | | Pulled loose | |
| Gas to surface | | Out of hole | |
| Bottom Hole Choke size | inch | Packer size | inches |

Pipe Recovery:

..... ft. oil ft. water 190 ft. mud
 Remarks

S. L. P. Reset, good blow. died in 10 mins.

Gas Flow:

Flow Rate (max.) Mcf./day How Measured

Size Flare Line (I.D.) inches Odor of gas

Remarks

Oil Flow:

Flow Rate Bbls./day How Measured

Gravity °A.P.I. at 60°F. Shake out % water % mud

Remarks

Pressures:**Rec. No. 5:**

I. Shut-in 310
 I. Flow 80
 F. Flow 80
 F. Shut-in 0
 Hyd. Pressure 1,830 - 1,940

Rec. No. 6:

I. Shut-in 360
 I. Flow 110
 F. Flow 110
 F. Shut-in 0
 Hyd. Pressure 1,920 - 1,940

Engineer W. F. Must

DRILL STEM TEST REPORT

Company Peel Plateau Exploration Ltd. Date June 5, 1950. Test No. 20
 Well Eagle Plains No. 1 Field Stratigraphic Test Hole
 Testing Company United Testers Operator L. Whitnack

Hole Data:

" casing to ft. Interval tested 8897 ft. to 9102 ft.
 " hole to ft. Formation tested Ord.
 " hole to ft. Formation top

Test Data:

Started in (a.m.) (p.m.)
 On bottom
 Tool open
 Gas to surface
 Bottom Hole Choke size inch Packer size inches

GEOLOGICAL SURVEY OF CANADA
406-CUSTOMS BUILDING
CALGARY, ALBERTA

Pipe Recovery:

ft. oil 1761 ft. water ft. mud

Remarks
 Salty water recovered and 1101' water cushion.

Gas Flow:

Flow Rate (max.) Mcf./day How Measured
 Size Flare Line (I.D.) inches Odor of gas
 Remarks

Oil Flow:

Flow Rate Bbls./day How Measured
 Gravity °A.P.I. at 60°F. Shake out % water % mud
 Remarks

Pressures:**Rec. No. 5:**

I. Shut-in 3725
 I. Flow 25
 F. Flow 525
 F. Shut-in 3725
 Hyd. Pressure 6215

Rec. No. 6:

I. Shut-in
 I. Flow
 F. Flow
 F. Shut-in
 Hyd. Pressure

DRILL STEM TEST REPORT

Company Peel Plateau Exploration Ltd. Date June 9, 1958 Test No. 21
 Well Eagle Plains No. 1 Field Stratigraphic Test Hole
 Testing Company United Testers Ltd. Operator L. Whitnack

Hole Data:

" casing to ft. Interval tested 9102 ft. to 9343 ft.
 " hole to ft. Formation tested Ord.
 " hole to ft. Formation top

Test Data:

| | | | |
|------------------------------|--------|--------------------|----------------------|
| Started in | (a.m.) | Oil to surface | 406-CUSTOMS BUILDING |
| On bottom | (p.m.) | Shut-In | CALGARY, ALBERTA |
| Tool open | | Pulled loose | |
| Gas to surface | | Out of hole | |
| Bottom Hole Choke size | inch | Packer size | inches |

Pipe Recovery:

..... ft. oil ft. water 255 ft. mud
 Remarks

Gas Flow:

Flow Rate (max.) Mcf./day How Measured

Size Flare Line (I.D.) inches Odor of gas

Remarks

Oil Flow:

Flow Rate Bbls./day How Measured

Gravity °A.P.I. at 60°F. Shake out % water % mud

Remarks

Pressures:Rec. No. 5:

- I. Shut-in False Shut-in.
- I. Flow Packer seat failed.
- F. Flow
- F. Shut-in
- Hyd. Pressure 425

Rec. No. 6:

- I. Shut-in
- I. Flow
- F. Flow
- F. Shut-in
- Hyd. Pressure

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

10568 - 114th Street

EDMONTON, ALBERTA

Phones: 25624

42562

GAS ANALYSIS REPORT

FIELD WELL NO. Eagle Plain #1 Yukon Territory
 OPERATOR Peel Plateau Exploration Company LOCATION
 SAND DEPTHS LAB NO. 10138
 ANALYZED BY Chemical & Geological Labs. Ltd. DATE July 23rd, 1957
 REMARKS

ORSAT ANALYSIS

GEOLOGICAL SURVEY OF CANADA
 406 CLOUTIER'S BUILDING
 PODBIELNIK,
 CALGARY, ALBERTA
 Low Temperature Fractionation

| | % by Volume | | | % by Volume | G.P.M. in U.S. Gal. Imp. Gal. |
|---------------------|----------------|-------|-------|----------------|----------------------------------|
| Oxygen | | | | 0 | |
| Nitrogen | | | | 2.26 | |
| Carbon dioxide | | | | 0.33 | |
| Hydrogen sulfide | | | | 0 | |
| Methane | | | | 96.94 | |
| Ethane | | | | 0.24 | |
| Propane | | | | 0.15 | 0.041 |
| Isobutane | | | | 0.08 | 0.026 |
| N-butane | | | | | |
| Isopentane | | | | | |
| N-pentane | | | | | |
| Diisopropyl | | | | | |
| N-Hexane | | | | | |
| Heptanes and Higher | | | | | |
| TOTAL | | | | 100.00 | 0.067 |
| | | | | | 0.055 |

HYDROGEN SULFIDE

(by Tutwiler Method)

G.P.M.

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

GROSS B.T.U.

60°F. and 14.7 p.s.i.a.

990

60°F. and 14.4 p.s.i.a.

970

Actual pentanes +

Calculated at 12 lbs.

Calculated at 15 lbs.

Calculated at 22 lbs.

Calculated at 26 lbs.

Vapor pressure (calculated)
of actual pentanes +

G.P.M.

570

560

Remarks and Conclusions: 15.50% air contamination. All figures corrected for this
 contamination.



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



Peel Plateau
Company Exploration Ltd. Well Name Eagle Plains #1

Formation _____ Depth _____

Location _____ Field Wildcat

Date Sampled _____ Date Analyzed July 26, 1957

File CNP-4-WA9

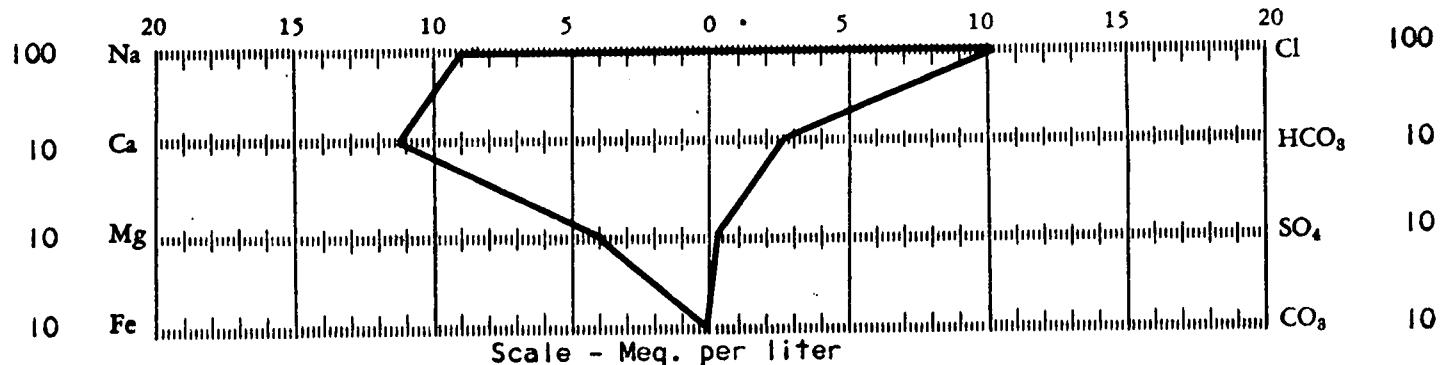
Sample No. 1

Sampled From D.S.T. #3

Province Yukon Territory

Engineer J. M.

| Constituents | Constituents | Meq/L | ppm | Constituents | Meq/L | ppm |
|--|--------------|--------|--------|-----------------|-------|--------|
| 1. Total Solids 61,232 ppm | 6. Sodium | 908 | 20,891 | 11. Chloride | 1,021 | 36,210 |
| 2. pH 6.8 | 7. Calcium | 103 | 2,060 | 12. Bicarbonate | 25 | 1,531 |
| 3. Sp. gr 1.0468 @ 70 °F. | 8. Magnesium | 37 | 450 | 13. Sulfate | 2 | 90 |
| 4. Resistivity 0.125 ohms/M ^M | 9. Iron | Absent | Absent | 14. Carbonate | - | Absent |
| 5. Hydrogen Sulfide Absent | 10. Barium | Absent | Absent | 15. Hydroxide | - | Absent |



HYPOTHETICAL COMBINATIONS

| Constituent | ppm | Constituent | ppm |
|--------------------------|-------|--------------------|--------|
| 1. Calcium Chloride | 5,706 | 4. Sodium Chloride | 53,027 |
| 2. Magnesium Bicarbonate | 1,833 | 5. Sodium Sulfate | 132 |
| 3. Magnesium Chloride | 564 | | |

GEOLOGICAL SURVEY OF CANADA
406- CUSTOMS BUILDING
CALGARY, ALBERTA



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



File CNP-4-WA 10

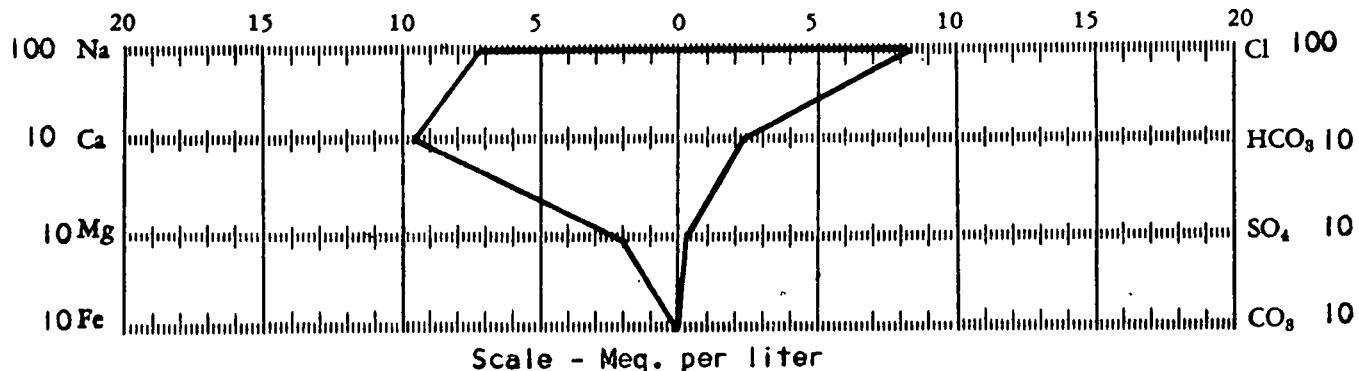
Peel Plateau
Company Exploration Ltd. Well Name Eagle Plains #1

Formation _____ Depth _____

Location _____ Field Wildcat

Date Sampled _____ Date Analyzed July 26, 1957

| Constituents | Constituents | Meq/L | ppm | Constituents | Meq/L | ppm |
|-------------------------------|--------------|-------|--------|-----------------|-------|--------|
| 1. Total Solids 49,717 ppm | 6. Sodium | 733 | 16,867 | 11. Chloride | 826 | 29,288 |
| 2. pH 6.85 | 7. Calcium | 96 | 1,920 | 12. Bicarbonate | 21 | 1,299 |
| 3. Sp. gr 1.0378 @ 69 °F. | 8. Magnesium | 20 | 243 | 13. Sulfate | 2 | 91 |
| 4. Resistivity 0.150 ohms/M M | 9. Iron | - | Absent | 14. Carbonate | - | Absent |
| 5. Hydrogen Sulfide Absent | 10. Barium | - | Absent | 15. Hydroxide | - | Absent |



HYPOTHETICAL COMBINATIONS

| Constituent | ppm | Constituent | ppm |
|--------------------------|-------|--------------------|--------|
| 1. Calcium Chloride | 5,318 | 4. Sodium Chloride | 42,789 |
| 2. Magnesium Bicarbonate | 1,555 | 5. Sodium Sulfate | 134 |
| 3. Magnesium Chloride | - | | |

GEOLOGICAL SURVEY OF CANADA
406- CUSTOMS BUILDING
CALGARY, ALBERTA



CORE LABORATORIES-CANADA LTD.

PETROLEUM RESERVOIR ENGINEERING

CALGARY, ALBERTA

WATER ANALYSIS

Peel Plateau

Company Exploration Ltd.

Well Name Eagle Plains No.1

File CNP-4-WA 11

Formation

Depth 4450'-4690'

Sample No. 1

Location

Field Wildcat

Sampled From D.S.T. #5

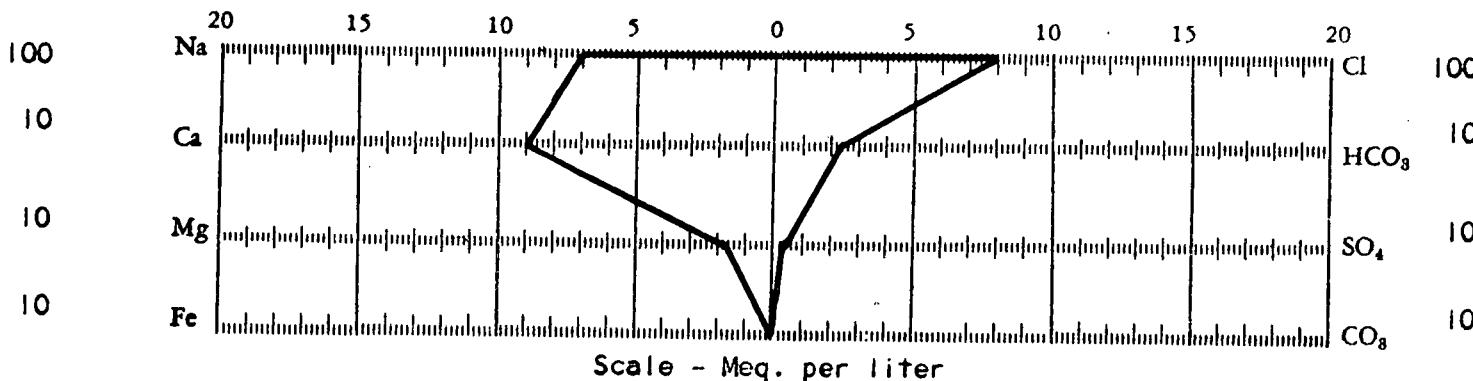
Date Sampled

Date Analyzed July 26, 1957

Province Yukon Territory

Engineer J.M.

| Constituents | Constituents | Meq/L | ppm | Constituents | Meq/L | ppm |
|--|--------------|-------|--------|-----------------|-------|--------|
| 1. Total Solids 47,104 ppm | 6. Sodium | 699 | 16,084 | 11. Chloride | 781 | 27,690 |
| 2. pH 6.85 | 7. Calcium | 89 | 1,780 | 12. Bicarbonate | 22 | 1,317 |
| 3. Sp. gr 1.063 @ 69 °F. | 8. Magnesium | 15 | 182 | 13. Sulfate | 1 | 51 |
| 4. Resistivity 0.153 @ 70 °F. ohms/M ² M | 9. Iron | - | Absent | 14. Carbonate | - | Absent |
| 5. Hydrogen Sulfide Absent | 10. Barium | - | Absent | 15. Hydroxide | - | Absent |



HYPOTHETICAL COMBINATIONS

| Constituent | ppm | Constituent | ppm |
|--------------------------|-------|--------------------|--------|
| 1. Calcium Chloride | 4,931 | 4. Sodium Chloride | 40,846 |
| 2. Magnesium Bicarbonate | 1,576 | 5. Sodium Sulfate | 75 |
| 3. Magnesium Chloride | - | | |

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GEOLOGICAL SURVEY OF CANADA
406- CUSTOMS BUILDING
CALGARY, ALBERTA



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



Peel Plateau
Exploration Ltd.

Company _____ Well Name Eagle Plains #1

Formation _____ Depth 4810' - 4950'

Location _____ Field Wildcat

Date Sampled _____ Date Analyzed July 26, 1957

File CNP-4-WA 12

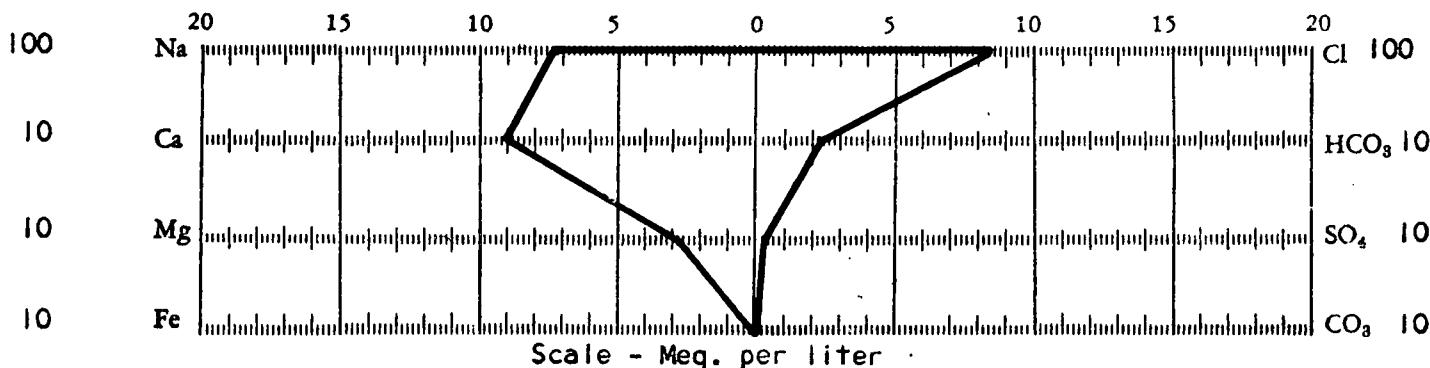
Sample No. 1

Sampled From D.S.T. #6

Province Yukon Territory

Engineer J. M.

| <i>Constituents</i> | <i>Constituents</i> | <i>Meq/L</i> | <i>ppm</i> | <i>Constituents</i> | <i>Meq/L</i> | <i>ppm</i> |
|--|---------------------|--------------|------------|---------------------|--------------|------------|
| 1. Total Solids _____ ppm | 6. Sodium | 749 | 17,220 | 11. Chloride | 841 | 29,820 |
| 2. pH <u>7.10</u> | 7. Calcium | 90 | 1,800 | 12. Bicarbonate | 22 | 1,360 |
| 3. Sp. gr <u>1.0383</u> @ <u>70 °F.</u> | 8. Magnesium | 26 | 316 | 13. Sulfate | 1 | 62 |
| 4. Resistivity <u>0.145</u> @ <u>70 °F.</u> <u>ohms/M²M</u> | 9. Iron | - | Absent | 14. Carbonate | - | Absent |
| 5. Hydrogen Sulfide <u>Absent</u> | 10. Barium | - | Absent | 15. Hydroxide | - | Absent |



HYPOTHETICAL COMBINATIONS

| <i>Constituent</i> | <i>ppm</i> | <i>Constituent</i> | <i>ppm</i> |
|--------------------------|--------------|--------------------|---------------|
| 1. Calcium Chloride | <u>4,986</u> | 4. Sodium Chloride | <u>43,724</u> |
| 2. Magnesium Bicarbonate | <u>1,628</u> | 5. Sodium Sulfate | <u>92</u> |
| 3. Magnesium Chloride | <u>175</u> | | |

GEOLOGICAL SURVEY OF CANADA
406- CUSTOMS BUILDING
CALGARY, ALBERTA



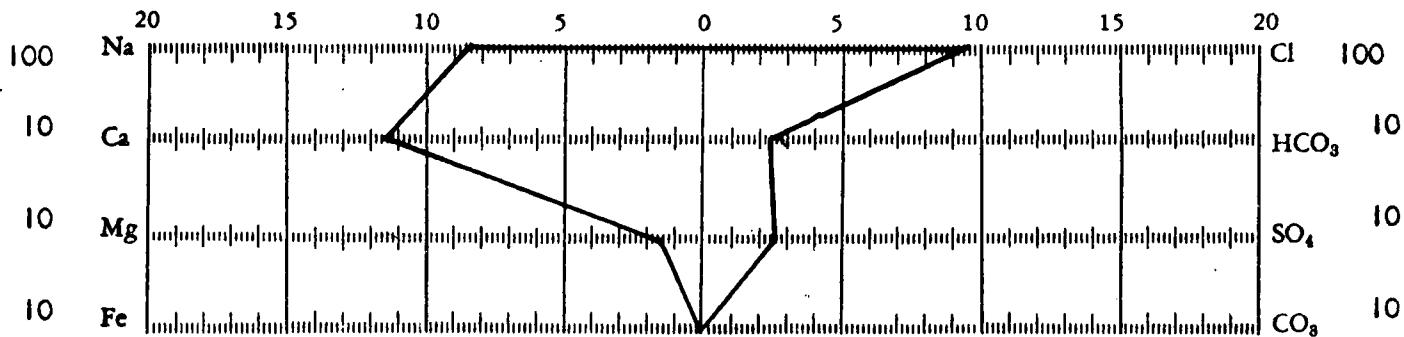
CORE LABORATORIES-CANADA LTD.
PETROLEUM RESERVOIR ENGINEERING
CALGARY, ALBERTA
WATER ANALYSIS



File CNP-4 WA20

Company Peel Plateau Exploration Ltd. Well Name Eagle Plains No. 1
Formation _____ Depth _____ Sample No. _____
Location _____ Field _____ Province Yukon Territory
Date Sampled _____ Date Analyzed Sept. 4, 1957 Engineer J.M.

| Constituents | Constituents | Meq/L | ppm | Constituents | Meq/L | ppm |
|---|--------------|---------------|--------------|-----------------|---------------|--------------|
| 1. Total Solids <u>57,464</u> ppm | 6. Sodium | <u>847</u> | <u>19481</u> | 11. Chloride | <u>929</u> | <u>32926</u> |
| 2. pH <u>6.45</u> | 7. Calcium | <u>115</u> | <u>2300</u> | 12. Bicarbonate | <u>23</u> | <u>1400</u> |
| 3. Sp. gr <u>1.0425</u> @ <u>66</u> °F. | 8. Magnesium | <u>15</u> | <u>178</u> | 13. Sulfate | <u>25</u> | <u>1179</u> |
| 4. Resistivity <u>0.152</u> @ <u>66</u> °F. | 9. Iron | <u>Absent</u> | <u>-</u> | 14. Carbonate | <u>Absent</u> | <u>-</u> |
| 5. Hydrogen Sulfide <u>Absent</u> | 10. Barium | <u>Absent</u> | <u>-</u> | 15. Hydroxide | <u>Absent</u> | <u>-</u> |



HYPOTHETICAL COMBINATIONS

| Constituent | ppm | Constituent | ppm |
|--------------------------|-------------|--------------------|--------------|
| 1. Calcium Chloride | <u>6371</u> | 4. Sodium Chloride | <u>48087</u> |
| 2. Magnesium Bicarbonate | <u>1677</u> | 5. Sodium Sulfate | <u>1775</u> |
| 3. Magnesium Chloride | <u>-</u> | | |

GEOLOGICAL SURVEY OF CANADA
408- CUSTOMS BUILDING
CALGARY, ALBERTA



CORE LABORATORIES-CANADA LTD.

PETROLEUM RESERVOIR ENGINEERING

CALGARY, ALBERTA

WATER ANALYSIS



File CNP-4 WA 21

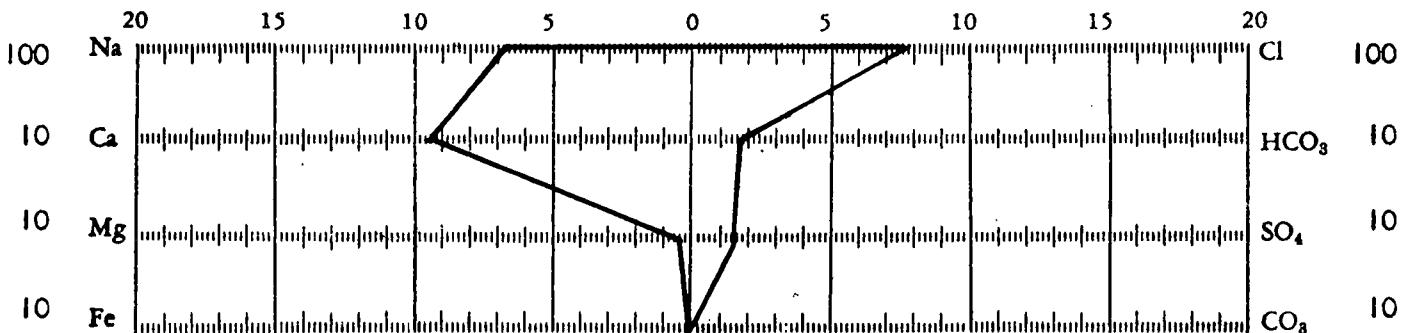
Company Peel Plateau Exploration Ltd. Well Name Eagle Plains No. 1 Sample No. _____

Formation _____ Depth _____ Sampled From D.S.T. No. 9

Location _____ Field _____ Province Yukon Territory

Date Sampled _____ Date Analyzed Sept. 4, 1957 Engineer J.M.

| <i>Constituents</i> | <i>Constituents</i> | Meq/L | ppm | <i>Constituents</i> | Meq/L | ppm |
|---|---------------------|---------------|--------------|---------------------|---------------|---------------|
| 1. Total Solids <u>46,176</u> ppm | 6. Sodium | <u>685</u> | <u>15755</u> | 11. Chloride | <u>753</u> | <u>26,714</u> |
| 2. pH <u>7.25</u> | 7. Calcium | <u>94</u> | <u>1880</u> | 12. Bicarbonate | <u>17</u> | <u>1055</u> |
| 3. Sp. gr <u>1.0353</u> @ <u>66</u> °F. | 8. Magnesium | <u>6</u> | <u>67</u> | 13. Sulfate | <u>15</u> | <u>705</u> |
| 4. Resistivity <u>0.178</u> @ <u>66</u> °F. | 9. Iron | <u>Absent</u> | <u>-</u> | 14. Carbonate | <u>Absent</u> | <u>-</u> |
| 5. Hydrogen Sulfide <u>Absent</u> | 10. Barium | <u>Absent</u> | <u>-</u> | 15. Hydroxide | <u>Absent</u> | <u>-</u> |



HYPOTHETICAL COMBINATIONS

| <i>Constituent</i> | ppm | <i>Constituent</i> | ppm |
|--------------------------|-------------|--------------------|---------------|
| 1. Calcium Chloride | <u>5208</u> | 4. Sodium Chloride | <u>39,195</u> |
| 2. Magnesium Bicarbonate | <u>1263</u> | 5. Sodium Sulfate | <u>1065</u> |
| 3. Magnesium Chloride | <u>-</u> | | |

GEOLOGICAL SURVEY OF CANADA
406- CUSTOMS BUILDING
CALGARY, ALBERTA



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



File CNP-4 WA-17

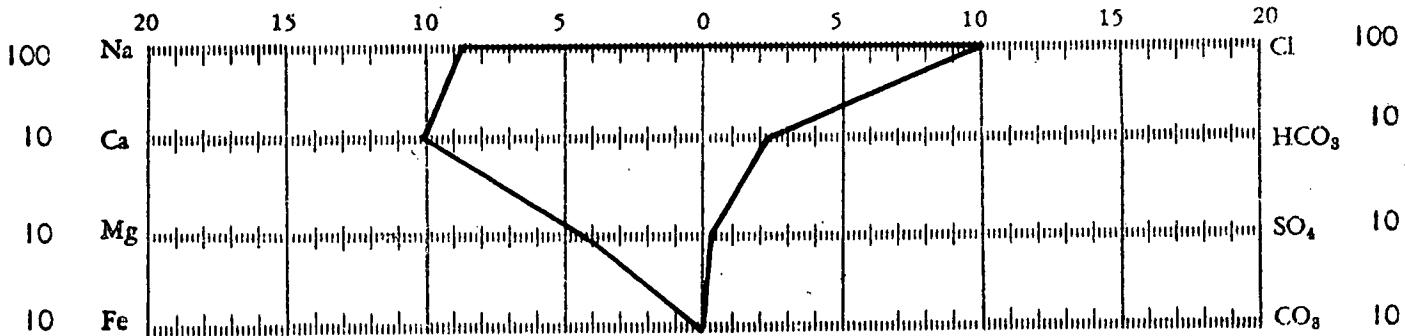
Company Peel Plateau Exploration Well Name Eagle Plains No. 1
Ltd.

Formation _____ Depth _____

Location _____ Field _____

Date Sampled Aug. 26, 1957 Date Analyzed Aug. 30, 1957

| Constituents | Constituents | Meq/L | ppm | Constituents | Meq/L | ppm |
|-------------------------------|--------------|--------|--------|-----------------|--------|-------|
| 1. Total Solids 59,820 ppm | 6. Sodium | 869 | 19,987 | 11. Chloride | 999 | 35441 |
| 2. pH 6.70 | 7. Calcium | 114 | 2280 | 12. Bicarbonate | 24 | 1488 |
| 3. Sp. gr 1.0441 @ 66 °F. | 8. Magnesium | 42 | 512 | 13. Sulfate | 2 | 112 |
| 4. Resistivity 0.135 @ 66 °F. | 9. Iron | Absent | - | 14. Carbonate | Absent | - |
| 5. Hydrogen Sulfide Absent | 10. Barium | Absent | - | 15. Hydroxide | Absent | - |



HYPOTHETICAL COMBINATIONS

| Constituent | ppm | Constituent | ppm |
|--------------------------|------|--------------------|-------|
| 1. Calcium Chloride | 6315 | 4. Sodium Chloride | 50720 |
| 2. Magnesium Bicarbonate | 1781 | 5. Sodium Sulfate | 142 |
| 3. Magnesium Chloride | 855 | | |

GEOLOGICAL SURVEY OF CANADA
406- CUSTOMS BUILDING
CALGARY, ALBERTA



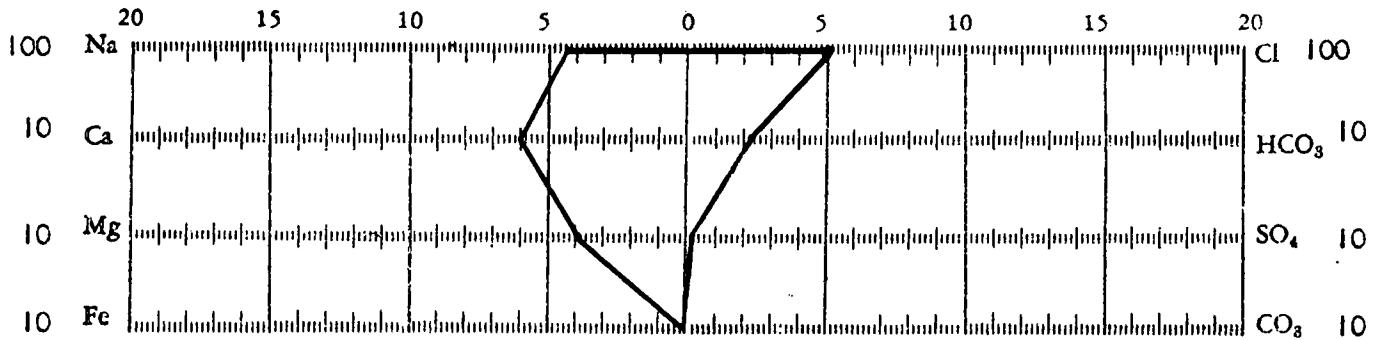
CORE LABORATORIES-CANADA LTD.
PETROLEUM RESERVOIR ENGINEERING
CALGARY, ALBERTA
WATER ANALYSIS



File CNP-4 WA-18

Company Peel Plateau Exploration Well Name Eagle Plains No. 1
Ltd. Depth _____
Formation _____ Sample No. _____
Location _____ Field _____ Provinc. Yukon Territory.
Date Sampled Aug. 26, 1957 Date Analyzed Aug. 30, 1957 Engineer J.M.

| Constituents | Constituents | Meq/L | ppm | Constituents | Meq/L | ppm |
|-------------------------------|--------------|--------|--------|-----------------|--------|--------|
| 1. Total Solids 31763 ppm | 6. Sodium | 446 | 10,258 | 11. Chloride | 521 | 18,460 |
| 2. pH 7.33 | 7. Calcium | 60 | 1200 | 12. Bicarbonate | 22 | 1,330 |
| 3. Sp. gr 1.0245 @ 66 °F. | 8. Magnesium | 38 | 469 | 13. Sulfate | 1 | 46 |
| 4. Resistivity 0.225 @ 66 °F. | 9. Iron | Absent | - | 14. Carbonate | Absent | - |
| 5. Hydrogen Sulfide Absent | 10. Barium | Absent | - | 15. Hydroxide | Absent | - |



HYPOTHETICAL COMBINATIONS

| Constituent | ppm | Constituent | ppm |
|--------------------------|------|--------------------|--------|
| 1. Calcium Chloride | 3324 | 4. Sodium Chloride | 26,033 |
| 2. Magnesium Bicarbonate | 1592 | 5. Sodium Sulfate | 71 |
| 3. Magnesium Chloride | 1235 | | |

GEOLOGICAL SURVEY OF CANADA
406- CUSTOMS BUILDING
CALGARY, ALBERTA

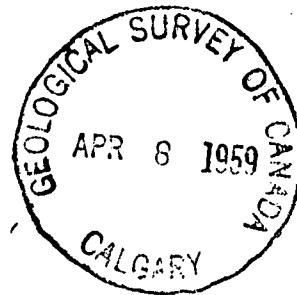


CORE LABORATORIES-CANADA LTD.

PETROLEUM RESERVOIR ENGINEERING

CALGARY, ALBERTA

WATER ANALYSIS



File CNP-4-WA-81

Company Western Minerals Ltd. Well Name Eagle Plains No. 1

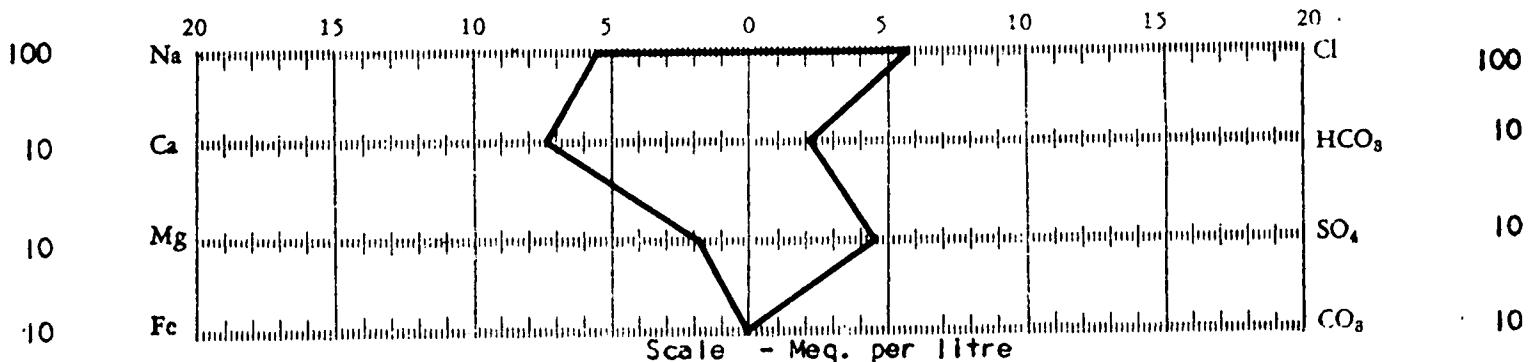
Formation _____ Depth _____

Sample No. 1Location _____ Field. WildcatSampled From D.S.T. # 20Date Sampled June/58 Date Analyzed June 16/58Province Yukon Territory

Constituents _____

Engineer B.K.1. Total Solids 37980 ppm 6. Sodium 546 12,558

Constituents _____ Meq/L ppm

2. pH 6.9 7. Calcium 74 1,48011. Chloride 571 20,2353. Sp. gr 1.0274 @ 73 °F. 8. Magnesium 18 21912. Bicarbonate 22 1,3474. Resistivity 0.22 @ 73 °F. 9. Iron - -13. Sulfate 45 2,1415. Hydrogen Sulfide Absent 10. Barium - -14. Carbonate - -15. Hydroxide - -

HYPOTHETICAL COMBINATIONS

| Constituent | ppm | Constituent | ppm |
|--------------------------|--------------|--------------------|---------------|
| 1. Calcium Chloride | <u>4,100</u> | 4. Sodium Chloride | <u>29,309</u> |
| 2. Magnesium Bicarbonate | <u>1,612</u> | 5. Sodium Sulfate | <u>3,195</u> |
| 3. Magnesium Chloride | <u>-</u> | | |

GEOLOGICAL SURVEY OF CANADA
406- CUSTOMS BUILDING
CALGARY, ALBERTA



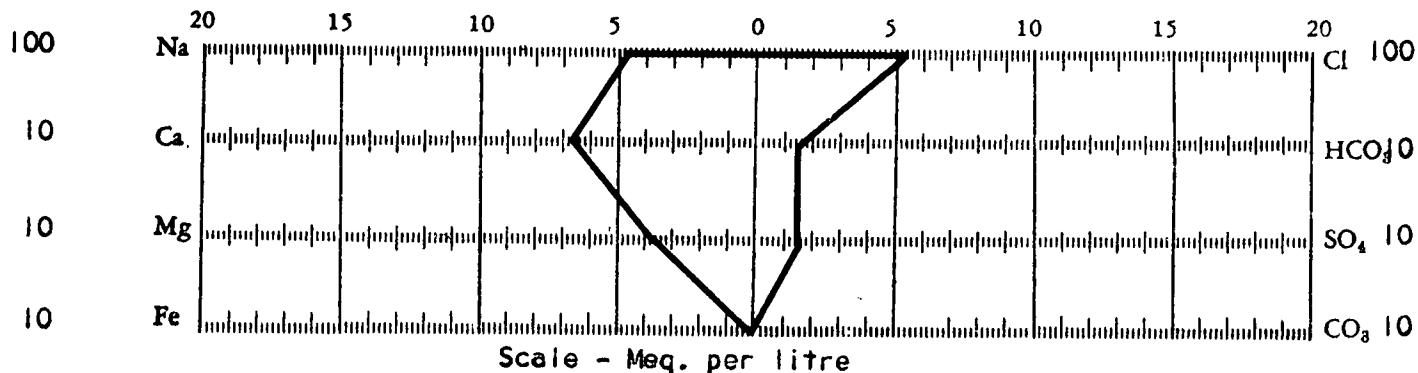
CORE LABORATORIES-CANADA LTD.
 PETROLEUM RESERVOIR ENGINEERING
 CALGARY, ALBERTA
 WATER ANALYSIS



File CNP-4-WA 26

Peel Plateau
 Company Exploration Ltd. Well Name Eagle Plains No. 1
 Formation _____ Depth _____
 Location _____ Field Wildcat
 Date Sampled _____ Date Analyzed Oct. 17, 1957
 Engineer B. K.

| Constituents | Constituents | Meq/L | ppm | Constituents | Meq/L | ppm |
|------------------------------|--------------|-------|--------|-----------------|-------|--------|
| 1. Total Solids 32,901 ppm | 6. Sodium | 460.6 | 10,594 | 11. Chloride | 530.6 | 18,815 |
| 2. pH 6.9 | 7. Calcium | 65.9 | 1,320 | 12. Bicarbonate | 16.0 | 976 |
| 3. Sp. gr 1.0249 @ 73 °F. | 8. Magnesium | 35.9 | 437 | 13. Sulfate | 15.8 | 759 |
| 4. Resistivity 0.21 ohms/M M | 9. Iron | - | - | 14. Carbonate | - | - |
| 5. Hydrogen Sulfide Absent | 10. Barium | - | - | 15. Hydroxide | - | - |



HYPOTHETICAL COMBINATIONS

| Constituent | ppm | Constituent | ppm |
|--------------------------|-------|--------------------|--------|
| 1. Calcium Chloride | 3,656 | 4. Sodium Chloride | 26,021 |
| 2. Magnesium Bicarbonate | 1,168 | 5. Sodium Sulfate | 1,122 |
| 3. Magnesium Chloride | 945 | | |

GEOLOGICAL SURVEY OF CANADA
 406- CUSTOMS BLDG.
 CALGARY

PEEL PLATEAU EXPLORATION LTD.

EAGLE PLAINS NO. 1

LOCATION $130^{\circ} 8' 30''$ - $66^{\circ} 48' 51''$ DAILY PROGRESS REPORT1957

- April 17 Drilled out rathole. Spudded in 4.30 p.m.
- April 18 Drilling 9" hole. Conditioned mud. Washout around conductor pipe.
- April 19 Cementing conductor. W.O.C.
- April 20 Re-drilled rathole. W.O.C. Reassembled to drill.
- April 21 W.O.C. Drilled out cement. Conductor washed out. Re-cemented conductor. W.O.C.
- April 22 W.O.C.
- April 23 W.O.C. D.O.C.
- April 24 Drilling, ran cement. W.O.C.
- April 25 Rigged up Laboratory. W.O.C. D.O.C. Depth 131 ft.
- April 26 Drilling, changed bits. Depth 260 ft.
- April 27 Reaming 12-1/4" to 100 ft. Lost circulation, re-cemented. Depth 306 ft.
- April 28 W.O.C. Depth 306 ft.
- April 29 Drilling in shale with interbedded siltstone.
- April 30 Drilling 9", changed bits. Depth 12 noon, 431 ft.
- May 1 Drilling 9", changed bits. Depth 12 noon, 520 ft.
- May 2 Drilling 9", Ran E Log, Temperature Surveys, reaming to 12-1/4". Depth 12 noon, 600 ft.
- May 3 Reaming to 12-1/4". Changed bits.
- May 4 Reaming 12-1/4" to 600 ft. Reaming to 17-1/2".
- May 5 Reaming to 17-1/2".

1957

- May 6 Reaming to 17-1/2".
- May 7 Reaming to 17-1/2". Drilling 9". Depth at 12 noon 600 ft.
- May 8 Drilling 9". Depth at 12 noon 750 ft.
- May 9 Drilling 9". Depth at 12 noon 880 ft.
- May 10 Drilling 9". Trip to change bits. Depth at 12 noon 930 ft.
- May 11 Drilling 9". Trip to ream with 12-1/4". Depth at 12 noon 1020 ft.
- May 12 Reaming with 17-1/4". Trip to change bits.
- May 13 Reaming. Lost 3 drill collars in hole; recovered same with fish. Resumed reaming.
- May 14 Circulating; ran casing; cemented casing; W.O.C.
- May 15 W.O.C. Cut off conductor pipe; welded on casing bowl; heading up.
- May 16 W.O.C. Drilled out; drilled 9" hole.
- May 17 Drilling 9", in shale. Depth at 12 noon 1150 ft.
- May 18 Drilling 9". Trip, new bit, ran survey. Depth at 12 noon 1251 ft.
- May 19 Drilling 9". Trip, new bit, ran survey. Depth at 12 noon 1372 ft.
- May 20 Drilling 9". Trip, new bit, ran survey. Depth at 12 noon 1435 ft.
- May 21 Drilling 9". Lost survey tool, sub and bit in hole; fishing.
- May 22 W.O.C. Fishing.
- May 23 Fishing; recovered tools; drilling. Depth at 12 noon 1557 ft.
- May 24 Milling on iron; trips with junk sub. Depth at 12 noon 1612 ft.
- May 25 Drilling. Twisted off one D.C. & Sub; recovered same. Depth at 12 noon 1705 ft.
- May 26 Drilling 9". Depth at 12 noon 1797 ft.

GEOLOGICAL SURVEY OF CANADA
406. CUSTOMS BUILDING
CALGARY, ALBERTA

1957

- May 27 Drilling 9". Depth at 12 noon 1900 ft. Survey at 1860 ft. 2 3/4 at 1900, 3 degrees. Pumping water via pipeline from Oval Creek to rig and camp. Progress 103 ft.
- May 28 Drilling 9". Survey 1940, 2-1/2 at 2025, 2-1/2 degrees. Trip for new bit. Depth at 12 noon 1992 ft. Progress 92 ft.
- May 29 Drilling 9". Circulated before running in with junk sub; drilled one foot and made trip to run in with 6-1/8" diamond core bit; cutting Core No. 1. Progress 103 ft. Depth at 12 noon 2095 ft.
- May 30 Cut Core No. 1, 2101 - 2122. Recovered 21 ft. shale with scattered silty shald and silt beds. Dip on core average 4 degrees. Depth 12 noon 2122 ft. Progress 27 ft. Ran in with 9" bit and reamed; resumed drilling. Survey at 2115, 2-3/4".
- May 31 Drilling 9". Survey at 2190, 2-1/2 degrees; trip to change bits. Depth at 12 noon 2224 ft. Progress 102 ft.
- June 1 Drilling 9". Survey at 2270 2 degrees; 2365 2-1/2 degrees. Depth at 12 noon 2341 ft. Progress 117 ft.
- June 2 Drilling 9". Survey 2450, 2-1/2 degrees. Pulled out of hole to cut line. Depth at 12 noon 2435 ft. Progress 94 ft.
- June 3 Drilling 9". Survey at 2542, 2 degrees. Trip to change bits. Depth at 12 noon 2542 ft. Progress 107 ft.
- June 4 Drilling 9". Survey 2610, 2-1/4 degrees. Trip to change bits. Depth at 12 noon 2650 ft. Progress 108 ft.
- June 5 Drilling 9". Survey at 2780, 3 degrees. Depth at 12 noon 2756 ft. Progress 105 ft.
- June 6 Drilling 9". Two trips to change bits. Depth at 12 noon 2860 ft. Progress 104 ft.
- June 7 Drilling 9". Survey at 2860 3-1/4, at 2956 3 degrees. Depth at 12 noon 2960 ft. Progress 100 ft.
- June 8 Drilling 9". Trip to change bits. Depth at 12 noon 3060 ft. Progress 100 ft.
- June 9 Drilling 9". Survey at 3125 3-1/4 degrees. Depth at 12 noon 3163 ft. Progress 103 ft. Trip for new bit. Cat working on landing strip.
- June 10 Drilling 9". Survey 3205 3-3/4 degrees. Trip to change bits. Depth at 12 noon 3222 ft. Progress 97 ft.

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GEOLOGICAL SURVEY OF CANADA
 406-CUSTOM BUILDING
 C. L. ELLIOTT

1957

- June 11 Drilling 9". Survey 3290 3-1/2 degrees. Trip to change bits. Depth at 12 noon 3307 ft. Progress 85 ft.
- June 12 Drilling 9". Survey 3384 2-3/4 degrees. Completed trip. Depth at 12 noon 3400 ft. Progress 93 ft.
- June 13 Drilling 9". Survey 3461 2-1/2 degrees, 3530 3 degrees. Trip. Depth at 12 noon 3498 ft. Progress 98 ft.
- June 14 Drilling 9". Survey 3530 3 degrees. Trip to change bits. Trip with junk sub. Drilled 1 ft. Trip with diamond bits to cut Core No. 2, 3611 - 3658. Depth at 12 noon 3604 ft. Progress 106 ft.
- June 15 Pulled Core No. 2; recovered 20 ft. limestone. Ran in with 9" bit and Junk sub. Reaming, drilled 1 ft. Trip to cut Core No. 3. Depth at 12 noon 3658 ft. Progress 54 ft.
- June 16 Cutting and recovered Core No. 3, 3659 - 3679, recovered 20 ft. Limestone. Drilling 9"; reaming; survey 3679 3 degrees. Trip for new bit. Depth at 12 noon 3679 ft. Progress 21 ft.
- June 17 Drilling 9". Survey 3679 3 degrees, 3752 2-1/4 degrees. Depth at 12 noon 3751 ft. Progress 93 ft.
- June 18 Drilling 9". Survey 3848 ft. 1-3/4 degrees. Trip for new bit. Depth at 12 noon 3848 ft. Progress 97 ft.
- June 19 Drilling 9". Circulating for test.
Drill stem test No. 1 Hisrun.
Drill Stem Test No. 2, recovered 200 ft. drilling mud. Depth at 12 noon 3918 ft. Progress 70 ft.
- June 20 Cut Core No. 4; cut drill line 100 ft. Reaming to 9". Drilling 9". Depth at 12 noon 3950 ft. Progress 22 ft.
- June 21 Drilling 9". Survey at 3970 1-3/4 degrees. Circulating to run logs, ran E logs, Caliper and Temperature Surveys. Depth at 12 noon 4002 ft. Progress 62 ft.
- June 22 Ran Temp. survey, directional survey, spooling sand line. Reaming 9" to 12-1/4".
- June 23 Two trips with reamers, reaming 9" to 12-1/4".
- June 24 Reaming 9" to 12-1/4"; trip to change bits.
- June 25 Reaming 9" to 12-1/4"; re-reaming and trip to service drill collars.
- June 26 Re-reaming and trip to change bits; reaming.

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GEOLOGICAL SURVEY C. CANADA
406 CUSTOMS BUILDING
CALGARY ALBERTA

| <u>1957</u> | |
|-------------|---|
| June 27 | Reaming; two trips to change bits; re-reaming. |
| June 28 | Reaming; trip to service drill collars; re-reaming. |
| June 29 | Reaming; fishing for 8 drill collars; recovered same. Trip with 9" bit to clean out hole; trip with reamer. |
| June 30 | Reaming; running casing; cemented casing to 2510 ft. |
| July 1 | W.O.C. and nipping up. |
| July 2 | Nipping up; gas leak between casings ignited; shut in at bull plug; pressure built up to 150%. Drilled out plug, pressure up on casing 950%. Drilled cement and shoe. |
| July 3 | Cleaning hole to bottom. Drilling 8-5/8". Gas surged from bleed-off line; pressure up to 150%, flared and decreased to 1 - 2 ft. flare. Gas leaked into mud. Depth at 12 noon 4010 ft. Progress 8 ft. |
| July 4 | Drilling 8-5/8". Survey at 4050 1-1/2 degrees. Trip to change bits; flaring gas, mud free of gas. Depth at 12 noon 4113 ft. Progress 103 ft. |
| July 5 | Drilling 8-5/8". Survey at 4180 1 degree. Trip to change bits; flaring gas, 1 ft. flare, mud free. Depth at 12 noon 4255 ft. Progress 142 ft. |
| July 6 | Drilling 8-5/8". Survey 4350 1-1/4 degrees. Trip to change bits; flare decreasing. Depth at 12 noon 4392 ft. Progress 137 ft. |
| July 7 | Drilling 8-5/8". Trip to change bits. Gas flaring weak, shut in to test pressure. Depth at 12 noon 4515 ft. Progress 123 ft. |
| July 8 | Drilling 8-5/8". Ran in for drill stem test No. 3. Lost mud. Depth at 12 noon 4675 ft. Progress 158 ft. |
| July 9 | Drill stem test No. 3 completed. Drilling 8-5/8". Survey at 4775 3/4 degrees. Ran in for drill stem test No. 4. Depth at 12 noon 4742 ft. Progress 67 ft. |
| July 10 | Completed drill stem test No. 4. Drilling 8-5/8". Lost circulation; mixed mud. Running in to core, measured pipe, no correction. Depth at 12 noon 4812 ft. Progress 70 ft. |
| July 11 | Cut Core No. 5. Reaming, drilling 8-5/8". Lost circulation. Regained circulation, drilling ahead. Depth at 12 noon 4845 ft. Progress 33 ft. |
| July 12 | Ran drill stem test No. 5. Drilling 8-5/8". Lost and regained circulation. Trip to cut core No. 6. Depth at 12 noon 4846 ft. Progress 1 ft. |

GEOLOGICAL SURVEY
406. CUSTOMS BUILDING
CALGARY ALBERTA CANADA

1957

- July 13 Cut core No. 6. Ran in with junk sub to 4912 ft., ran in to circulation. Trip in with core barrel. Depth at 12 noon 4912 ft. Progress 66 ft.
- July 14 Cut core No. 7. Ran drill stem test No. 6. Reaming and drilling ahead. Depth at 12 noon 4950 ft. Progress 38 ft.
- July 15 Drilling 8-5/8". Pumped down plug No. 1. W.O.C. Depth at 12 noon 4994 ft. Progress 44 ft.
- July 16 W.O.C. and running in stands; condition mud; drilling at 8-5/8". Depth at 12 noon 4994 ft. Progress 0.
- July 17 Drilling 8-5/8". Trip to cut line. Depth at 12 noon 5095 ft. Progress 101 ft.
- July 18 Drilling 8-5/8". Survey at 5290 2 degrees. Pulled out. Depth at 12 noon 5243 ft. Progress 148 ft.
- July 19 Ran in hole; drilling 8-5/8". Depth at 12 noon 5330 ft. Progress 87 ft.
- July 20 Drilling 8-5/8". Pulled out, ran survey, strung 8 lines. Bailed cellar to work on B.O.P. Depth at 12 noon 5434 ft. Progress 104 ft.
- July 21 Work on B.O.P. and well head.
- July 22 Drilling 8-5/8". Depth at 12 noon 5512 ft. Progress 78 ft.
- July 23 Drilling 8-5/8". Survey 5580 1-1/2 degrees. Ran in with junk sub. Drilled 2 ft; circulated to cut core No. 8, 5590 - 5600. Recovered 10 ft. limestone; ran in with 8-5/8" and reamed. Depth at 12 noon 5590 ft. Progress 78 ft.
- July 24 Mixed mud; drilling 8-5/8". Depth at 12 noon 5645 ft. Progress 55 ft.
- July 25 Drilling 8-5/8". Ran directional survey 5760 4 degrees S.S.W. Ran drift survey 5760 4-1/4 degrees. Depth at 12 noon 5750 ft. Progress 105 ft.
- July 26 Drilling 8-5/8". Survey 5830 4-1/2 degrees; drilling; Survey 5860 4-1/2 degrees, S.S.W. Depth at 12 noon 5825 ft. Progress 75 ft.
- July 27 Completed survey, ran in to drill 8-5/8". Pulled out to change bits. Depth at 12 noon 5908 ft. Progress 83 ft.
- July 28 Ran survey 5940, 4-1/2 degrees S.S.W. Drilling 8-5/8". Depth at 12 noon 5976 ft. Progress 68 ft.

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- July 29 Pulled out and ran survey 6010 4-1/2 degrees; drilling 8-5/8". Made trip with junk sub and circulated, drilled 1 ft. Pulled out and measured pipe, no correction. Depth at 12 noon 6033, Progress 57 ft.
- July 30 Ran in with core barrel, cut core No. 9, 6047 - 6087. Recovered 40 ft. grey blue dolomite; ran in and reamed hole. Depth at 12 noon 6080 ft. Progress 47 ft.
- July 31 Reaming and drilling 8-5/8". Pulled out of hole. Ran survey 6120 5 degrees; ran in and drilled ahead. Depth at 12 noon 6109 ft. Progress 29 ft.
- August 1 Drilling 8-5/8", ran survey at 6190 4-3/4 degrees. Drilling. Pulled out and ran directional survey 6195 5 degrees. Depth at 12 noon 6158 ft. Progress 49 ft.
- August 2 Drilling 8-5/8". Lost circulation, regained same. Drilling. Depth at 12 noon 6198 ft. Progress 40 ft.
- August 3 Pulled out and ran survey 6220 5-1/3 degrees. Ran in hole. Drilling. Survey at 6255 ft 4-3/4 degrees. Depth at 12 noon 6244 ft. Progress 46 ft.
- August 4 Drilling 8-5/8". Pulled out, ran survey 6285 5 degrees. Ran in and drilling. Depth at 12 noon 6290 ft. Progress 46 ft.
- August 5 Drilling 8-5/8"; survey at 6326 5 degrees, at 6360 4-3/4 degrees. Trip to change bits; drilling. Depth at 12 noon 6353 ft. Progress 68 ft.
- August 6 Drilling 8-5/8"; survey at 6414 4-1/2 degrees, at 6500 4 degrees. Drilling and pulled out. Depth at 12 noon 6465 ft. Progress 112 ft.
- August 7 Survey at 6515 4-1/2 degrees, at 6580 3-1/2 degrees. Drilling 8-5/8". Depth at 12 noon 6577 ft. Progress 112 ft.
- August 8 Drilling 8-5/8"; pulled out to run E log; survey at 6650 3 degrees. Ran E log. Drilling 8-5/8". Depth at 12 noon 6650 ft. Progress 73 ft.
- August 9 Drilling 8-5/8". Survey at 6710 3 degrees. Drilling and pulled out of hole. Depth at 12 noon 6792 ft. Progress 142 ft.
- August 10 Survey at 6790 2-1/2 degrees; cut core No. 10, 6792 - 6824 ft, recovered 32 ft. Depth at 12 noon 6824 ft. Progress 32 ft.

GEOLOGICAL SURVEY OF CANADA
406- CUSTOMS BUILDING
CALGARY, ALBERTA

1957

- August 11 Drilling 8-5/8". Pulled out to change bits. Survey at 6878 2-1/2 degrees. Depth at 12 noon 6878 ft. Progress 54 ft.
- August 12 Drilling 8-5/8". Lost circulation, mixed mud, resumed drilling. Trip to change bits. Ran survey at 6970 1-1/2 degrees. Drilling. Depth at 12 noon 6969 ft. Progress 91 ft.
- August 13 Drilling 8-5/8". Ran survey, ran logs. Depth at 12 noon 7040 ft. Progress 71 ft.
- August 14 Completed logging and ran in to circulate to test. Ran drill stem test No. 7 and 8; pulled out of hole.
- August 15 Ran drill stem test No. 9. Ran in with junk sub; reamed and drilled 2 ft. Ran survey, misrun. Ran in with core barrel. Cutting core No. 11.
- August 16 Completed cutting core No. 11 and pulled out. Ran in to cut core No. 12. Depth at 12 noon 7048 ft. Progress 8 ft.
- August 17 Completed cutting core No. 12. Ran survey at 7065 1 degree. Reaming and drilled 1ft. Ran in to cut core No. 13. Depth at 12 noon 7055 ft. Progress 7 ft.
- August 18 Recovered core No. 13. Ran in to ream and resumed drilling.
- August 19 Pulled out to change bits. Survey at 7100 ft. 2/3 degree. Ran in. Drilling 8-5/8". Pulled out. Depth at 12 noon 7126 ft. Progress 29 ft.
- August 20 Ran in and drilled 8-5/8". Depth at 12 noon 7187 ft. Progress 61 ft.
- August 21 Drilling 8-5/8". Pulled out. Survey at 7265 1-2/3 degrees. Ran drill stem test No. 10. Pulled out, laid down tool. Depth at 12 noon 7264 ft. Progress 77 ft.
- August 22 Ran in and drilled 8-5/8". Pulled out to run in to core. Depth at 12 noon 7337 ft. Progress 73 ft.
- August 23 Cut core No. 14. Recovered core. Two survey misruns. Ran in to drill. Depth at 12 noon 7366 ft. Progress 29 ft.
- August 24 Reamed out hole. Drilling 8-5/8". Survey at 7430 2 degrees. Trip to change bits. Depth at 12 noon 7412 ft. Progress 46 ft.
- August 25 Drilling 8-5/8". Survey 7530 2-1/2 degrees. Pulled out to test. Depth at 12 noon 7487 ft. Progress 75 ft.

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- August 26 Drilling 8-5/8". Ran drill stem test No. 11. Depth at 12 noon 7533 ft. Progress 46 ft.
- August 27 Drilling 8-5/8". Trip to change bits. Lost circulation 7675 - 7678 ft. Mixed mud; continued to lose circulation. Depth at 12 noon 7675 ft. Progress 142 ft.
- August 28 Mixing mud and pumping down. Trip to cut Core No. 15. Circulating and conditioning mud. Depth at 12 noon 7678 ft. Progress 3 ft.
- August 29 W.O.O. Depth at 12 noon 7688 ft. Progress 10 ft.
- August 30 W.O.O.
- August 31 W.O.O.
- September 1 W.O. Gel.
- September 2 W.O. Gel and mixing mud.
- September 3 Ran in, reamed 6-1/8" to 8-5/8". Circulated; trip to run drill stem test No. 12. W.O. Gel.
- September 4 W.O. Gel.
- September 5 W.O. Gel. Mixing mud, ran in with junk sub and drilled, 7688 - 7696 while conditioning mud. Lost circulation.
- September 6 W.O. Gel; ran drill stem test No. 13, misrun, packer seat failed to hold.
- September 7 Ran drill stem test No. 14. O.K. Stuck in hole 1 hour. W.O. Gel.
- September 8 W.O. Gel; preparing to run plugs.
- September 9 W.O. Gel. Ran plug No. 2. W.O.C. Pulled out. Ran plug No. 3.
- September 10 W.O.C. Ran in, felt plug No. 3 at 4798. Drilled out Plug No. 3. Circulated out cement; circulated and mixed Gel; conditioned mud.
- September 11 Circulated and conditioned mud. Pulled out and W.O. Gel. Ran in to cut core No. 16. Pulled out, ran in to ream.
- September 12 Reamed 10 ft. Drilled 15 ft. W.O. Gel.
- September 13 W.O. Gel.
- September 14 W.O. Gel.

GEOLOGICAL SURVEY OF CANADA
406- CUSTOMS BUILDING
CALGARY, ALBERTA.

1957

- September 15 W.O. Gel. Ran drill stem test No. 15, misrun, sawdust plugged tool.
- September 16 Mixed mud and sawdust; pulled out to run drill stem test No. 16. Ran drill stem test No. 16, recovered 155 ft. drilling mud.
- September 17 Drilling shot holes for velocity survey.
- September 18 Conditioning mud and drilling shot holes. Rigging up to run logs.
- September 19 Logging and drilling shot holes.
- September 20 Logging and drilling shot holes.
- September 21 Ran velocity survey. Resumed drilling 8-5/8". Depth at 12 noon 7725 ft. Progress 7 ft.
- September 22 Drilling 8-5/8". Trip to change bits. Depth at 12 noon 7788 ft. Progress 63 ft.
- September 23 Drilling 8-5/8". Trip and ran in to cut core No. 17. Depth at 12 noon 7878 ft. Progress 90 ft.
- September 24 Completed cutting core No. 17. Recovered 32 ft. Ran in and reamed rat hole. Drilling 8-5/8". Depth at 12 noon 7906 ft. Progress 28 ft.
- September 25 Drilling 8-5/8". Survey at 7970 2-1/4 degrees. Trip to change bits. Drilled 8-5/8". Depth at 12 noon 7970 ft. Progress 64 ft.
- September 26 Drilling 8-5/8". Trip to change bits. Depth at 12 noon 8055 ft. Progress 85 ft.
- September 27 Drilling 8-5/8". Trip to change bits. Depth at 12 noon 8146 ft. Progress 91 ft.
- September 28 Drilling 8-5/8". Pulled out. Depth at 12 noon 8237 ft. Progress 91 ft.
- September 29 Completed trip to change bits. Drilling 8-5/8". Depth at 12 noon 8337 ft. Progress 100 ft.
- September 30 Drilling 8-5/8". Survey at 8409 4-1/2 degrees. Ran logs. Depth 8409 ft. Progress 72 ft.
- October 1 W.C.O. Cut drill line. Survey at 8400 5 degrees W. Ran in hole, conditioned mud, circulating.

1957

- October 2 Pulled out to run drill stem test No. 17,
8338 - 8409. Packer stuck, backed off, pulled out.
Ran in with jars. Pulled out and recovered fish.
Break and lay down jars and fish. W.O.C.
- October 3 W.O.O. Ran in and set plug, 100 ft. bottom, 40 sacks
cement. Pulled out.
- October 4 Pulled out to run plug at 5040, 3 sacks cement. Ran
plug at 4425. Fishing, recovered fish. Ran 3 sacks
cement on McCullough bailer. Ran in with bit,
circulating and conditioned mud. Laid down D pipe.
- October 5 Ran drill stem test No. 18. Misrun. Made up packer.
Ran drill stem test No. 19, 4085 - 4423
V.O. 12.50
I.S.I. 15
V.O. 60
F.S.I. 15
Recovered 190 ft. mud
Ran McCullough bridge plug at 2615. Ran cement plug,
60 sacks cement.
- October 6 Ran McCullough bridge plug at 200 ft. (8-5/8")
Fished out setting tool; recovered same. Cement
plug at top.

PROGRESS DRILLING REPORT FOR 1958

- May 28 Mixing mud, picking up drill stem. Drilling out plug #1 $8\frac{5}{8}$ " bit.
- May 29 Drilled out plugs #2, 3 and 4.
- May 30 Drilled out cement; commenced drilling 4.30 p.m., $8\frac{5}{8}$ " hole.
Pulled out to change bits.
Drilling in limestone.
- May 31 Drilling in limestone $8\frac{5}{8}$ " bit. Depth at 12 noon 8462'.
- June 1 Drilling $8\frac{5}{8}$ ", trip to change bits, losing circulation and mixed mud.
Depth at 12 noon 8645'
Drilling in limestone. Progress.
- June 2 Drilling $8\frac{5}{8}$ ", trip to change bits
Depth at 12 noon 8795'
Drilling in limestone. Progress 150'
- June 3 Drilling $8\frac{5}{8}$ ", survey at 8945', $6\frac{1}{2}$ degrees. Trip to change bits.
Depth at 12 noon 8946'
Drilling in limestone. Progress 151'
- June 4 Drilling $8\frac{5}{8}$ ", trip to run in with core barrel.
Depth at 12 noon 9045'
Drilling in limestone. Progress 99'
- June 5 Cut core No.18, 9079 to 9102, 23', recovered 12' limestone
Ran D.S.T. No.20, recovered 1764' salt water.
Depth at 12 noon 9102' Progress 57'
- June 6 Pulled out packer, strung 10 lines, relined brakes, Ran in hole.
Reamed 23', drilled 10' limestone.
- June 7 Drilling $8\frac{5}{8}$ ", pulled out.
Depth at 12 noon 9177'
Drilling in limestone. Progress 65'
- June 8 Pulled out, survey at 9220', 12 degrees. Drilling circulated to pull
out to core.
Depth at 12 noon 9260' Progress 83'
- June 9 Pick up and service core barrel, cut core No.19-9327 to 9343.
Recovered 3', ran survey, misrun; ran D.S.T. No.21, 9102 - 9343.
Recovered 550' mud.
- June 10 Pulled out packer; ran survey at 9120, 12 degrees, slip and cut
100' drilling line. Reaming and drilling. Survey 9320, $12\frac{1}{2}$ degrees.
Depth at 12 noon 9327'. Progress 67'
- June 11 Drilling; pulled out to change bits; drilling.
Depth at 12 noon 9445' Progress 118'

GEOLOGICAL SURVEY OF CANADA
406-CUSTOMS BUILDING
CALGARY, ALBERTA

- June 12 Drilling; pulled out; ran survey at 9562'; $7\frac{3}{4}$ degrees.
Depth at 12 noon, 9562'. Progress 117'
- June 13 Ran survey at 9588'. Ran in to cut Core No.20. Cut 1'; Core barrel stuck in hole. Working stuck pipe. Pull out. W/Overshot parts.
- June 14 Waiting on Overshot parts.
- June 15 Ran in hole with Overshot. Circulating. Pulled out; recovered 3 stands fish. Ran in with Overshot. Circulating; rig up to run Overshot string.
- June 16 Running dummy run to check pipe; circulate and work pile; running Magnetector; running Backoff shot; Torque up pipe; ran backoff shot and backoff pipe at 6985'; pulled out; ran in and screwed into fish; circulated.
- June 17 Circulated and conditioned mud; pipe parted 18 strands; pulled out and ran in with Overshot; caught fish, circulated and worked pipe; ran dummy run; ran Magnetector; back off pipe; pulled out with Fish; broke off Overshot.
- June 18 Worked on Overshot; cut out grapple; picked up 21 joints $3\frac{1}{2}$ " pipe; ran in; laid down crooked $4\frac{1}{2}$ " pipe; circulated; top of fish at 6989'; caught fish; circulated and worked pipe; trying to torque pipe to run string shot; ran string shot; stopped at Overshot; ran heavy spear on sandline; ran string shot; backed off pipe at 8085'; picked up 12 stands $3\frac{1}{2}$ " pipe.
- June 19 Ran in open end to screw into fish; circulated and screwed into fish.; Circulated and worked pipe; ran heavy spear on end of sand line; attempted to go to bottom; worked Magnetector; ran in Magnetector; torqued pipe and ran backoff shot at 8450'.
- June 20 Pulled out; slip and cut drilling lines; picked up washover and $3\frac{1}{2}$ " drill pipe; laid down bent pipe; ran in and hit bridge at 4680'; reamed and conditioned mud; top of fish at 8460'; pulled out; ran in with washover pipe; reamed with washover.
- June 21 Reamed with washover pipe; ran in and reamed from 6330 to 8073'; reamed with washover; pulled out; ran in with washover pipe; reamed 4680 to 4760; ran in with washover pipe.
- June 22 Reamed with washover pipe; ran in; reamed to top of fish and attempted to stab same; washed over fish and tried to re-stab fish; pulled out; top of fish at 8465'; pulled out; strung new drill lines; ran in with washover pipe; reamed at 5925' ran in; washed over fish 8465-8477.
- June 23 Washing over fish; pulled out; worked on washover shoe; ran in; washed over fish; pulled out of hole.
- June 24 Worked on washover shoe; ran in;; tried to wash over^{400 CUSTOM BUILDING}; pulled out^{400 CUSTOM BUILDING}; hooked up cutters; ran in with washover pipe and cutters; tried to wash over fish; cut off fish; at 8508'; pulled out and recovered 45.2 off fish; ran in with washover pipe and shoe.
- GEOLOGICAL SURVEY OF CANADA
CALGARY ALBERTA

- June 25 Washed over and pulled out; ran in with cutter; tried to cut off fish; cutter jammed, failed to cut; pulled out.
- June 26 Ran in with shoe; washing over fish; pulled out; ran in with cutter; cutting off fish; pulled out and laid down fish; top off fish 8651.
- June 27 Picked up overshot jars and 2 drill collars; ran in; catch fish; circulating; worked pipe; jarring; ran sinker bar; circulated; ran Magnetector; pulled out; broke down jars and overshot; ran in with washover pipe; top off fish 8651'.
- June 28 Ran in; washing over; circulated; pulled out; installed new line on line spooler; cut off fish; pulled out; top fish 8989.
- June 29 Pulled out; recovered fish; cut 80' drill line; ran in with shoe; washed over; pulled out.
- July 1 Circulating and worked pipe; ran sinkerbar to 8932; circ; worked pipe; ran McCullough Feeler; ran shot string; pulled out; ran in open end to pick up 4 $\frac{1}{2}$ " pipe.
- June 30 Tripping; cut off fish; pulled out; ran in with cutter and wash-over pipe; circ. and worked washover pipe.
- July 2 Picked up 4 $\frac{1}{2}$ " pipe; jarring on washover pipe.
- July 3 Jarring washover pipe.
- July 4 Jarring; spotting diesel oil.
- July 5 Jarring washover pipe; cut drill line.
- July 6 Jarring washover pipe.
- July 7 Jarring washover pipe.
- July 8 Jarring on washpipe; ran Magnetector; ran string shot; ran sinker bar on sandline 8950; ran string shot; circulated.
- July 9 Jarring and circulating; pulled out; ran in open end with drill collars; circ. and screwed back into jars; ran string shot; ran Magnetector; ran sinkerbar on sandline; ran magna. backing off pipe..
- July 10 Attempted to back off; circ. worked pipe; ran string shot; pulled out; waiting on orders.
- July 11 W.O.O.
- July 12 W.O.O.; rigging to run E logs; logging.

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CALGARY, ALBERTA

- July 13 Logging; work on logging tool; logging; ran in open end; circ.; ran plug No.1 displaced.
- July 14 Running bridging plugs.
- July 15 Running bridging plugs, pulled out and laid down pipe. Drilling suspended.

GEOLOGICAL SURVEY OF CANADA
406- CUSTOMS BUILDING
CALGARY, ALBERTA

SUMMARY SAMPLE DESCRIPTIONSEAGLE PLAINS NO. 1.

0 - 80

Interbedded Siltstone, Sandstone, minor Shale.Siltstone.

Grey, micaceous, quartzitic, hard, compact.

Sandstone.

Grey, very fine grained, compact, quartzitic, poorly sorted, dark and clear quartz grains, angular and abundant well-rounded coarse quartz grains. Traces black chert grains. Pyritic, calcareous cement.

Shale.

Light grey, micaceous and clay ironstone with abundant bright brown coated fracture planes and brown lenses shale and silty shale. Traces white quartzitic veinlets and light grey limy stringers.

80 -

Shale.

130

Grey, blocky, minor fissile, traces sandstone and siltstone only, micromicaceous in part.

130 -

320

Interbedded Shale and Siltstone and traces fine Sandstone lenses.Shale.

As above.

Siltstone.

As above, with sandy lenses and fine sandstone beds. This section is composed of laminated and lensed silty sediments.

320 -

340

Sandstone.With interbeds of Shale in lower 10 ft.Sandstone.Grey with buff tint, very silty to sandy siltstone, very fine grained, micaceous, with abundant coarse to medium quartz grains, sub-angular; compact, well cemented, non calcareous, minor cherty and quartzitic grains fine to medium grained. Very poorly sorted and lensed. Trace Glaucnrite.Shale.

Grey, compact, micaceous.

54

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|----------------|-------------------|---|
| 340 - 960 | | Interbedded and laminated <u>Shale</u> and <u>Siltstone</u> . Minor <u>Sandstone</u> laminae and lenses. |
| | <u>Shale.</u> | Grey to dark grey, fissile in part; pre- dominantly compact, blocky, micromicaceous, laminated. |
| | <u>Siltstone.</u> | Grey, argillaceous to sandy, with fine sandy lenses, laminated and lensed. Micaceous. |
| 960 - 1350 | <u>Shale.</u> | Predominant, grey, fissile, siliceous and silty in part, micromicaceous, laminated. |
| | <u>Siltstone.</u> | As scattered fine laminae throughout the shale. |
| 1350 - 1740 | <u>Shale.</u> | Interbedded with <u>Siltstone</u> and <u>Sandstone</u> , lenses and laminations of siltstone and sandstone. |
| | | <u>Shale</u> is grey, silty in part, becoming darker grey in some interbeds. Micaceous. |
| | | <u>Siltstone</u> is siliceous and shaly in part, darker grey. |
| | | <u>Sandstone</u> is silty, very fine grained, siliceous. Present in upper and lower beds as thin laminae. 1700 - 1730, grey, poorly sorted, trace <u>Glauconite</u> . |
| | | <u>Coal</u> at 1470 - 1480. <u>Gas</u> shows 1440 - 1450. |
| 1740 - 2190 | <u>Shale.</u> | With minor laminae of <u>Siltstone</u> scattered throughout. Shale is grey and dark grey to black, interbedded, fissile, micaceous, scattered silty shale lenses. Scattered brownish non-micaceous lenses of shale. Traces black carbonaceous filaments. |
| 2190 - 2450 | <u>Shale.</u> | With abundant fine interbeds and laminae of <u>Siltstone</u> and traces <u>Sandstone</u> . |
| | | Shale is grey and dark grey as above, micaceous. |
| | | <u>Siltstone</u> dark grey, siliceous, laminated. |

- 2450 - Shale. Predominant, scattered beds with Siltstone and Sandstone interbeds.
- 3230 Shale, grey and dark grey, micaceous, traces silty shale.
- Siltstone and traces silty sandstone interbedded in shale at 2750 - 2870 and 3160 - 3170.
- Sandstone is dark grey, hard, poorly sorted, argillaceous and siliceous, tight, limy cemented.
- Sandstones. 3030 - 3060. Marker bed, minor shale and siltstone interbeds.
- Sandstone is light grey, very fine grained, argillaceous, limy, fairly soft, foliated with abundant light brown mica in coarse flakes. Poorly sorted. Traces white calcite veinlets in shale, and quartz veinlets with crystals 3130 - 3160.
- 3230 - Shale. And Silty Shale interbeds, traces Siltstone and Sandstone with clear quartz veinlets at 3340.
- 3540 Shale is grey and dark grey to black, non micaceous at 3390. At 3500 shale carries white quartz veinlets, pyrite and coaly carbonized plant remains.
- 3540 - Shale. Dark grey, with abundant black carbonaceous to coaly shale. Pyrite abundant. Trace quartz and pyritic shale.
- Top Limestone 3575.
- 3570 - Shale. As above, minor.
- 3590 Limestone. Light buff, mottled with grey-brown limestone. Abundant stringers and veinlets of white fine crystalline limestone. Buff limestone is finely crystalline to dense. Limestone becomes more rubbly and in part finely fragmented. No shows, no apparent porosity, no fossil fragments apparent. Numerous cuttings appear to be slickensided.
- 3590 - Limestone. As above, slightly lighter in colour, more dense, hard, mottled, with white and grey limestone.

3610 -
3680

See Core Description.

3680 -
3815 Limestone.

As above, with sooty argillaceous material as fracture infill. Some units are dark grey-brown, argillaceous. White and grey calcite and limestone inclusions and veins abundant. Chalky limestone masses present. Mottling and blotching common. Limestone is fragmental, fractured; secondary crystalline limestone and calcite crystals scattered. No shows recorded on meter in this non-porous section. Limestone is dense, slow drilling.

3815 -
4600 Limestone.

Overall colour is darker grey-brown, quite argillaceous. Becoming somewhat more coarsely crystalline, highly fractured, mottled and fragmental. Light buff and white limestone as secondary vein infill and inclusions abundant. Traces vugs with quartz crystals.

White Limestone Marker Bed 4235 - 4245.

Traces fossils at 3940, 4400, 4560.
No shows, no apparent porosity.

4600 -
5150 Limestone.

Dark grey-brown, argillaceous and light grey-buff, somewhat chalky limestone. White calcite veins and inclusions. Limestone has a coarse salt and pepper appearance in upper portion. Fracture infill, veins and inclusions accounts for the rock being brittle. Traces quartz crystals, stylolite partings and a general mottling throughout. Began to lose mud - 4650. Fracture and vug porosity and intergranular porosity evident. Slow and fast drilling breaks numerous. Sawdust in mud made coring difficult. Gas shows on meter very low.

5150 -
5270 Limestone.

White calcite and mottled grey and white limestone, becoming light grey-buff and grey at 5170. Calcite abundant, limestone is silty to argillaceous, finely crystalline. Very minor dark grey-brown argillaceous limestone.

5270 -
5890 Limestone.

Dark grey-brown, argillaceous, fairly coarse in texture, mottled, abundant calcite veins in some units to traces only, and light grey-buff limestone. An overall mottled or blotched

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| | | appearance. No shales, no apparent porosity, traces fossil fragments only. |
| 5890 - 6035 | <u>Limestone.</u> | Light grey-buff and light grey. Finely crystalline to massive, dense limestone. Becomes homogeneous grey limestone at 5980 to pale grey-blue limestone at 6030. Hard, very fine crystalline. |
| 6035 - 6440 | <u>Dolomite.</u> | Pale to darker grey-blue and grey to grey-brown dolomite. Fine crystalline to massive, dense in texture with sugary textured beds present. Calcite veinlets and stringers fairly abundant. |
| 6440 - 6470 | <u>Limestone.</u> | Pale grey-buff, dense, argillaceous and <u>Dolomite</u> , becoming less abundant. |
| 6470 - 6778 | <u>Limestone.</u> | Pale grey-buff, mottled with white to light grey limestone. Veins of calcite. Crystalline to chalky. Pyritic. |
| 6778 - 7140 | <u>Limestone.</u> | Dark grey brown, argillaceous and brecciated, finely mottled; vein calcite abundant and calcite inclusions, slickensides. Becoming more argillaceous and somewhat dolomitic and carrying black argillaceous limestone or limy shale. |
| 7140 - 7150 | <u>Limestone and Limy Shale.</u> | Hard drilling, with criss-cross fine calcite veinlets and fracture infill. Limestone is dark grey to black, argillaceous, mottled, brecciated, slickensided. Black limy shale inclusions and beds abundant. Fossils present, pyrite noted. Section is highly fractured, slickensided, brecciated etc. \pm 7675. May be fault zone. Slickensides are at right angles to core, suggesting lateral movement. Limestone becomes lighter in colour and less argillaceous at \pm 7800. Limy black shale decreasing near base. |
| 7950 - 8409 | <u>Limestone.</u> | Grey, with faint brownish cast, argillaceous content slight, and medium to dark grey dense <u>limestone</u> . Traces calcite veins. Limestone is dense, somewhat brecciated. |

T.D. 8409.

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| 8410 - 8435 | <u>Limestone.</u> | Dark grey-brown and grey becoming lighter grey. Dense, <u>argillaceous</u> and fine crystalline. Abundant <u>calcite veins</u> |
| 8435 - 8455 | <u>Limestone.</u> | Grey and brownish-grey. Somewhat argillaceous. Fine crystalline. Calcite abundant. Grey to light grey predominant. |
| 8455 - 8485 | <u>Limestone.</u> | As above. Calcite less abundant. |
| 8485 - 8575 | <u>Limestone.</u> | Medium grey, slight brownish cast. Fine to medium crystalline, somewhat mottled, argillaceous. Break to fast drilling 8488-8498. Very fine calcite veins. Limestone is brittle. Drills fast. Reacts sluggishly to acid. |
| 8575 - 8650 | <u>Limestone.</u> | As above. |
| 8650 - 8700 | <u>Limestone/</u> | Grey, faintly mottled, argillaceous, slight brown cast. Trace of calcite. Hard drilling. |
| 8700 - 8800 | <u>Limestone.</u> | Medium crystalline. Slightly mottled. Dense grey- brown to dark grey argillaceous limestone becoming abundant. Trace of calcite. |
| 8800 - 8850 | <u>Limestone.</u> | Grey with brownish tinge. Medium crystalline becoming more abundant. Softer drilling. Still argillaceous. Traces of hard black limey shale. |
| 8850 - 8900 | <u>Limestone.</u> | Grey, medium crystalline. Only slightly argillaceous and mottled. Trace of black limey shale and calcite. |
| 8900 - 9079 | <u>Limestone.</u> | As above. More coarsely crystalline. |
| 9079 - 9102 | | See Core #18 Description. |
| 9102 - 9110 | <u>Limestone.</u> | Light grey and medium crystalline predominant. Medium grey crystalline limestone with traces black limey shale and dark brown argillaceous limestone. Limestone is mottled. |
| 9110 - 9130 | <u>Limestone.</u> | Light grey. Finely crystalline to medium. Brittle softer drilling. Traces darker grey limestone. No apparent porosity. No shows. |
| 9130 - 9140 | <u>Limestone.</u> | As above with 10% <u>dark brown to black argillaceous</u> <u>limestone.</u> |

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| 9140 - | <u>Limestone.</u> | |
| 9170 | | Dark brown to black. Dense, very <u>argillaceous</u> calcite veinlets and minor inclusions of calcite and light grey limestone. |
| 9170 - | <u>Limestone.</u> | |
| 9180 | | Grey, faint buff tinge. Medium crystalline. 10% dark grey argillaceous limestone. |
| 9180 - | <u>Limestone.</u> | |
| 9190 | | 70% grey limestone and 30% dark grey limestone. |
| 9190 - | <u>Limestone.</u> | |
| 9230 | | Dark grey with faint brownish cast and minor black limestone. <u>Argillaceous</u> . Traces grey limestone. Mottling and brecciation evident. Traces of fracturing and calcite veins. Brittle, hard and dense. |
| 9230 - | <u>Limestone.</u> | |
| 9327 | | Dark grey and grey crystalline. Mottled. Traces of black dense limestone. Calcite abundant to traces only. Limestone is argillaceous. |
| 9327 - | | See Core #19 Description |
| 9343 | | |
| 9343 - | <u>Limestone</u> | |
| 9440 | | As above Core #19. Hard drilling. Dark grey argillaceous predominant to 100% 9400-9440. |
| 9440 - | <u>Limestone.</u> | |
| 9589 | | Dark grey. Argillaceous. Dense to fine crystalline. Mottled and brecciated. Traces to 10% light grey to white crystalline limestone. Calcite veins fairly abundant. Traces of black argillaceous limestone. |

T.D.9589

53

CORE DESCRIPTIONS

CORE NO. 1. 2101 - 2122

Recovered 21 ft. Average dip 4°.

21 ft. Shale.

Dark and medium grey with minor black interbeds, micromicaceous. Scattered thin silty shale beds. Trace carbonaceous black filaments. Trace pyrite. Compact, blocky.

CORE NO. 2. 3611 - 3658

Recovered 20 ft.

20 ft. Limestone.

Grey-brown with veinlets and inclusions of white calcite. Inclusions of sooty black limestone and same on stylolite partings. Limestone is massive to finely crystalline. Rubbly to fragmental, brecciated. Highly fractured and brittle, with calcite fracture fillings. Fossiliferous: Corals, Brachiopods, Pelecypods. Scattered fracture and vuggy porosity and scattered traces pinpoint porosity. Scattered traces gas shows. Sulphurous odour. Trace oil fluorescence only. Meter did not register gas shows.

CORE NO. 3. 3659 - 3679

Recovered 20 ft.

20 ft. Limestone.

Essentially as Core No. 2. No shows. No apparent porosity except in minor scattered fractures. Calcite abundant.

CORE NO. 4. 3920 - 3940

Recovered 20 ft.

20 ft. Limestone.

Dark grey with brownish cast and lighter grey limestone; fine crystalline. Brecciated, mottled, blotched. White calcite veins and inclusions. Fossils present. Black sooty to shiny limy shale on partings. Essentially the same as Core No. 3.

CORE NO. 5. 4827 - 4847

Recovered 2 ft.

2 ft. Limestone.

Dark grey-brown and lesser amounts to grey-buff limestone. Mottled, blotched. Massive, with

calcite inclusions and veinlets. Drilled section shows evidence of inter-crystal, vein and vuggy porosity due to an abundance of crystals in samples. Traces fossils in drilled section. Fractures present with calcite crystals.

CORE NO. 6. 4891 - 4912

Recovered 3 ft.

3 ft. Limestone.

Grey, mottled, blotched with dark grey and white limestone, or dolomitic limestone. Brecciated. Abundant white calcite in veins and inclusions forms about 50% of core. Crystal aggregate abundant in veins. Vuggy and fracture porosity. Limestone is brittle and shatters readily.

Heavy sawdust content of mud and the brittle and fractured nature of the limestone makes it impossible to recover more of the core.

CORE NO. 7. 4913 - 4950

Recovered 2 ft.

2 ft. Limestone.

Dark grey and light grey, mottled, dolomitic in part. Finely reticulated and also with inclusions of light grey to white limestone. Highly fractured, brittle and brecciated.

Fracture and pinpoint porosity. Gas shows abundant and small reading on meter 4915 - 4918.

CORE NO. 8. 5590 - 5600

Recovered 10 ft.

10 ft. Limestone.

75% light grey-buff, very fine crystalline, massive, with criss-cross calcite veins and veinlets, minor calcite inclusions, traces fine fractures and stylolite partings. Minor dark grey-brown argillaceous limestone in narrow zones in upper 8 ft.

25% dark grey-brown limestone, argillaceous and interbedded with light grey-buff limestone in lower 2 - 3 ft. of the section. Dip of 15 - 20 degrees. 6" calcite at base. Trace gas shows in one fine fracture. Overall grey and dark-grey cast to the core.

CORE NO. 9. 6047 - 6087

Recovered 40 ft.

36 ft. Dolomite
and
Dolomitic
Limestone

Pale grey-blue and grey. Dense, very fine crystalline. No shows, no apparent porosity, no bedding, 4" pyritic light green shale break at 6051, apparently horizontal. A number of stylolitic partings and numerous nearly vertical hair-thin to $\frac{1}{4}$ " white calcite veins.

4 ft. Limestone.

Breccia, grey and light grey, irregular small masses of light grey to white calcite in grey dense limestone.

CORE NO. 10. 6792 - 6824

Dev/S.I. (Stab!)

Recovered 32 ft.

10 ft. Limestone.

Dark brownish grey, argillaceous, veins and inclusions white calcite abundant.

10 ft. Limestone.

White calcite predominant, coarse crystalline, with abundant partings and inclusions or segregations of dark grey-brown limestone. The mid 4 ft. is 50/50 white calcite and dark limestone.

12 ft. Limestone.

Dark grey-brown, argillaceous, with criss-cross veins and small and large inclusions or segregations of white calcite. Numerous fracture partings and stylolites with black, hard, limy shale. No bedding, no shows, no apparent porosity. Scattered indications of breccia and slickensiding.

CORE NO. 11. 7040 - 7048

Recovered 8 ft.

8 ft. Limestone.

Dolomitic or a true dolomite, dark grey to black, slight brownish cast, dense, argillaceous, numerous calcite veins irregular in shape and size as fracture infills and calcite inclusions. The dolomite is highly slickensided throughout the section, and somewhat brecciated. Abundant black shaly slickensided sediment in fractures. The dolomite is hard and slow coring.

CORE NO. 12. 7048 - 7069

Recovered 21 ft.

21 ft. Limestone.

Dolomitic, black and medium grey, blotched to mottled in upper 10 ft. Brownish cast, argillaceous. Scattered calcite veins up to 1/2" as fracture infill. Slickensides fairly abundant. Lower 10 ft. black limy dolomite, argillaceous, or a dolomitic shale. Numerous fossils in upper 10 ft., traces only in lower section. Dolomite is very hard, brittle, dense.

CORE NO. 13. 7069 - 7097

Recovered 28 ft.

28 ft. Limestone.

Dolomitic, argillaceous, very fine crystalline, very hard, dark grey to black, mottled and brecciated with medium grey argillaceous limestone. Numerous calcite veins in fractures. Fractures present with slickensided black shale. No fossils present. Core jammed in the barrel due to breakage on fractures and parts of the core are shattered.

CORE NO. 14. 7337 - 7377 M Silurian (Stelik)

Recovered 4.0 ft.

20 ft. Shale.

Black, limy, very hard. Fossiliferous - Brachiopods abundant in more limy bands. Bedded black and dark grey more limy shale. Pyrite fairly abundant, also slickensides. Fine veins and large inclusions at 8 ft. in section. Horizontal bedding and nearly vertical fracture infills of calcite. No shows, non porous.

Box #4
Aug 1971 ad uninc

20 ft. Limestone.

Grey and dark grey, highly brecciated; minor slickensides and secondary calcite veins and inclusions as fracture infilling. Fossiliferous: Coral, Stromatoporoid, few Brachiopod fragments. Poorly bedded. No shows, traces only of porosity.

CORE NO. 15. 7678 - 7688

Recovered 7 ft.

7 ft. Shale and
Limestone.

Minor calcite. Grey, white and black. Rubbly, brecciated, fractured; a highly disturbed zone. Slickensides abundant throughout the rock. The core splintered in some sections. Fractures up to 75 degrees cutting the core. Few minor vugs. Hairline fractures and trace porosity along slickenside planes. Trace gas bleeding noted. Slickensides indicate lateral movement.

CORE NO. 16. 7696 - 7706

Recovered 8 ft.

8 ft. Shale.

Black limy and limestone, shaly, interbedded. Brecciated in part; black limy shale highly slickensided on bedding planes. Bedding dips 8 degrees. Calcite veinlets and fracture infills. Traces fossils. Trace gas shows on minute fractures and on contacts, also from pinpoint porosity.

CORE NO. 17. 7874 - 7906

Recovered 32 ft.

28 ft. Limestone.

Grey with faint brownish cast, dense, hard, faintly mottled, with calcite veins. Traces fossils, minor amounts shale. Few scattered vugs along fractures. Trace stylolites. Slightly argillaceous. No shows.

4 ft. Shale.

Black, limy and limestone, poorly interbedded. Inclusions of black chert. Trace slickensides.

CORE NO.18, 9079 - 9102

Recovered 12 ft.

5 ft. Limestone.

Grey and dark grey, brecciated with angular inclusions of black limey shale. Limestone is coarsely crystalline with traces of stylolites and calcite veins. Trace of fine fractures and traces of fossil fragments. No shows.

7 ft. Limestone.

Grey and light grey, mottled and coarsely crystalline. A few stylolites and calcite veins. Traces of fine fractures. No shows

CORE NO.19, 9327 - 9343

Recovered 3 ft.

3 ft. Limestone.

Grey and dark grey. Argillaceous. Somewhat mottled, brittle, easily fractured. Criss-cross veinlets of calcite common. Dense to finely crystalline.

HOLE DEVIATION SURVEYSCompany Peel Plateau Exploration Ltd.Well Eagle Plains No.1Field Stratigraphic Test Hole

| Depth | Deviation Degrees | Deviation Direction | TYPE OF INSTRUMENT |
|-------|----------------------|------------------------|-----------------------------|
| 80 | 1/2 | | Eastman Survey |
| 80 | 1 | | |
| 205 | 7/8 | | |
| 260 | 1-1/4 | | |
| 380 | 1-1/2 | | |
| 400 | 1-3/4 | | |
| 420 | 1-3/4 | | |
| 460 | 1-1/8 | | |
| 470 | 2/3 | | |
| 519 | 1-3/4 | | |
| 550 | 1-1/2 | | |
| 600 | 1-1/4 | | |
| 920 | 2-1/4 | | |
| 970 | 2-1/4 | | |
| 1020 | 2-1/4 | | |
| 1120 | 3-1/4 | | |
| 1218 | 3-1/2 | | |
| 1335 | 3 | | |
| 1404 | 3-1/4 | | |
| 1435 | 2-3/4 | | |
| 1500 | 2-3/4 | | |
| 1710 | 3 | | |
| 1860 | 2-3/4 | | GEOLOGICAL SURVEY OF CANADA |
| 1900 | 3 | | 406-CUSTOMS BUILDING |
| 1940 | 2-1/2 | | CALGARY ALBERTA |

HOLE DEVIATION SURVEYSCompany Peel Plateau Exploration LtdWell Eagle Plains No.1Field Stratigraphic Test Hole

| Depth | Deviation Degrees | Deviation Direction | TYPE OF INSTRUMENT |
|-------|----------------------|------------------------|--------------------|
| 2025 | 2-1/2 | | |
| 2115 | 2-3/4 | | |
| 2190 | 2-1/2 | | |
| 2270 | 2 | | |
| 2365 | 2-1/2 | | |
| 2450 | 2-1/2 | | |
| 2520 | 2 | | |
| 2610 | 2-1/4 | | |
| 2780 | 3 | | |
| 2860 | 3-1/4 | | |
| 2956 | 3 | | |
| 3125 | 3-1/4 | | |
| 3205 | 3-3/4 | | |
| 3290 | 3-1/2 | | |
| 3384 | 2-3/4 | | |
| 3464 | 2-1/2 | | |
| 3540 | 3 | | |
| 3679 | 3 | | |
| 3752 | 2-1/4 | | |
| 3848 | 1-3/4 | | |
| 3970 | 1-3/4 | | |
| 4050 | 1 | | |
| 4250 | 1-1/4 | | |
| 4480 | 1/2 | | |

GEOLOGICAL SURVEY OF CANADA
406-CUSTOMS BUILDING
CALGARY, ALBERTA

HOLE DEVIATION SURVEYS

Company Peel Plateau Exploration Ltd.

Well Eagle Plains No.1

Field Stratigraphic Test Hole

| Depth | Deviation Degrees | Deviation Direction | TYPE OF INSTRUMENT |
|-------|----------------------|------------------------|----------------------|
| 4775 | 3/4 | | |
| 5290 | 2 | | |
| 5580 | 1-1/2 | | |
| 5760 | 4 | S.S.W. | Directional. Eastman |
| 5760 | 4-1/2 | | Drift |
| 5830 | 4-1/2 | | Drift |
| 5860 | 4-1/2 | S.S.W. | Direct. Eastman |
| 5940 | 4-1/2 | S.S.W. | Direct. Eastman |
| 5976 | 4-1/2 | S.S.W. | Direct. |
| 6010 | 4-1/2 | S.S.W. | Direct |
| 6120 | 5 | S.S.W. | Direct. |
| 6190 | 4-3/4 | | Drift |
| 6195 | 5 | S.S.W. | Direct |
| 6220 | 5 | S. | Direct. |
| 6255 | 4-3/4 | | Drift |
| 6285 | 5 | S. | Direct |
| 6326 | 5 | | |
| 6353 | 4-3/4 | | |
| 6414 | 4-1/2 | | |
| 6500 | 4 | | |
| 6515 | 4-1/2 | S. | |
| 6580 | 3-1/2 | | |
| 6650 | 3 | | |
| 6710 | 3 | | |

GEOLOGICAL SURVEY OF CANADA
406-CUSTOMS BUILDING
CALGARY, ALBERTA

HOLE DEVIATION SURVEYS

Company Peel Plateau Exploration Ltd.

Well Eagle Plains No.1

Field Stratigraphic Test Hole

CASING REPORT

Sheet No. 1

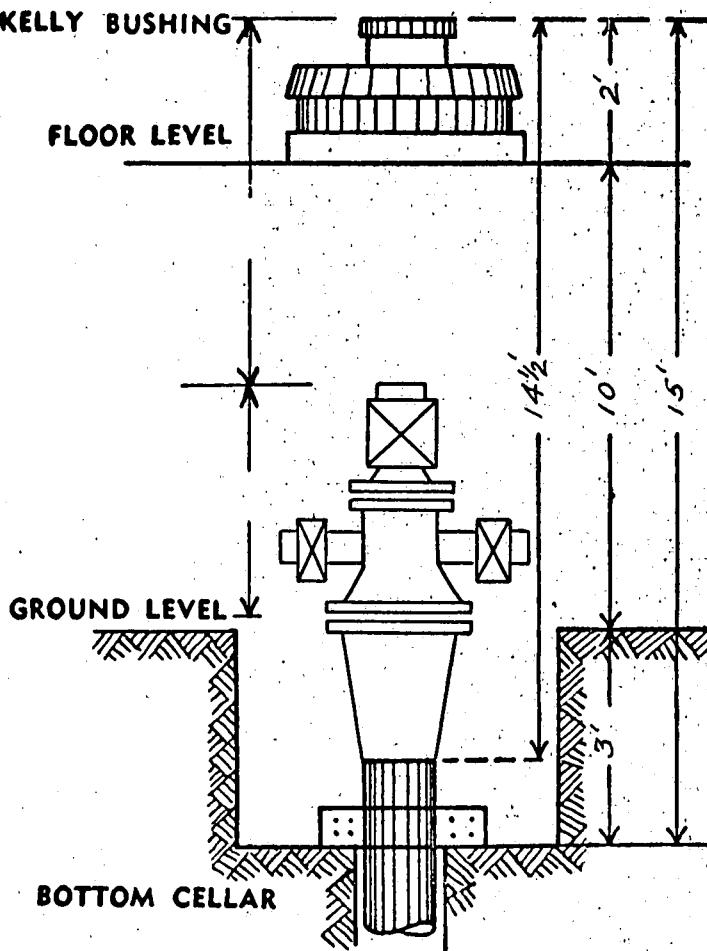
Company Peel Plateau Exploration Ltd.

Date May 14/57

Well Eagle Plains No.1

Field Stratigraphic Test Hole

KELLY BUSHING



Size Casing 13-3/8"

Weight 54.5

Grade J55

Make Spang

Type T & C

Range 2

Thread 8

Casing Shoe Halliburton

Collar Hall. Float between 1st 2 joints

Centralizers on 1st, 3rd & 5th joints
welded

Scratchers

No. Joints Welded 3

Welding Company Contractors

No. Joints delivered 34

No. joints left in hole 34

Thd's off tally delivered 1002.87

Thd's off tally left in hole 988.37

Thd's on tally delivered

Thd's off tally left in hole

Kelly Bushing elevation 1469.4

Depth Shoe below Kelly Bushing 1006.72

Time started running casing 1 a.m. May 14 1957 Time casing in hole 6.45 a.m. May 14 1957

Time started circulating

Time started cementing 8.42

No. sacks mixed 860

Type 300 sacks Hourly
300 sacks construction

Calcium Chloride added

(14 sacks)

Aquagel added

Nil

Avg. slurry weight

Time cement in pipe 9.40 a.m. May 14 1957

Type of plug used Rubber

Plug pumped down by Big. Pumps

Time plug down 9.55 a.m. May 14 1957

Bumped plug with 1000 psi.

Cement returns Good

Pressure left on head 1000 psi.

Cementing Co. Halliburton

Cementer Halliburton

Make well head National

Size 12"

Description 600 series for 13-3/8" - 95/8" - 5 1/2" Casing - 2 7/8" E.U.B. tubing

CASING REPORT

Sheet No. 2

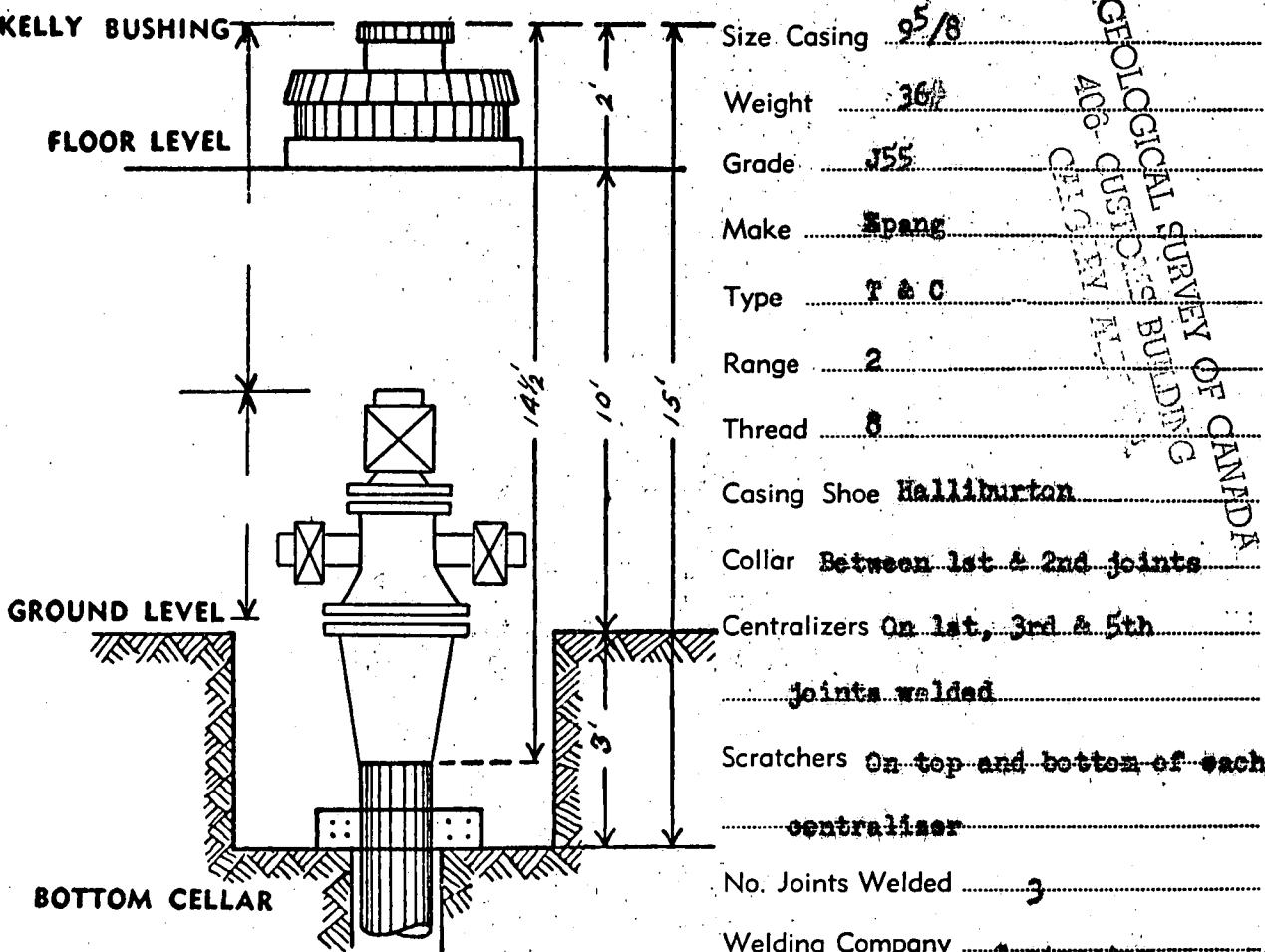
Company Peel Plateau Exploration Ltd.

Date June 30 1957

Well Eagle Plains No.1

Field Stratigraphic Test Hole

KELLY BUSHING



Size Casing 9 5/8

Weight 367

Grade J55

Make Spang

Type T & C

Range 2

Thread 8

Casing Shoe Halliburton

Collar Between 1st & 2nd joints

Centralizers On 1st, 3rd & 5th

joints welded

Scratchers On top and bottom of each
centralizer

No. Joints Welded 3

Welding Company Contractor

| | |
|-----------------------------------|---------------------------------------|
| No. Joints delivered 78 | No. joints left in hole 78 |
| Thd's off tally delivered 2511.50 | Thd's off tally left in hole 2493.76 |
| Thd's on tally delivered ----- | Thd's off tally left in hole ----- |
| Kelly Bushing elevation 1469.4 | Depth Shoe below Kelly Bushing 2510.0 |

| | | |
|--|------------------------------------|-------------------|
| Time started running casing 10a.m. | Time casing in hole 5.15p.m. | |
| Time started circulating 5.15p.m. | Time started cementing 6.30p.m. | |
| No. sacks mixed 600 | Make B.C. Cement | Type Construction |
| Calcium Chloride added 1.1 | Aquagel added 2% on first 400 sack | |
| Avg. slurry weight ----- | Time cement in pipe 30 Minutes | |
| Type of plug used Rubber | Plug pumped down by Rig. Humps | |
| Time plug down 7.50p.m. | Bumped plug with 1000 psi. | |
| Cement returns None | Pressure left on head ----- psi. | |
| Cementing Co. Halliburton | Cementer Halliburton | |
| Make well head National | Size 12" | |
| Description 600 Series for 13 3/8" - 9 5/8" - 5 1/2" csg. and 2 7/8" E.U.E. tubing head | | |

Engineer C. B. Barlow

PIPE TALLY

Sheet No.1

Company Peel Plateau Exploration Ltd.

Date May 1st, 1957

Well Eglie Plains No. 1

Field Stratigraphic Test Hole

Size 13-3/8". Wt. 54.5

Grade

Make Spang

Type T & C Thread

No. Joints on Location 31

Remarks

| No. | LENGTH feet | TOTALS feet | No. | LENGTH feet | TOTALS feet | No. | LENGTH feet | TOTALS feet |
|-----|----------------|----------------|-----|----------------|----------------|-----|----------------|----------------|
| 1 | 28 50 | | 31 | 30 36 | | 61 | | |
| 2 | 29 36 | | 32 | 29 65 | | 62 | | |
| 3 | 28 66 | | 33 | 31 30 | | 63 | | |
| 4 | 30 75 | | 34 | 28 30 | | 64 | | |
| 5 | 28 83 | | 35 | | 119 61 | 65 | | |
| 6 | 29 49 | | 36 | | | 66 | | |
| 7 | 24 32 | | 37 | Total | 1002 87 | 67 | | |
| 8 | 29 99 | | 38 | | Shoe 2 25 | 68 | | |
| 9 | | | 39 | | F.C.1 60 | 69 | | |
| 10 | 27 48 | | 40 | | 1006 72 | 70 | | |
| | 28 95 | | | | | | | |
| | | 289 32 | | | | | | |
| 11 | | | 41 | | | 71 | | |
| 12 | 28 70 | | 42 | | | 72 | | |
| 13 | 29 15 | | 43 | | | 73 | | |
| 14 | 29 12 | | 44 | | | 74 | | |
| 15 | 30 67 | | 45 | | | 75 | | |
| 16 | 29 10 | | 46 | | | 76 | | |
| 17 | 28 60 | | 47 | | | 77 | | |
| 18 | 29 18 | | 48 | | | 78 | | |
| 19 | 28 73 | | 49 | | | 79 | | |
| 20 | 29 75 | | 50 | | | 80 | | |
| | 32 90 | | | | | | | |
| | | 296 10 | | | | | | |
| 21 | | | 51 | | | 81 | | |
| 22 | 33 45 | | 52 | | | 82 | | |
| 23 | 28 53 | | 53 | | | 83 | | |
| 24 | 28 24 | | 54 | | | 84 | | |
| 25 | 29 23 | | 55 | | | 85 | | |
| 26 | 29 22 | | 56 | | | 86 | | |
| 27 | 27 50 | | 57 | | | 87 | | |
| 28 | 29 74 | | 58 | | | 88 | | |
| 29 | 27 83 | | 59 | | | 89 | | |
| 30 | 33 19 | | 60 | | | 90 | | |
| | 30 91 | | | | | | | |
| | | 297 84 | | | | | | |

TALLIED BY

Charlie Wark

CHECKED BY

W. G. Campbell

PIPE TALLY

Company Peel Plateau Exploration Ltd.

Sheet No. 2

Well Eagle Plains No. 1

June 29 1957

Size 3-5/8"

Date Stratigraphic Test Hole

Type I & C

Wt. 36

Field C

Grade 3.55

Spang

Thread 670 TRD

Make

No. Joints on Location

Remarks

| No. | LENGTH feet | TOTALS feet | No. | LENGTH feet | TOTALS feet | No. | LENGTH feet | TOTALS feet |
|-----|----------------|----------------|-----|----------------|----------------|-----|----------------|----------------|
| 1 | 32 | 98 | 31 | 33 | 53 | 61 | 31 | 60 |
| 2 | 32 | 76 | 32 | 30 | 40 | 62 | 32 | 56 |
| 3 | 31 | 21 | 33 | 32 | 85 | 63 | 33 | 15 |
| 4 | 31 | 05 | 34 | 32 | 43 | 64 | 33 | 00 |
| 5 | 32 | 65 | 35 | 32 | 91 | 65 | 32 | 40 |
| 6 | 32 | 34 | 36 | 32 | 61 | 66 | 32 | 67 |
| 7 | 32 | 91 | 37 | 31 | 53 | 67 | 32 | 50 |
| 8 | 32 | 27 | 38 | 32 | 21 | 68 | 33 | 03 |
| 9 | 30 | 63 | 39 | 32 | 60 | 69 | 31 | 12 |
| 10 | 32 | 85 | 40 | 32 | 74 | 70 | 30 | 29 |
| | | 321 76 | | | 1208 27 | | | 2250 53 |
| 11 | 32 | 38 | 41 | 32 | 83 | 71 | 33 | 10 |
| 12 | 31 | 08 | 42 | 32 | 25 | 72 | 32 | 34 |
| 13 | 32 | 15 | 43 | 31 | 85 | 73 | 32 | 20 |
| 14 | 28 | 02 | 44 | 33 | 26 | 74 | 32 | 44 |
| 15 | 33 | 12 | 45 | 32 | 11 | 75 | 33 | 03 |
| 16 | 31 | 00 | 46 | 33 | 25 | 76 | 32 | 64 |
| 17 | 33 | 24 | 47 | 29 | 84 | 77 | 32 | 20 |
| 18 | 33 | 53 | 48 | 33 | 07 | 78 | 33 | 02 |
| 19 | 33 | 05 | 49 | 30 | 30 | 79 | | 2511 50 |
| 20 | 31 | 78 | 50 | 29 | 85 | 80 | | |
| | | 641 91 | | | 1606 88 | | | |
| 21 | 33 | 23 | 51 | 31 | 90 | 81 | F.S. | 2 08 |
| 22 | 32 | 02 | 52 | 32 | 00 | 82 | F.C. | 1 66 |
| 23 | 31 | 80 | 53 | 32 | 32 | 83 | Total | 2515 24 |
| 24 | 32 | 23 | 54 | 33 | 10 | 84 | | |
| 25 | 30 | 12 | 55 | 32 | 96 | 85 | | |
| 26 | 32 | 00 | 56 | 31 | 26 | 86 | | |
| 27 | 33 | 51 | 57 | 31 | 03 | 87 | | |
| 28 | 22 | 11 | 58 | 31 | 90 | 88 | | |
| 29 | 31 | 70 | 59 | 32 | 54 | 89 | | |
| 30 | 32 | 98 | 60 | 32 | 16 | 90 | | |
| | | 964 46 | | | 1926 18 | | | |

TALLIED BY F. Tippin

CHECKED BY C. B. Berlow

BIT RECORD

Company Peel Plateau Exploration Ltd. Date _____

Well Eagle Plains No. 1 Field Stratigraphic Test Hole

| Bit No. | DEPTH | | Size | MAKE AND TYPE | Footage | Hours Run | REMARKS |
|---------|-------|------|--------------|-------------------|---------|-------------|------------|
| | From | To | | | | | |
| 1 | 6 | 60 | 12-1/4 | Reed 2 C W W | 60 | 10 | |
| 2 | 60 | 100 | 9 | O S C | 140 | 10 | |
| 3 | 100 | 175 | 9 | O W W | 75 | 10 | |
| 4 | 175 | 306 | 9 | O W V | 131 | V.D. | |
| 5 | 60 | 100 | 12-1/4 | Reamer | | | V.D. |
| 6 | 306 | 440 | 9 | O W V | 134 | 26 | D. |
| 7 | 460 | 558 | 9 | O W V | 98 | 10-1/2 D. | |
| 8 | 558 | 600 | 9 | O S C | 42 | 9-1/2 G. | |
| 9 | 100 | 354 | 12-1/4 | Reamer | 254 | 19 | G.V. loose |
| 10 | 354 | 600 | 12-1/4 | Reamer | 246 | 14 | D. |
| 11 | | | 17-1/4 | Reamer | | | |
| 12 | | | 17-1/4 | Reamer | | | |
| 13 | | | 17-1/4 | Rerun Reamer | | | |
| 14 | | | 17-1/4 | Rerun Reamer | | | |
| 15 | 600 | 726 | 9 | D S C | 126 | 17 | D |
| 16 | 726 | 822 | 9 | O S C | 96 | 18 | D |
| 17 | 822 | 907 | 9 | O W V | 95 | 11-1/4 D | |
| 18 | 907 | 997 | 9 | O W V | 90 | 16-1/2 G | |
| 19 | 997 | 1021 | 9 | O W V | 24 | 2-1/2 G | |
| 20 | 601 | 910 | 12-3/4 | Reamer Rerun | 309 | 6-3/4 D | |
| 21 | 910 | 1005 | 12-1/4 | Reamer Rerun | 95 | 5 | D |
| 22 | 601 | 800 | 17-1/2 | Reamer Rerun | 200 | 11 | D |
| 23 | 800 | 940 | 17-1/4 | Reamer | 140 | 7-1/4 D | |
| 24 | 910 | 1003 | 17-1/4 | Ser. #634, Reamer | 93 | 12-1/2 D | |
| 25 | 1021 | 1120 | O.S.C. 95443 | | 99 | 14-3/4 H.D. | |

GEOLOGICAL SURVEY OF CANADA
 406 CUSTOMS BUILDING
 OTTAWA, ONTARIO K1A 0E6

BIT RECORD

Company Peel Plateau Exploration Ltd.

Date

Well Eagle Plains No. 1

Field Stratigraphic Test Hole

| Bit No. | DEPTH | | Size | MAKE AND TYPE | Footage | Hours Run | REMARKS |
|---------|-------|------|--------|----------------|---------|-------------------|---------------|
| | From | To | | | | | |
| 26 | 1120 | 1210 | 9" | O.S.C. 95623 | 98 | 19-3/4 D | |
| 27 | 1218 | 1335 | 9" | O.S.C. 95426 | 117 | 21 | D |
| 28 | 1335 | 1401 | 9" | O.S.C. 95647 | 69 | 16 | D |
| 29 | 1401 | 1435 | 9" | O.W.V. 91111 | 31 | 9 | N.D. |
| 30 | 1435 | 1540 | 9" | O.S.C. 95465 | 105 | 23 | D |
| 31 | 1540 | 1560 | 9" | W.T.R. 95816 | 20 | Drill on iron. G. | |
| 32 | 1560 | 1612 | 9" | O.S.C. 95464 | 52 | 6-1/4 F | |
| 33 | 1612 | 1692 | 9" | O.W.V. 90219 | 80 | 17 | F |
| 34 | 1692 | 1718 | 9" | O.W.V. 91380 | 26 | 7 | Lost 1 D.C.F. |
| 35 | 1718 | 1814 | 9" | O.W.V. 91503 | 96 | 10-1/2 F & Loose | |
| 36 | 1814 | 1967 | 9" | O.W.V. 91481 | 153 | 28-3/4 F & Loose | |
| 37 | 1967 | 2100 | 9" | O.W.V. 91374 | 133 | 29-1/4 F & Loose | |
| 38 | 2100 | 2101 | 9" | O.W.V. 91374 | 1 | 1/4 Rerun | |
| 39 | 2101 | 2122 | 6-1/2" | Koebel Diamond | 21 | 12-1/4 | |
| 40 | 2122 | 2240 | 9" | O.W.V. 91384 | 139 | 26-1/2 F & Loose | |
| 41 | 2240 | 2311 | 9" | O.W.V. 91379 | 171 | 32 | F & loose |
| 42 | 2311 | 2568 | 9" | O.W.V. 91375 | 157 | 35-1/4 F & Loose | |
| 43 | 2568 | 2695 | 9" | O.S.C. 96110 | 127 | 23 | F & Loose |
| 44 | 2695 | 2836 | 9" | O.S.C. 96110 | 141 | 26-3/4 D & Loose | |
| 45 | 2836 | 2870 | 9" | O.S.C. 96147 | 34 | 9 | D & Loose |
| 46 | 2870 | 3031 | 9" | O.W.V. 91385 | 161 | 32-1/4 D & Loose | |
| 47 | 3031 | 3164 | 9" | O.W.V. 91378 | 133 | 26-1/4 F & Loose | |
| 48 | 3164 | 3220 | 9" | O.W.V. 91383 | 36 | 26-1/2 D. | |
| 49 | 3220 | 3348 | 9" | O.W.C. 96102 | 128 | 33-3/4 D & Loose | |
| 50 | 3348 | 3467 | | O.W.C. 96404 | 119 | 23-3/4 D & Locked | |

BIT RECORD

Company Peel Plateau Exploration Ltd.

Date _____

Well Eagle Plains No.1

Field Stratigraphic Test Hole

| Bit No. | DEPTH | | Size | MAKE AND TYPE | Footage | Hours Run | REMARKS |
|---------|-------|------|-------|----------------|---------|-----------|-------------|
| | From | To | | | | | |
| 51 | 3467 | 3591 | 9" | O.W.C. 96416 | 124 | 22-3/4 | D & Loose |
| 52 | 3591 | 3611 | 9" | O.W.C. 96408 | 20 | 5 | Green |
| 53 | 3611 | 3658 | 6-1/8 | Kochel Diamond | 47 | 10-1/2 | Coring |
| 54 | 3611 | 3659 | 9" | O.W.C. 96408 | 48 | 8 | Rerun Room |
| 55 | 3659 | 3679 | 6-1/8 | Rerun diamond | 20 | 4-3/4 | G |
| 56 | 3659 | 3720 | 9" | O.W.C. 96401 | 41 | 13-1/2 | Room 20° D. |
| 57 | 3720 | 3805 | 9" | O.W.C. 96406 | 85 | 24-3/4 | D & L |
| 58 | 3805 | 3918 | 9" | O.W.C. 96411 | 113 | 24-3/4 | D. |
| 59 | 3918 | 3929 | 9" | O.W.C. 96400 | 2 | 1/2 | Green |
| 60 | 3929 | 3940 | 6-1/8 | Diamond | 20 | 4-3/4 | Good |
| 61 | 3940 | 4002 | 9" | O.W.C. 96400 | 82 | 20-1/2 | Room 20 |

REPLACEMENT BIT RECORD

| | | | | | | | | |
|----|------|------|--------|----------------|------|--------|--------|---|
| 1 | 1022 | 1145 | 12-1/4 | O.P. Rerun | 123 | 5 | D | |
| 2 | 1145 | 1461 | 12-1/4 | O.P. Rerun 332 | 316 | 9-3/4 | D. | |
| 3 | 1461 | 1661 | 12-1/4 | O.P. | 291 | 13-1/2 | D | |
| 4 | 1661 | 1815 | 12-1/4 | | 332 | 18 | D | |
| 5 | 1815 | 1944 | 12-1/4 | | 291 | 129 | 20-1/4 | D |
| 6 | 1944 | 2000 | | O.P. New | 303 | 56 | 14-1/4 | D |
| 7 | 2000 | 2012 | 12-1/4 | Rued | 6171 | 12 | 9-1/2 | P |
| 8 | 2012 | 2130 | 12-1/4 | O.P. Roemer | 303 | 110 | 15 | D |
| 9 | 2130 | 2265 | 12-1/4 | O.P. Roemer | 291 | 135 | 14-1/2 | D |
| 10 | 2265 | 2409 | 12-1/4 | O.P. Roemer | 332 | 144 | 12-1/4 | |
| 11 | 2409 | 2510 | 12-1/4 | O.P. Roemer | 303 | 101 | | |

BIT RECORD

Company Peel Plateau Exploration Ltd.

Date

Well Eagle Plains No.1

Field Stratigraphic Test Hole

| Bit No. | DEPTH | | Size | MAKE AND TYPE | Footage | Hours Run | REMARKS |
|---------|-------|-------|-------|-----------------------|---------|-----------|---------------------|
| | From | To | | | | | |
| 62 | 4002 | 4113 | 8-5/8 | O.H.C. 23770 | 109 | 24-1/4 | F.D. |
| 63 | 4113 | 4262 | 8-5/8 | O.H.C. 23758 | 149 | 22-1/4 | D |
| 64 | 4262 | 4488 | 8-5/8 | O.W.V. 19538 | 226 | 34-1/1 | D |
| 65 | 4488 | 4720 | 8-5/8 | O.W.V. 26410 | 232 | 34-1/4 | D |
| 66 | 4720 | 4784 | 8-5/8 | O.W.V. 19543 | 64 | 12 | Good |
| 67 | 4784 | 4827 | 8-5/8 | O.W.V. 19543 | 43 | 5-1/1 | Rerun. D. |
| 68 | 4827 | 4847 | 6-1/8 | Koebel Diam.rerun | 210 | 10 | G. |
| 69 | 4847 | 4885 | 8-5/8 | O.W.V. 19533 | 38 | 6-1/4 | G. |
| 70 | 4885 | 4891 | 8-5/8 | O.W.V. 19539 | 6 | 1/4 | G. |
| 71 | 4891 | 4912 | 6-1/2 | K.Diam.rerun | 21 | 4-1/2 | G. |
| 72 | 4891 | 4912 | 8-5/8 | O.W.V. 19533 | 21 | 1-1/2 | G.Rerun Rerun |
| 73 | 4913 | 4950 | 6-1/8 | K. Diamond | 37 | | |
| 74 | 4908 | 4913 | 8-5/8 | O.W.V. 19533 | 5 | | |
| 75 | 4913 | 4950 | 6-1/8 | K. Diam.Rerun | 37 | | |
| 76 | 4950 | 4994 | 8-5/8 | O.W.V. 19539 Rerun | 44 | | 4913-50 Reamed |
| 77 | 4994 | 5077 | 8-5/8 | O.W.V. 19539 | 83 | 15 | D |
| 78 | 5077 | 5290 | 8-5/8 | O.W.V. 19540 | 213 | 35-1/4 | D |
| 79 | 5290 | 5434 | 8-5/8 | O.W.V. 26403 | 144 | 32-1/2 | F |
| 80 | 5434 | 5588 | 8-5/8 | O.S.C. 23835 | 174 | 33 | M.Dull |
| 81 | | Rerun | | O.S.C. 23835 | 2 | 12 | In with Junk Sub |
| 82 | 5590 | 5600 | 6-1/8 | Koebel Diamond | 10 | 3-1/4 | G. |
| 83 | 5600 | 5757 | 8-5/8 | O.S.C. 23756 | 157 | 24-3/4 | D. |
| 84 | 5757 | 5867 | 8-5/8 | O.S.C. 23756 | 110 | 24-3/4 | D. |
| 85 | 5869 | 5940 | 8-5/8 | O.W.V. 23834 | 73 | 19 | N.D. |
| 86 | 5940 | 6014 | 8-5/8 | O.W.V. 23833 | 74 | 20-1/4 | N.D. |

Sheet No.....
 406. GEOLOGICAL SURVEY OF CANADA
 CUSTODIAL BUILDING
 Stratigraphic Test Hole
 TIA

BIT RECORD

Peel Plateau Exploration Ltd.

Company Eagle Plains No.1

Date Stratigraphic Test Hole

Well _____ Field _____

| Bit No. | DEPTH | | O. MAKE AND TYPE | Feedage | Hours R/H | REMARKS |
|---------|-------|------|--------------------------------|---------|-----------|-----------------------|
| | 6519 | 6047 | | | | |
| 88 | 6047 | 6087 | 6-1/8 Diamond 216-12 | 40 | 11-1/2 | Good |
| 89 | 6087 | 6128 | 8-5/8 O.W.V. 19530 | 41 | 17-1/2 | Reamed 6087-6087 H.D. |
| 90 | 6128 | 6178 | 8-5/8 O.W.V. 19532 | 50 | 20-3/4 | D |
| 91 | 6178 | 6221 | 8-5/8 O.W.V. 19541 | 43 | 16-3/4 | D |
| 92 | 6221 | 6285 | 8-5/8 O.W.C. 19808 | 64 | 24-1/2 | M.D. |
| 93 | 6285 | 6364 | 8-5/8 O.W.V. 19545 | 79 | 27-1/2 | F |
| 94 | 6364 | 6519 | 8-5/8 O.S.C. 23765 | 155 | 22-3/4 | D |
| 95 | 6519 | 6650 | 8-5/8 O.S.C. 23755 | 131 | 24-1/2 | D |
| 96 | 6650 | 6792 | 8-5/8 O.S.C. 23754 | 142 | 26-1/2 | D |
| 97 | 6792 | 6824 | 6-1/8 Koebel Diam | 32 | 7-1/4 | G |
| 98 | 6824 | 6878 | 8-5/8 O.W.V. 21137 (Reamed 32) | 54 | 17 | G |
| 99 | 6878 | 6969 | 8-5/8 O.S.C. 23768 | 91 | 19-1/2 | D |
| 100 | 6969 | 7038 | 8-5/8 O.W.C. 25964 | 69 | 18 | D |
| 101 | | | 8-5/8 O.W.C. 26021 | | | Clean out |
| 102 | 7038 | 7040 | 8-5/8 O.W.C. 26021 | 2 | 1/2 | G |
| 103 | 7040 | 7048 | 6-1/8 Koebel D.Core 11 | 8 | 6-1/2 | G |
| 104 | 7048 | 7069 | 6-1/8 Koebel D.Core 12 | 21 | 16-1/2 | G |
| 105 | 7040 | 7069 | 8-5/8 W 7 R 31248 | 26 | 5 | D |
| 106 | 7069 | 7097 | 6-1/8 Koebel D.Core 13 | 26 | 12-1/2 | G |
| 107 | 7097 | 7106 | 8-5/8 W 7 R 31254 | 9 | 6-3/4 | D |
| 108 | 7106 | 7160 | 8-5/8 W 7 R 31253 | 54 | 17 | D |
| 109 | 7160 | 7264 | 8-5/8 W 7 36425 | 104 | 29-1/2 | D & L |
| 110 | 7260 | 7337 | 8-5/8 O.W.V. 26402 | 73 | 13-1/4 | D |

Sheet No......

BIT RECORD

Reel Plateau Exploration Ltd.

Company Eagle Plains Bell No. 1

Date Stratigraphic Test Hole

Well **Field**

BIT RECORD

Company Western Minerals Ltd. **Date** _____

Well Eagle Plains No.1 Field Stratigraphic Test Hole

| Bit No. | DEPTH | | Size | MAKE AND TYPE | Footage | Hours Run | REMARKS |
|---------|-------|------|-------|------------------------|---------|-----------|------------------------|
| | From | To | | | | | |
| 130 | | | 8 5/8 | OWB Sur. (RR) 35812 | | | |
| 131 | | | 8 5/8 | W7. 34477 | | 1 1/2 | mill on locked iron |
| 132 | | | 8 5/8 | W7R 31251 | | 1 3/4 | F. " " " |
| 133 | | | 8 5/8 | W7. 51117 | | 2 3/4 | D. " " " |
| 134 | 8409 | 8426 | 8 5/8 | W7. 51162 | 17 | 3 | " Drill Plug Cement |
| 135 | 8426 | 8645 | 8 5/8 | W7. 42494 | 219 | 21 1/2 | D |
| 136 | 8645 | 8795 | 8 5/8 | W7. 51024 | 150 | 20 1/2 | D |
| 137 | 8795 | 8955 | 8 5/8 | W7. 42727 | 166 | 20 1/2 | D |
| 138 | 8955 | 9079 | 8 5/8 | W7. 42599 | 124 | 20 1/2 | D |
| 139 | 9079 | 9102 | 6 1/8 | Diamond Koebel | 23 | 7 1/2 | |
| 140 | 9102 | 9220 | 8 5/8 | W7. 42614 | 141 | 21 3/4 | D |
| 141 | 9220 | 9327 | 8 5/8 | W7. 42608 | 107 | 12 1/2 | D |
| 142 | 9327 | 9343 | 6 1/8 | Koebel diamond | 16 | 3 3/4 | |
| 143 | 9343 | 9445 | 8 5/8 | OWB. 50450 | 102 | 19 1/2 | D |
| 144 | 9445 | 9588 | 8 5/8 | W7. 42660 | 143 | 24 | D |
| 145 | 9588 | 9589 | 6 1/8 | Tru. Diamond | | | Stuck |

GEOLOGICAL SURVEY OF CANADA
406- CUSTOMS BUILDING
CALGARY, ALBERTA

DRILLING MUD RECORD

Company Peel Plateau Exploration Ltd.
 Well Eagle Plains No. 1
 Field Stratigraphic Test Hole

| DATE | DEPTH ft. | WEIGHT Lbs./gal. | Visc. Sec. | Water Loss C.C. | pH | ADDITIONS |
|----------|--------------|---------------------|--|-----------------------|------|-----------------------------|
| April 17 | 60 | 4.06 | CUSTOM SURVEY CALGARYS BUILDING SUPPLY CO. LTD. ALBERTA | | | Gel. 20 sacks |
| April 18 | 100 | | | | | Gel. 10 sacks, Caustic 50# |
| April 20 | | | | | | Gel. 25 sacks |
| April 27 | 306 | 9.1 | 56 | | | Gel. 5 sacks |
| April 29 | 350 | 9.3 | 44 | | | Gel. 25 sacks, Senter 50# |
| May 3 | | 9.4 | 60 | | | Gel. 5 sacks |
| May 4 | 600 | 9.4 | 65 | | | Gel. 5 sacks |
| May 5 | | 9.4 | 50 | | | Gel. 10 sacks |
| May 8 | 750 | 9.6 | 45 | | | Gel. 10 sacks |
| May 12 | 801 | 10.4 | 48 | | | Gel. 35 sacks, Caustic 25# |
| May 16 | 1110 | 8.8 | 34 | | | Gel. 18 sacks |
| May 17 | 1167 | 8.4 | 35 | | | Gel. 20 sacks |
| May 20 | 1487 | 9.2 | 34 | | | Cemtox 300#, Gel. 15 sacks |
| May 24 | 1647 | 9.5 | 42 | | | Gel. 10 sacks |
| May 27 | 1945 | 9.3 | 32 | | | Caustic 25#, Tannex 200# |
| May 28 | 2040 | 9.8 | 37 | | | Gel. 30 sacks |
| May 30 | 2167 | 9.8 | 38 | | | Tannex 100#, Caustic 10# |
| May 31 | | | | | | Gel. 10 sacks |
| June 1 | 2395 | 9.7 | 37 | 16 | | Gel. 25 sacks |
| June 3 | 2542 | 10 | 65 | 9.5 | 2/32 | Tannex 100#, Caustic 10# |
| June 8 | 3059 | 10 | 47 | 9.2 | 2/32 | Gel. 54 sacks |
| June 13 | 3558 | 10.1 | 60 | | | Tannex 2 sacks, Caustic 50# |
| June 14 | | | | | | 200# Tannex, 25# Caustic |
| June 15 | | | | | | 100# Tannex |
| June 16 | 3679 | 10.3 | 45 | 8.8 | 2/32 | 50# Caustic |
| | | | | | | 50# Tannex, 15# Caustic |

DRILLING MUD RECORD

Company Peel Plateau Exploration Ltd.

Well Eagle Plains No.1

Field Stratigraphic Test Hole

| DATE | DEPTH | Weight lbs./gal. | Visc. Sec. | Water Loss C.C. | Ph | ADDITIONS |
|---------|-------|---------------------|---------------|-----------------------|------|--|
| June 20 | 3940 | 10.2 | 50 | 9.8 | 2/32 | Tannex 50#, Caustic 15# |
| June 22 | | Rerunning | | | | Tannex 50#, Caustic 10# |
| June 25 | | 10.6 | 45 | 9.6 | 2/32 | Tannex 50#, Caustic 15# |
| June 27 | 2074 | 10.8 | 53 | 9 | 2/32 | Tannex 2 sacks Gel 5 sacks, Caustic 15# |
| July 3 | 4010 | 10 | 38 | 12 | 2/32 | Gel 12 sacks, Gel 50# |
| July 4 | 4113 | 9.5 | 40 | 10.1 | 2/32 | Tannex 50#, Caustic 10# |
| July 5 | 4255 | 9.4 | 42 | 11.2 | 2/32 | Gel 20 sacks, Tannex 1 sack, Caustic 15# |
| July 8 | 4675 | 9.6 | 61 | 8.2 | 2/32 | Gel Flake 14 sacks, Gel 30 sacks Mud 68 sacks, Sawdust 97 sacks |
| July 9 | 4742 | 9.3 | 80 | 8.4 | 2/32 | Gel 37 sacks Gel Flake 2 sacks, Sawdust 95sks |
| July 10 | 4784 | 9.1 | 80 | | | Gel 95 sacks Gel Flake 33 sacks, Sawdust 137 sks. |
| July 11 | 4845 | 9.1 | 65 | | | Gel 50 sacks, Sawdust 170 sacks |
| July 12 | 4881 | | | | | Gel 47 sacks, Caustic 200# Sawdust 133 sacks |
| July 15 | 4994 | 9.4 | 75 | | | Caustic 100#, Sawdust 281 sacks |
| July 16 | 4994 | 9 | 60 | | | Gel 175 sacks |
| July 17 | 5095 | 8.9 | 34 | 4.6 | 2/32 | Gel 11 sacks |
| July 18 | 5290 | 9 | 45 | 10.6 | 2/32 | Gel 10 sacks, Caustic 25# Tannex 2 sacks |
| July 19 | 5330 | 8.8 | 52 | 9.6 | 2/32 | Gel 17 sacks, Sawdust 37 sacks |
| July 22 | 5512 | 8.6 | 43 | 9.6 | 2/32 | Gel 22 sacks |
| July 23 | 5390 | 8.6 | 52 | 10.3 | 2/32 | Gel 45 sacks, Caustic 100# Tannex 100# |
| July 24 | 5615 | 8.6 | 40 | 9 | | Sawdust 100 sacks, Caustic 100#, Gel 20 sacks |
| July 25 | 5758 | 9 | 43 | 9.6 | 2/32 | Gel 10 sacks Tannex 50#, Caustic 100# |
| July 26 | 5825 | 9 | 42 | 8.4 | 2/32 | Gel 13 sacks Sawdust 70 sacks |
| July 27 | 5908 | 8.6 | 40 | 10.2 | 2/32 | Gel 35 sacks, Driscose 100# |
| July 28 | 5976 | 8.7 | 62 | 6.4 | 2/32 | Gel 15 sacks |

DRILLING MUD RECORD

Company Peel Plateau Exploration Ltd.

GEOLOGICAL SURVEY OF CANADA
CALGARY, ALBERTA

Well Eagle Plains No.1

Field Stratigraphic Test Hole

| DATE | DEPTH | Weight lbs./gal. | Visc. Sec. | Water Loss C.C. | Ph | ADDITIONS |
|-----------|-------|---------------------|---------------|-----------------------|------|--|
| August 2 | 6198 | 8.9 | 48 | 8.7 | 2/32 | Sawdust 70 sacks, Gel 40 sacks, Tannex 100#, Drisococe 100# (Caustic 50#) |
| August 3 | 6244 | 8.7 | 55 | 6.2 | 2/32 | Drisococe 100#, Sawdust 20 sacks Gel 20 sacks |
| August 4 | 6290 | 8.6 | 69 | 6.8 | | Sawdust 45 sacks, Drisococe 200# Gel 6 sacks, Drisococe 100#, Fibre seal 15 sacks, Sawdust 5 sacks |
| August 5 | 6353 | 8.6 | 52 | 6.0 | 2/32 | Gel 10 sacks, Drisococe 100# Sawdust 5 sacks |
| August 6 | 6465 | 8.8 | 62 | 5.8 | 2/32 | Gel 35 sacks, Drisococe 300#, fibre tex 14 sacks, Sawdust 55 sacks |
| August 7 | 6577 | 8.8 | 68 | 5.2 | 2/32 | Sawdust 5 sacks, Gel 10 sacks, Moss 6 sacks |
| August 8 | 6650 | 8.8 | 50 | 6.2 | 2/32 | Caustic 100#, Moss 3 sacks Tannex 75#, Drisococe 100# |
| August 9 | 6748 | 8.2 | 78 | 6.8 | 2/32 | |
| August 10 | 6824 | 8.9 | 50 | 5.8 | 2/32 | |
| August 11 | 6878 | 9.1 | 59 | 6 | 2/32 | Baroid 100#, Moss 10 sacks Gel 15 sacks |
| August 12 | 6969 | 8.9 | 57 | 7.2 | 2/32 | Drisococe 200#, Moss 12 sacks, Gel 35 sks, Sawdust 40 sks, Fibre seal 20 sks |
| August 13 | 7040 | 8.9 | 52 | 6 | 2/32 | Drisococe 100# Moss 2 sacks, Gel 10 sacks |
| August 17 | 7055 | 9.0 | 40 | 7.8 | 2/32 | Gel 25 sacks, Drisococe 100# |
| August 18 | 7087 | 9.1 | 45 | 8.2 | 2/32 | Gel 10 sacks |
| August 20 | 7187 | 9.2 | 43 | 6.4 | 2/32 | Gel 10 sacks, Drisococe 100# |
| August 21 | 7264 | 9.2 | 62 | 6.0 | 2/32 | Gel 20 sacks, Moss 4 sacks Gel 5 sacks |
| August 22 | 7315 | 9.1 | 47 | 6.8 | 2/32 | Fibre 10 sacks, Moss 5 sacks |
| August 24 | 7412 | 9.2 | 47 | 8.2 | 2/32 | Fibre seal 5 sacks |
| August 25 | 7497 | 9.3 | 55 | 6 | 2/32 | Gel 15 sacks |
| August 27 | 7675 | 9.6 | 80 | 6.2 | 2/32 | Drisococe 50#, Gel 15 sacks, Moss 10 sks, Micatex 10 saks, Fibretex 30sks Paloseal 6 sacks |
| August 28 | 7678 | | | | | Gel 45sax, Palco 4 sacks, Dris. 100# Micatex 13 saks, Moss 4 sks |
| Sept. 2 | 7688 | | | | | Gel 23 sacks, Moss 20 sacks |
| Sept. 5 | 7688 | | | | | Drisococe 150# |
| Sept. 10 | 7696 | | | | | Micatex 46 sks, Moss 13sks, Saw- dust 20 sks, Gel 66sks, Dris. 830# Gel 72 sacks |
| Sept. 11 | 7696 | | | | | Drisococe 500#, Caustic 200# Gel 900#, Micatex 650# 2000# Hydron |

DRILLING MUD RECORD

Company Peel Plateau Exploration Ltd.

Well Eagle Plains No.1

Field Stratigraphic Test Hole

PEEL PLATEAU EXPLORATION LTD.

1

GEOLOGICAL Sheet No. 5

LOGICAL SURVEY

DRILLING MUD RECORD

Company Peel Plateau Exploration Ltd.

Well Eagle Plains No.1

Field Stratigraphic Test Hole

CANADA

DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES

NORTHERN ADMINISTRATION AND LANDS BRANCH

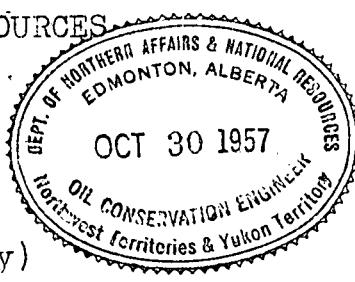
(ABANDONMENT)

(COMPLETION)

(SUSPENSION)

REPORT

(Strike out operations which do not apply)



To be submitted in triplicate in accordance with Section 70 of the Territorial Oil and Gas Regulations to the Conservation Engineer at Edmonton, Alberta.

| | | | |
|------------------------------------|--|---|--------------------------------------|
| Name of well . | Eagle Plains No. 1 | Permit No. . . | N/A . . . |
| Registered owner | Peel Plateau Exploration Ltd. | Lease No. . . | N/A |
| Location: (Survey description) | 66°-48'-54" N Lat. 138°-8'-30" W Long | Reservation & Exclusive Right to Explore as covered by P.C.'s #2808 1955-603, 1955-1720 | Drilling Company Parker Drilling Co. |
| Elevation: Ground | Kelly bushing 1469.4 | Depth | 8409 |
| Spudded | Finished drilling | Rig released | |
| Deviations from vertical | | | |

CASING

| Date | Size O.D. | Weight lbs/foot | Grade | Set at feet | Sacks cement |
|------------|-----------|--------------------|------------|----------------|-----------------|
| 1. | 13-3/8" | .54.5 . . . | J-55 . . . | 1006.72 . . . | 600 . . . |
| 2. | 9-5/8" | .36.0 . . . | J-55 . . . | 2510 . . . | 860 . . . |
| 3. | | | | | |

TUBING

Status of well on completion of drilling Suspended at 8409 ft..

Producing zone . . . Nil
Cored intervals 2101-2122; 3611-3658; 3659-3678; 3920-3940; 4827-4847; 4891-4912; . . .
4913-4950; 5590-5600; 6047-6087; 6792-6824; 7040-7048; 7048-7069; 7069-7097; 7337-7377; . . .
7678-7688; 7696-7706; 7874-7906.

Interval logged: E-log Surface to 8409 ft. . . M-log Surface to 8409 ft.
R-log Surface to 8409 ft. . . Other Temperature surface to 2500 ft.

DRILLSTEM TESTS

| Test No. | Date | Interval tested | Duration | Results |
|----------|-----------|-------------------|---------------|----------------------------------|
| 1 | June 19 | 3580 - 3918 | | Misrun, seat failed |
| 2 | June 19 | 3515 - 3918 . . . | 60 mins . . . | 200 ft. mud |
| 3 | July 8-9 | 4695 - 4720 | 60 mins | 480' gassy mud, 3860' salt water |
| 4 | July 9-10 | 4750 - 4785 . . . | 60 mins | G.T.S. 35 min. T. STM. 4235' SW |
| 5 | July 12 | 4450 - 4690 | 60 mins | 656' W mud, 1868 mud SW |
| 6 | July 14 | 4810 - 4950 . . . | 30 mins | 160' mud, 3976' S.W. gassy |
| 7 | Aug. 14 | 6904 - 7040 | 60 mins | 887' muddy (SWer) |
| 8 | Aug. 14 | 6790 - 6904 | 60 mins | 664' SW |
| 9 | Aug. 15 | 6246 - 6485 | 60 mins | 1681 SW mud |
| 10 | Aug. 21 | 7040 - 7264 | 45 mins | 5561' SW |

| <u>Test No.</u> | <u>Date</u> | <u>Interval tested</u> | <u>Duration</u> | <u>Results</u> |
|--|-------------|------------------------|-----------------|-----------------------|
| 11 | Aug. 26 | 7264 - 7533 | 60 mins | 996' M SW.W. |
| 12 | Sept. 3 | 7650 - 7688 | 55 mins | 140' W.mud, 650' W.C. |
| 13 | Sept. 6 | | | Misrun, packer failed |
| 14 | Sept. 14 | 7636 - 7696 | 60 mins | 140' mud |
| 15 | Sept. 15 | | | Misrun, top plugged |
| 16 | (Sept) 16 | 7527 - 7721 | 60 mins | 155' mud |
| 17 | Oct. 2 | 8338 - 8409 | 60 mins | 796' SW. |
| 18 | Oct. 5 | | | Misrun |
| 19 | Oct. 6 | 4085 - 4423 | 60 mins | 190' mud |
| Perforations: (Gun.....) (Det.....) | | | | |
| | | | Nil | |
| Shootings: | | | | |
| | | | Nil | |
| Hydraulically fracturing: | | | | |
| | | | Nil | |
| Chemical treatment: | | | | |
| | | | Nil | |
| Date Initial Production tests: Nil | | | | |
| Initial production data | | | | |
| | | | Nil | |
| Pumping or flowing | | | | |
| | | | Nil | |
| Plug back: | | | | |
| | | | Nil | |
| Other: | | | | |
| | | | Suspended | |
| (isv0) | | | | |

CEMENT PLUGS SET

| <u>Date</u> | <u>Plug set at</u> | <u>Sacks cement</u> | <u>Method</u> | <u>Top found at</u> |
|-------------|-------------------------------------|---------------------|---------------------------|---------------------|
| Oct. 3/57 | 8309 - 8409 McCullough Bridging | 40 sacks | H.O.W.Co. Schlumberger | 8327' |
| Oct. 4/57 | plug at 5040 McCullough Plug | 3 sacks | Line Schlumberger | 5040' |
| Oct. 4/57 | at 4425 | 3 sacks | Line | 4425' |
| Oct. 6/57 | 2475 - 2550 | 60 sacks | H.O.W.Co. | 2407' |
| Oct. 6/57 | McCullough Bridging Plug at 250' | Nil | Schlumberger Line | 250' |

Well samples have been sent to: Core Laboratories

Cores will be stored at: Calgary

Electric log is appended: Yes No X

Radioactivity log is appended: Yes No X

Micrometer log is appended: Yes No X

Geologic record or strip log(is) submitted Yes No X
(will be)
(isv0)

Results of tests for porosity, permeability, and saturation of each stratum containing oil, gas or water (are) submitted
(will be) Yes No X

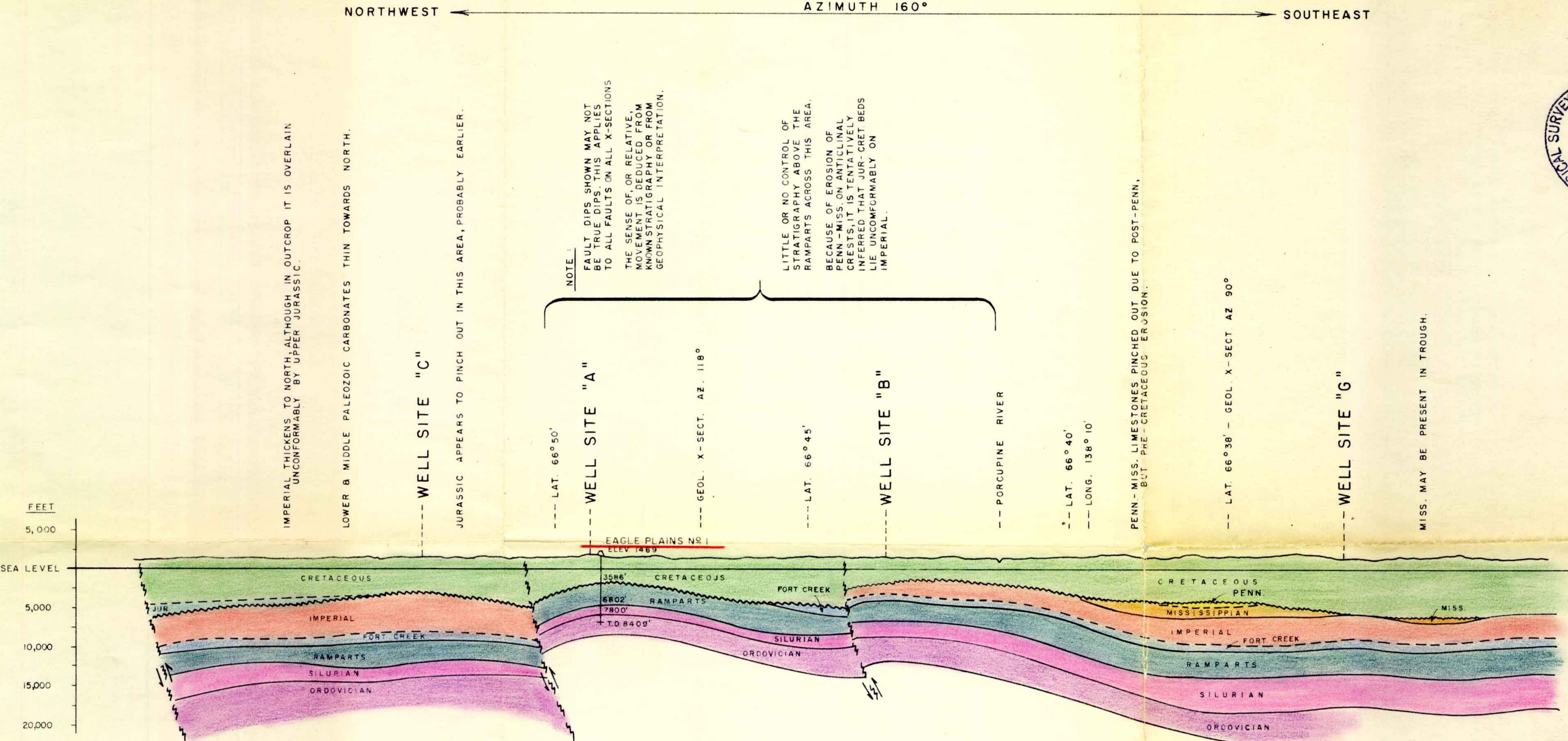
With respect to abandonment we have complied with Section 60(3) and (4) of the Regulations: N/A (Initial here)

ADDITIONAL DETAILS AND COMMENTS

Signed

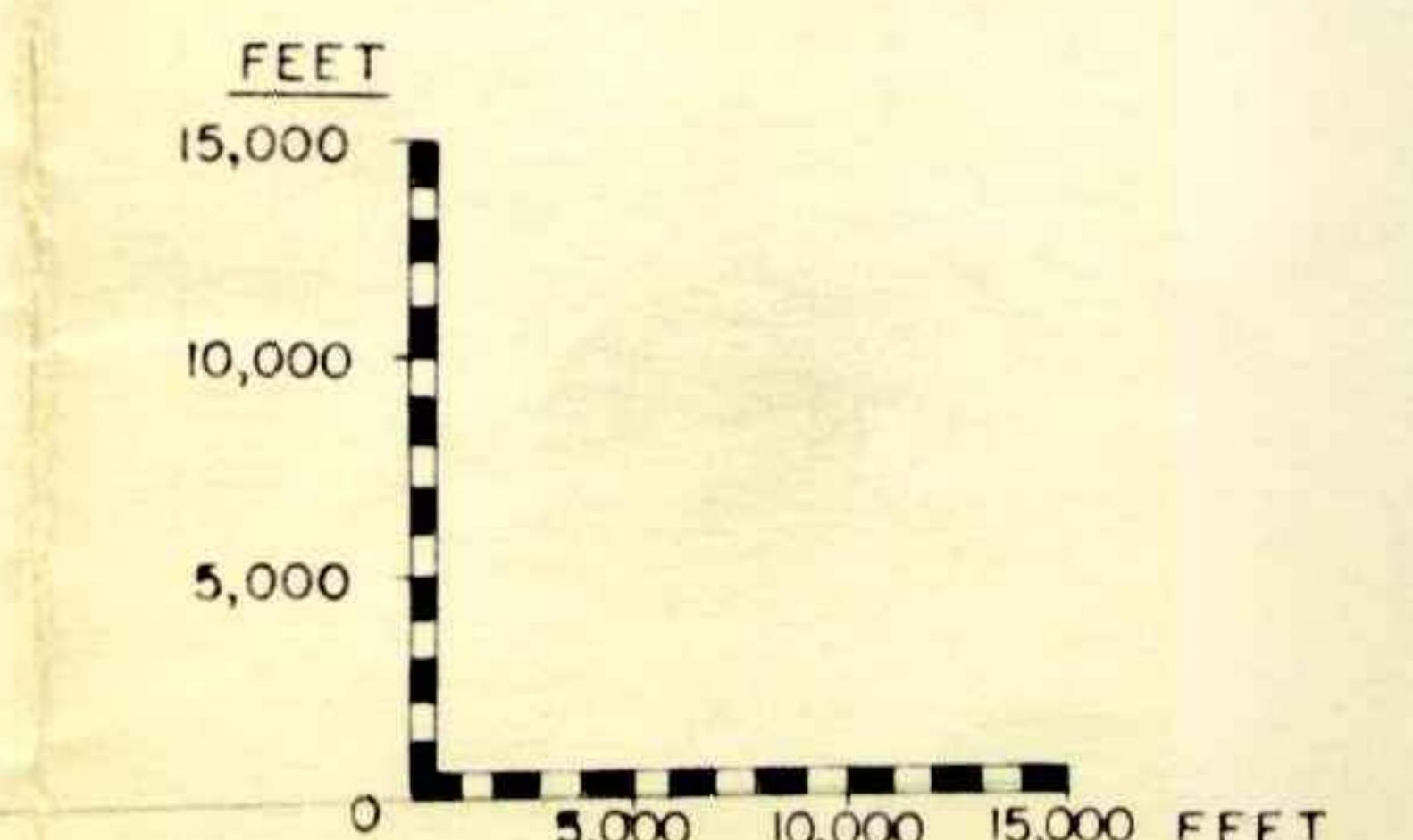
W.G. Campbell

Address 8 Michael Building,
Calgary, Alberta.



GEOLOGICAL SURVEY OF CANADA
406-CUSTOMS BUILDING,
CALGARY, ALBERTA

GEOLOGICAL CROSS SECTION ACROSS THE EAGLE PLAINS ALONG AZIMUTH 160°



BY B. R. PELLETIER. REVISED NOV 1957
BY W.F.W.

PEEL PLATEAU EXPLORATION LTD.
CALGARY, ALBERTA A.L. OLDFIELD
TORONTO, ONTARIO OCT 4 1956



