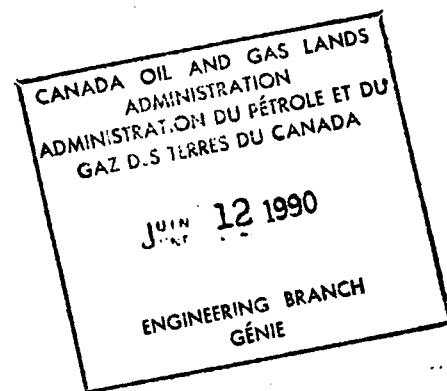


**FINAL WELL REPORT
FOR
PARAMOUNT ET AL CAMERON L-44**



**PARAMOUNT RESOURCES LTD.
4000 First Canadian Centre
350 - 7th Avenue S.W.
CALGARY, Alberta
T2P 3W5**

Michael Cholach, P.Geol.

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4. Deviation Record
5. Mud Data

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2. Stratigraphic Column

A. INTRODUCTION

1. Summary

The Paramount et al Cameron L-44 well was drilled by Paramount Resources Ltd. during the first quarter of 1990 to explore for reserves of natural gas in the Slave Point, Sulphur Point, and Keg River Formations. The drilling contractor was Sierra Drilling Ltd. The rig was a Sierra 5000 top drive unit with a hydraulic pipe handling system. The rig also has slant hole capability for angles from 45 degrees to 90 degrees. Rig capacity is 110,000 daN.

The L-44 well was drilled to a total depth of 1634 m. Surface hole (311 mm) was drilled to 391 m, cased with 244.5 mm and cemented. The main hole (222 mm) was drilled to 1634 m. The hole was logged. Logs run were:

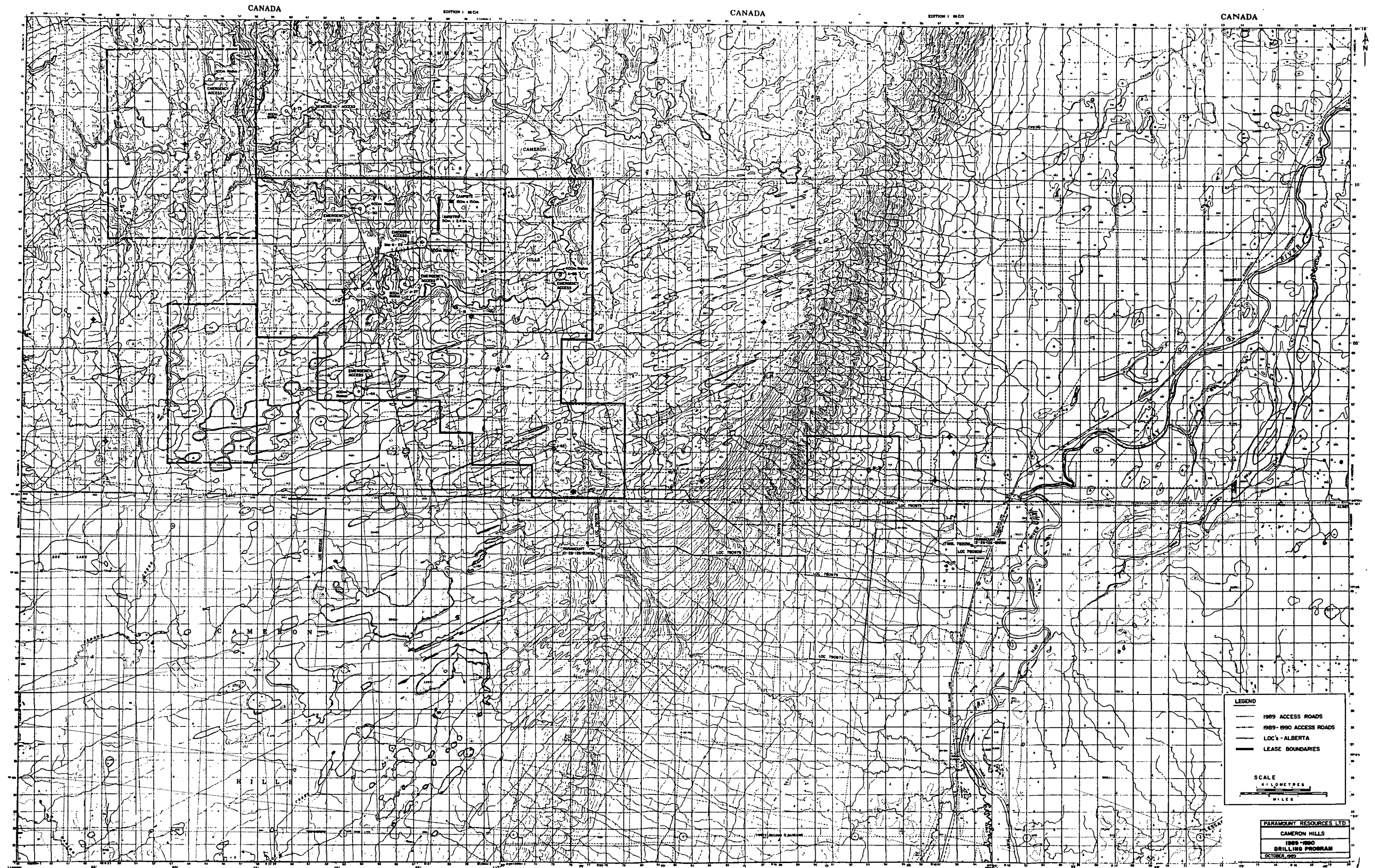
DIL-SFL-GE-SP-Ten
BHC-SONIC-GR-CAL
CNL-LDT-GR-C1-C2-Ten
MICROLOG-GR-Ten
CYBERLOOK

One drill stem test was run in the Keg River Formation. The test was successful. Fluid recovery consisted of 1092 m of gasified salt water and mud.

The well was cased with 139.7 mm casing and cemented.

The Keg River, Muskeg, Sulphur Point, and Slave Point Formations were further evaluated by a service rig. Details of this work appears in Section E.

2. Locality Map (See Figure 1, Following Page)



B. GENERAL DATA

1. Well Name

Paramount et al Cameron L-44
Exploration Agreement No. 312
Grid Area: 60° 10' N, 117° 30' W

2. Well Location

Surveyed by conventional ground traverse methods to determine final position.

UTM Ref. Meridian: 117°

Coordinates: North 665 7937.14
East 46 3761.91

Lat. 60° 03' 31.86"
Long. 117° 39' 02.97"

3. Unique Well Identifier

300L446010117300

4. Operator And Drilling Contractor

Operator: Paramount Resources Ltd.
4000 First Canadian Centre
350 - 7th Avenue S.W.
Calgary, Alberta
T2P 3W5

Drilling Contractor: Sierra Drilling Ltd.
P.O. Box 177
Medicine Hat, Alberta
T1A 7E8

5. Drilling Unit (N/A)

6. Position Keeping (N/A)

7. Support Craft (N/A)

8. Drilling Unit Performance (N/A)

9. Difficulties And Delays (N/A)

C. SUMMARY OF OPERATIONS

1. Elevations

Rotary Table 749.10 m

Ground 745.40 m

2. Total Depth

Drilled 1634.00 m

Logged 1635.80 m

PBTD 1365.00 m

3. Date And Hour Spudded

Spudded 1989-12-29 at 04:15 hours.

4. Date Drilling Completed

1990-01-14

5. Date Of Rig Release

1990-01-20

6. Well Status

Bridge plug set at 1365 mKB.

7. Hole Sizes And Depth

Surface Hole 311 mm - 390 m

Main Hole 222 mm - 1634 m

See Table 1 for Bit Record. (Following Page).

TABLE 1

PARAMOUNT ET AL CAMERON L-44

BIT RECORD

<u>NO.</u>	<u>SIZE MM</u>	<u>MAKE</u>	<u>TYPE</u>	<u>DEPTH OUT</u>	<u>METRES DRILLED</u>	<u>HOURS</u>	<u>METRES PER HOUR</u>	<u>ACCUM HOURS</u>
1A	311	SMITH	DGHV	118	118	9.50	12.40	9.50
2A	311	SMITH	TC907	372	254	14.25	17.80	23.75
3A	311	REED	S11J	391	19	.75	25.00	24.50
1	222	REED	HP51A	1120	729	32.50	34.50	57.00
2	222	REED	HP51A	1262	142	16.25	8.70	73.25
3	222	REED	HP52A	1568	306	75.00	4.10	148.25
4	222	REED	HP53A	1634	66	19.25	3.40	167.50

8. Casing And Cement Record

Surface Casing: Ran 30 joints, 244.5 mm, 53.56 kg/m, J-55, LT&C, Ipsco Casing. Landed at 389.20 mKB. Cemented with 30 tonnes 0.1.0 cement + 2% CaCl_2 .

Production Casing: Ran 128 joints of 139.7 mm, 23.07 kg/m, IK55, LT&C Casing. Landed at 1636.0 mKB.

Casing cemented in two stages.

Stage #1: 1353.75 m - 1636 mKB. Preflushed with 3.0 m³ scavenger slurry (1.8 tonnes 0.1.0 slurry mixed at 1400 kg/m³ with 0.8% NFL 3 + 0.1% SPC 12,000). Cemented with 13.2 tonnes of 0.1.0 Class 'G' cement. Displaced cement with 7 m³ water and 14.2 m³ mud, total 21.1 m³. Bumped plug with 15 mPa. Pressured up to 15 mPa and set packer. Dropped dart and circulated out excess cement.

Stage #2: Preflushed with 3.0 m³ water. Cemented with 77.5 tonnes of 0.1.8 cement + 0.75% T-10. Displaced cement with 16.9 m³ water. Plug down at 06:16 hours on 1990-01-20.

The calculated cement rise behind the 139.7 mm casing is 390 m.

Casing is held by a Crown C-22 11" x 5 1/2" automatic casing hanger and a Crown GOF 11" x 5 1/2" secondary seal.

9. Sidetracked Hole (N/A)

10. Drilling Fluid

Surface Hole (0 - 391 m):

This portion of the well was drilled with a bentonite-lime slurry mud with the following properties:

Weight	1280 kg/m ³
Viscosity	79
W.L.	7.0
pH	10

Main Hole (391 m - 1634 mKB):

The interval from 391 m to 1262 m was drilled with air. While air drilling, a reserve mud supply of 1100 kg/m^3 mud_g was kept on hand. The mud has a viscosity of 40 to 45, and a pH of 9.0 to 9.5.

The interval from 1262 m to 1634 m was drilled with a gel-chem mud having a density of about 1110 kg/m^3 . Viscosity was maintained around 50, pH at 10.5 and fluid loss at less than 8.0.

11. Fishing Operations (N/A)

12. Well Kicks

None encountered.

13. Formation Leak-Off Test

A formation leak-off test was run at 394 m (surface casing landed at 389.2 mKB). The fluid density was 1000 kg/m^3 having a gradient of 9.81 kg/m . The maximum applied pressure was 4744 kPa/m with no formation breakdown giving a formation gradient of 22 kPa/m.

14. Time Distribution (See Table 2, Following Page)

15. Deviation Survey (N/A)

16. Abandonment Plugs (N/A)

17. Composite Well Record (In Pocket)

TABLE 2

PARAMOUNT ET AL CAMERON L-44

TIME DISTRIBUTION

SPUDED WELL ON 1989-12-29 AT 04:15 HOURS

RIG RELEASED ON 1990-01-20 AT 16:15 HOURS

PAGE 1 OF 8

DATE	FROM	TO	DRILL	CIRC. COND. MUD	TRIPS	RIG SERVICE	RIG REPAIRS	SLIP & CUT LINE	DEV. SURVEY	WIRELINE LOGS	RUN CASING CEMENT	W.O.C.	NIPPLE UP B.O.P.	TEST B.O.P.	DRILL STEM TEST	REAM	OTHER	B.O.P. DRILL	DEPTH 24:00 HOURS
1989-12-29	04:15	05:15	1.00																
1989-12-29	05:15	05:30							0.25										
1989-12-29	05:30	06:30															1.00		
1989-12-29	06:30	08:00	1.50																
1989-12-29	08:00	08:15				0.25													
1989-12-29	08:15	08:30																0.25	
1989-12-29	08:30	11:30	3.00																
1989-12-29	11:30	12:00							0.50										
1989-12-29	12:00	16:30	4.50																
1989-12-29	16:30	16:45							0.25										
1989-12-29	16:45	18:15			1.50														
1989-12-29	18:15	19:45	1.50																
1989-12-29	19:45	20:00				0.25													
1989-12-29	20:00	23:15	3.25																
1989-12-29	23:15	24:00							0.75										228
1989-12-30	00:00	03:30	3.50																
1989-12-30	03:30	04:00							0.50										
1989-12-30	04:00	07:45	3.75																
1989-12-30	07:45	08:00							0.25										
1989-12-30	08:00	08:15				0.25													
1989-12-30	08:15	11:00	2.75																
1989-12-30	11:00	11:15							0.25										
1989-12-30	11:15	13:15			2.00														
1989-12-30	13:15	15:00					1.75												
1989-12-30	15:00	16:45			1.75														
1989-12-30	16:45	17:30	0.75																
1989-12-30	17:30	17:45							0.25										
1989-12-30	17:45	19:15		1.50															
1989-12-30	19:15	20:45			1.50														
1989-12-30	20:45	24:00									3.25								391

TABLE 2

PARAMOUNT ET AL CAMERON L-44

TIME DISTRIBUTION

SPUDDED WELL ON 1989-12-29 AT 04:15 HOURS

RIG RELEASED ON 1990-01-20 AT 16:15 HOURS

PAGE 2 OF 8

[illegible]

PARAMOUNT ET AL CAMERON L-44

SPUDDED WELL ON 1989-12-29 AT 04:15 HOURS

RIG RELEASED ON 1990-01-20 AT 16:15 HOURS

PAGE 3 OF 8

[illegible]

TABLE 2

PARAMOUNT ET AL CAMERON L-44

TIME DISTRIBUTION

SPUDDED WELL ON 1989-12-29 AT 04:15 HOURS

RIG RELEASED ON 1990-01-20 AT 16:15 HOURS

PAGE 4 OF 8

DATE	FROM	TO	DRILL	CIRC.	TRIPS	RIG	RIG	SLIP &	DEV.	WIRELINE	RUN	W.O.C.	NIPPLE	TEST	DRILL	REAM	OTHER	B.O.P.	DEPTH
				COND.		SERVICE	REPAIRS	CUT LINE	SURVEY	LOGS	CASING		UP	STEM	B.O.P.			B.O.P.	TEST
1990-01-08	00:00	00:15				0.25													
1990-01-08	00:15	04:45	4.50																
1990-01-08	04:45	05:15				0.50													
1990-01-08	05:15	05:45							0.50										
1990-01-08	05:45	11:15	5.50																
1990-01-08	11:15	11:45			0.50														
1990-01-08	11:45	12:00		0.25															
1990-01-08	12:00	12:15				0.25													
1990-01-08	12:15	12:45							0.50										
1990-01-08	12:45	19:00	6.25																
1990-01-08	19:00	19:30			0.50														
1990-01-08	19:30	19:45		0.25															
1990-01-08	19:45	20:45			1.00														
1990-01-08	20:45	21:45		1.00															
1990-01-08	21:45	22:15		0.50															
1990-01-08	22:15	23:30		1.25															
1990-01-08	23:30	24:00		0.50															1263
1990-01-09	00:00	00:45		0.75															
1990-01-09	00:45	01:15		0.50															
1990-01-09	01:15	04:45		3.50															
1990-01-09	04:45	06:30		1.75															
1990-01-09	06:30	09:30			3.00														
1990-01-09	09:30	12:00															2.50		
1990-01-09	12:00	12:15				0.25													
1990-01-09	12:15	16:15			4.00														
1990-01-09	16:15	20:00														3.75			
1990-01-09	20:00	20:15				0.25													
1990-01-09	20:15	21:00														0.75			
1990-01-09	21:00	21:15															0.25		
1990-01-09	21:15	22:00														0.75			
1990-01-09	22:00	24:00			2.00														1263

TABLE 2

PARAMOUNT ET AL CAMERON L-44

TIME DISTRIBUTION

SPUDDED WELL ON 1989-12-29 AT 04:15 HOURS

RIG RELEASED ON 1990-01-20 AT 16:16 HOURS

PAGE 5 OF 8

[illegible]

TABLE 2

PARAMOUNT ET AL CAMERON L-44

TIME DISTRIBUTION

SPUDDED WELL ON 1989-12-29 AT 04:15 HOURS

RIG RELEASED ON 1990-01-20 AT 16:15 HOURS

PAGE 6 OF 8

[illegible]

TABLE 2

PARAMOUNT ET AL CAMERON L-44

TIME DISTRIBUTION

SPUDED WELL ON 1989-12-29 AT 04:15 HOURS

RIG RELEASED ON 1990-01-20 AT 16:15 HOURS

PAGE 7 OF 8

[illegible]

TABLE 2

PARAMOUNT ET AL CAMERON L-44

TIME DISTRIBUTION

SPUDED WELL ON 1989-12-29 AT 04:15 HOURS

RIG RELEASED ON 1990-01-20 AT 16:15 HOURS

PAGE 8 OF 8

DATE	FROM	TO	DRILL	CIRC. COND. MUD	TRIPS	RIG SERVICE	RIG REPAIRS	SLIP & CUT LINE	DEV. SURVEY	WIRELINE LOGS	RUN CASING CEMENT	W.O.C.	NIPPLE UP B.O.P.	TEST B.O.P.	DRILL STEM TEST	REAM	OTHER	B.O.P. DRILL	DEPTH 24:00 HOURS
1990-01-18	00:00	05:00			5.00														
1990-01-18	05:00	06:45		1.75															
1990-01-18	06:45	07:00																0.25	
1990-01-18	07:00	16:30			9.50														
1990-01-18	16:30	17:15						0.75											
1990-01-18	17:15	23:30			8.25														
1990-01-18	23:30	24:00		0.50															1634
1990-01-19	00:00	04:30		4.50															
1990-01-19	04:30	10:30			6.00														
1990-01-19	10:30	24:00									13.50								1634
1990-01-20	00:00	06:15									6.25								
1990-01-20	06:15	12:15										6.00							
1990-01-20	12:15	16:15															4.00		1634
TOTALS			168.25	31.50	104.50	5.25	29.25	1.00	8.25	33.25	40.00	14.00	28.00	32.00	4.25	24.75	16.25	1.25	

D. GEOLOGY

Regional Geological Discussion:

The geological record in the Cameron Hills area can be divided into six lithostratigraphic intervals, each generally bounded by major transgressive or regressive events. These intervals are:

1. Lower Elk Point Group
2. Upper Elk Point Group
3. Beaverhill Lake Group
4. Woodbend Group
5. Winterburn Group
6. Wabamun Group

Lower Elk Point Group

This group includes the interval from the Basal Devonian sands to the base of the Keg River Formation. The evaporites of the Chinchaga Formation and silici-clastics of the basal Granite Wash were deposited within a shallow restricted epicontinental seaway. These deposits onlap the Pre-Devonian surface and range in thickness from zero over the prominent Tathlina and Peace River archs to nearly 300 metres within the interarch basins.

Upper Elk Point Group

A major transgression resulted in the deposition of organic rich open marine carbonates of the Lower Keg River Formation. This crinoid/brachiopod rich carbonate platform ranges in thickness from 15 to 50 metres.

Continued marine transgression and subsidence led to the formation of an extension Upper Keg River barrier reef complex (Shekelie-Presquile Barrier Complex) which enclosed the Elk Point basin on its northern and western sides. Southeast of this barrier, isolated pinnacle reefs, low energy reef mounds and shelf deposits of the Upper Keg River Formation were deposited. Generally the Upper Keg River is deposited conformably upon Lower Keg River Platform carbonates, but in areas of high Pre-Devonian topography, these rocks are deposited unconformably upon the Pre-Devonian surface (e.g. A-5 and I-10 wells).

Relatively open marine conditions existed through to the end of the Keg River time with normal salinity maintained by marine water entering the basin from both the northwest and northeast. During the early Givetian stage the Tathlina land mass elevated resulting in the restriction of the Elk Point basin with normal marine conditions restricted to the Shekelie Barrier Complex. Southeast of the Barrier Complex, the increasingly evaporitic conditions resulted in deposition of interbedded anhydrites and dolomites of the Muskeg Formation.

Toward the end of Upper Elk Point time subsidence of the barrier complex allowed normal marine conditions to return to the northern end of the Elk Point basin resulting in deposition of the regional extensive Sulphur Point dolomites and limestones. Detailed correlations of the Sulphur Point carbonates with adjacent anhydrite/dolomite cycles of the uppermost Muskeg Formation indicated a facies relationship exists between these two formations.

Upper Elk Point deposition was terminated by a pronounced regression, resulting in widespread deposition of shallow marine and continental shales and silty sandstone of the Watt Mountain Formation.

Beaverhill Lake Group

Beaverhill Lake Group sedimentation began with gradual marine transgression over a relatively flat surface of Watt Mountain clastics. The initial deposits comprised of the peritidal and shallow restricted shelf carbonates of the Fort Vermilion Formation. Continued transgression created more open marine conditions and the shallow shelf carbonates of the Slave Point were deposited.

Further marine transgression over the Slave Point surface resulted in deposition of a sequence of basin filling argillaceous limestones and calcareous shales of the Waterways Formation.

Woodbend Group

In northern Alberta the transition from the shallow marine Waterways Formation to the deeper water Woodbend Group is conformable. This transgressive pulse produced the most extensive Devonian marine incursion into the Alberta Basin and is represented by euxinic "deep" water organic rich shales of the Muskwa/Duvernay Formation. These shales are overlain by thick accumulations of Upper Woodbend Group shales of the Fort Simpson Formation and carbonates of the Twin Falls (Grosmont) Formation.

Winterburn Group

The regressive sedimentation patterns developed during infilling of the Woodbend Basin continued with shallow water carbonate shelf deposits prograding out over basin filling clastics. In northern Alberta a regressive pulse allowed the argillaceous carbonates of the Basal Nisku Formation to give way to cleaner shallow water shelf carbonates of the Calmar Formation and Blueridge Member of the Graminia Formation. A second major regressive pulse occurred at the close of Winterburn time resulting in the deposition of terrigenous clastics of the Graminia Silt unit.

Wabamun Group

The Wabamun Group carbonate ramp sequence conformably overlies the Winterburn Group. These largely lime mud rich, burrowed pelletoidal limestones, grading locally to lime grainstones, were deposited in response to six major eustatic sea level rises and accentuated by local subsidence patterns.

Well Summary

Paramount et al Cameron L-44 was drilled from surface to 1634 m (total depth) in 18 days. Delays due to mechanical failure were encountered at surface casing, due to a leak in the manifold while pressure testing the B.O.P.s; and at 1120 m, when the air compressor failed.

L-44 was drilled from surface casing to 1262 m with air, and from there to total depth with mud. Lost circulation was encountered in the Wabamun on mudding up, LCM was added and circulation recovered.

A minor gas peak was encountered in the lower Slave Point at 1384 m to 1389 m, within a microcrystalline limestone. Oil shows were encountered within the Muskeg at 1442 to 1462 m; the Keg River at 1501 to 1530 m; the lower Keg River at 1554 to 1562 m; and the Ernestina Lake at 1579 to 1583 m.

L-44 reached total depth in the Pre-Devonian, within a metamorphic sequence of interbedded Quartzite and Amphibolite.

Samples were collected at 10 metre intervals while air-drilling, and at 5 metre intervals from mud-up to T.D. Also unwashed geochemical samples were collected at 10 metre intervals from mud up to T.D.

1. Drill Cuttings (See Following Pages For Sample Descriptions)

The 222 mm hole was drilled with air from 391 m to 1262 m, 2 m samples were collected from 520 m to 570 m, and 850 m to 860 m. Samples were collected for the entire interval from 860 m to 1634 m (total depth).

Sample Distribution = Washed Cuttings, 5 Metre Intervals

One Set Samples	-	C.O.G.L.A., Yellowknife
One Set Samples	-	I.S.P.G., Calgary
One Set Samples	-	Paramount, Calgary.

Sample Distribution = Unwashed Cuttings, 10 Metre Intervals

One Set Samples	-	I.S.P.G., Calgary
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2. Cores (N/A)

3. Lithology (See Following Pages)

4. Stratigraphic Column (See Figure 2, Following Page)

5. Biostratigraphic Column (N/A)

TABLE OF FORMATIONS

AGE	FORMATION		LITHOLOGY
LATE DEVONIAN	Wabamun		Limestone crypto to micro crystalline
	Winterburn		Limestone crypto - micro crystalline, argillaceous
	Woodbend Group	Twin Falls (Grosmont)	Limestone crypto - micro
		Fort Simpson	shales
		Muskwa	organic rich shales
	Beaverhill Lake	Waterways	shales (basinal)
Slave Point		Limestone	
Ft. Vermilion		Limestone	
Watt Mountain		shales - bituminous	
Sulphur Point		Limestone & Dolomite	
MIDDLE DEVONIAN	Upper Elk Pt.	Muskeg	anhydrite & dolomite / Dolomite
		Lower Keg River	organic rich limestone & dolomite
	Lower Elk Point	Chinchaga	anhydrite
EARLY DEVONIAN	Lower Elk Point	Granite Wash	sands
			Metamorphic Complex
PRE DEVONIAN			

GEOLOGICAL MARKERS

K.B: 749.1 m

GRD: 745.4 m

[illegible]

Paramount et al Cameron L-44

Sample Descriptions

- 391 - 420 m Shale 100%, black, soft to firm, subfissile to fissile, earthy to locally waxy, occasionally silty.
- 420 - 430 m Shale 90%, as above. Siltstone 10%, dark grey, firm, blocky, earthy, locally micaceous.
- 430 - 450 m Shale 100%, as above, becoming light to dark grey, locally silty.
- 450 - 470 m Shale 100%, dark grey, firm, subfissile, earthy, locally micaceous.
- 470 - 490 m Shale 100%, as above, locally silty.
- 490 - 520 m Shale 100%, dark grey to grey/brown, soft to firm, subfissile, earthy, locally silty.

Wabamun 525.0 m (+224.1 m)

- 520 - 570 m No returns. Adding foam.
- 570 - 590 m Limestone 100%, cream to brown/white, hard, cryptocrystalline to locally microcrystalline, chalky to granular, locally oolitic or fragmental, occasionally crinoidal, trace Cephlapod, dominately tight, locally 0-6% intercrystalline to pin-point porosity with trace dead oil staining, trace pyrite.
- 590 - 600 m Limestone 100%, cream to light grey/white, hard, cryptocrystalline to microcrystalline, locally very fine crystalline, chalky to sucrosic, locally granular, locally argillaceous, occasionally with argillaceous clasts, oolitic in part, tight to trace pin-point porosity, no show.
- 600 - 610 m Limestone 100%, grey/white, hard, cryptocrystalline, chalky to earthy, locally fragmental with argillaceous clasts, tight.

Winterburn 607.0 m (+142.1 m)

- 610 - 620 m Limestone 100%, grey/brown, grey/white, hard, microcrystalline to locally cryptocrystalline, sucrosic, locally oolitic, earthy, tight.
- 620 - 630 m Limestone 100%, brown/white, hard, cryptocrystalline, waxy to chalky, tight.
- 630 - 650 m Limestone 100%, brown/white, firm to hard, microcrystalline to locally cryptocrystalline, sucrosic, trace pin-point porosity, dominately tight, no show.
- 650 - 670 m Limestone 100%, grey/white, hard to brittle, cryptocrystalline to microcrystalline, earthy to sucrosic, locally argillaceous, trace sparry Calcite, trace pyrite, tight.

670 - 700 m	<u>Limestone</u> 90%, as above. <u>Shale</u> 10%, dark grey, locally grey/green, firm, subfissile, earthy, trace pyrite.
700 - 710 m	<u>Limestone</u> 80%, grey/brown to grey/white, hard to brittle, microcrystalline to locally cryptocrystalline, earthy to sucrosic, argillaceous in part, trace sparry Calcite, tight. <u>Shale</u> 20%, dark grey, grey/green, black, firm, subfissile, earthy to waxy.
710 - 720 m	<u>Limestone</u> 50%, as above. <u>Shale</u> 50%, dark grey, firm, fissile, earthy, micaceous in part.
720 - 730 m	<u>Shale</u> 80%, light grey to grey/green, as above. <u>Limestone</u> 20%, as above.
730 - 740 m	<u>Shale</u> 60%, as above. <u>Limestone</u> 40%, grey/brown, hard, microcrystalline, sucrosic, fragmental, locally oolitic, argillaceous in part., trace pin-point porosity.
740 - 760 m	<u>Shale</u> 70%, black to dark grey, firm, fissile, earthy, carbonaceous in part, locally micaceous. <u>Limestone</u> 30%, as above.
760 - 780 m	No sample.
780 - 800 m	<u>Shale</u> 50%, as above. <u>Siltstone</u> 30%, light grey, firm, blocky, earthy, micaceous, calcareous. <u>Limestone</u> 20%, as above.
800 - 810 m	<u>Shale</u> 60%, green/grey to dark grey, as above. <u>Siltstone</u> 30%, <u>Limestone</u> 10%, as above.
810 - 840 m	<u>Shale</u> 50%, green/grey, firm to hard, subfissile, waxy to earthy, rarely micaceous. <u>Limestone</u> 30%, brown/white, buff, hard, microcrystalline, sucrosic, locally argillaceous, tight. <u>Siltstone</u> 20%, dark brown, grey/brown, hard, blocky, earthy, micaceous, calcareous.
840 - 850 m	<u>Limestone</u> 50%, grey/brown, hard, microcrystalline, sucrosic, argillaceous, tight. <u>Shale</u> 50%, as above.
<u>Twin Falls 855.0 m (-105.9 m)</u>	
850 - 860 m	No sample.
860 - 870 m	<u>Limestone</u> 100%, grey/brown to dark grey, hard to brittle, microcrystalline, sucrosic, locally fragmental, argillaceous, occasionally oolitic, trace sparry Calcite, trace pin-point porosity, dominately tight. <u>Shale</u> trace, as above.
870 - 890 m	<u>Limestone</u> 90%, as above. <u>Shale</u> 10%, grey/green to dark grey, brittle to firm, subfissile, earthy, rarely micaceous.
890 - 900 m	<u>Limestone</u> 70%, grey/white, hard to brittle, microcrystalline, sucrosic, argillaceous, tight, trace <u>Brachiopod</u> . <u>Shale</u> 30%, dark grey, firm, subfissile, earthy, locally silty.

900 - 920 m	<u>Limestone</u> 90%, <u>Shale</u> 10%, as above.
920 - 930 m	<u>Limestone</u> 60%, as above. <u>Shale</u> 40%, dark grey to black, firm, subfissile to fissile, earthy, locally silty.
930 - 940 m	<u>Limestone</u> 50%, as above. <u>Shale</u> 50%, dark grey to black, as above.
940 - 960 m	<u>Limestone</u> 100%, light grey, hard to brittle, cryptocrystalline to microcrystalline, chalky to earthy, sucrosic, argillaceous, tight. <u>Shale</u> trace, as above.
960 - 980 m	<u>Limestone</u> 70%, as above. <u>Shale</u> 30%, dark grey to black, brittle, subfissile, earthy, silty in part, trace micaceous.
980 - 990 m	<u>Shale</u> 60%, black, dark grey, locally dark green to dark brown, firm to brittle, subfissile, earthy, locally micaceous, occasionally silty. <u>Limestone</u> 40%, as above.
990 - 1000 m	<u>Limestone</u> 50%, grey/brown, hard, cryptocrystalline to locally microcrystalline, waxy to chalky, locally sucrosic, occasionally fragmental, argillaceous in part, tight. <u>Shale</u> 50%, as above.
<u>Hay River 1004.0 m (-254.9 m)</u>	
1000 - 1010 m	<u>Limestone</u> 70%, light grey, hard, microcrystalline to very fine crystalline, sucrosic to granular, earthy in part, argillaceous, tight. <u>Shale</u> 30%, dark green, dark grey, locally black, as above.
1010 - 1030 m	<u>Shale</u> 60%, dark grey, green/grey, locally black, firm, subfissile, earthy, rarely micaceous. <u>Limestone</u> 40%, as above.
1030 - 1040 m	<u>Shale</u> 60%, as above. <u>Siltstone</u> 20%, light grey, friable, blocky, earthy to granular, calcareous. <u>Limestone</u> 20%, as above.
1040 - 1050 m	<u>Shale</u> 80%, black to dark grey, green/grey, firm, subfissile, earthy, locally micromicaceous. <u>Siltstone</u> 20%, as above.
1050 - 1060 m	<u>Shale</u> 40%, as above. <u>Limestone</u> 40%, light grey, hard to brittle, cryptocrystalline, earthy, argillaceous, tight. <u>Siltstone</u> 20%, as above.
1060 - 1070 m	No sample.
1070 - 1080 m	<u>Shale</u> 40%, black, locally dark grey, firm to brittle, fissile, earthy to platey, rarely micaceous. <u>Limestone</u> 40%, as above. <u>Siltstone</u> 20%, light grey, firm, blocky, calcareous, earthy.
1080 - 1090 m	<u>Shale</u> 50%, dark brown, green/grey, firm, subfissile to fissile, earthy to waxy, locally micaceous. <u>Limestone</u> 50%, as above.

- 1090 - 1110 m Shale 60%, dark grey to black, firm, subfissile, earthy, micaceous in part, locally calcareous. Siltstone 40%, light grey, soft to firm, blocky, earthy, micaceous, calcareous.
- 1110 - 1210 m No sample.
- 1210 - 1220 m Shale 100%, dark grey, green/grey, black, firm to locally brittle, subfissile, earthy to locally platy, rarely micaceous, slightly calcareous in part.
- 1220 - 1260 m No sample. Mud up at 1262 m.
- 1260 - 1270 m Shale 100%, dark grey to black, firm, subfissile to fissile, earthy, locally micaceous, silty in part, calcareous in part.
- 1270 - 1275 m Shale 100%, locally dark brown, as above.
- 1275 - 1280 m Shale 100%, light to dark grey, firm, subfissile, earthy, silty in part, locally calcareous.
- 1280 - 1285 m Shale 100%, black, locally dark grey, firm, fissile, earthy to waxy, locally micaceous.
- 1285 - 1290 m Shale 90%, dark grey to locally black, firm, fissile, earthy to mottled, micaceous in part. Siltstone 10%, light grey, firm to friable, blocky, earthy, calcareous.
- 1290 - 1300 m Shale 80%, black, locally dark grey, firm, fissile, earthy to waxy, locally mottled, micaceous in part, Siltstone 10%, as above. Marlstone 10%, grey/white, soft, blocky, earthy.

Beaverhill Lake 1302.0 m (-552.9 m)

- 1300 - 1310 m Shale 80%, Siltstone 20%, as above.
- 1310 - 1315 m Shale 80%, dominately black, as above. Sandstone 20%, white to grey/white, friable, very fine to fine, sub-angular, moderately sorted, 90% quartz, calcareous cement, tight, trace pyrite.
- 1315 - 1320 m Shale 60%, dark grey to locally black, firm, subfissile to fissile, earthy to waxy, locally mottled, micaceous, silty in part. Siltstone 20%, grey/white to light grey, firm to friable, blocky, earthy, calcareous. Sandstone 10%, Marlstone 10%, as above.
- 1320 - 1330 m Shale 60%, dark grey to black, as above. Siltstone 30%, Marlstone 10%, as above.

Muskwa 1330.0 m (-580.9 m)

- 1330 - 1340 m Shale 70%, Siltstone 20%, as above. Sandstone 10%, grey/white to white, friable, very fine, subround to sub-angular, well sorted, 100% quartz, calcareous cement, tight, trace pyrite.
- 1340 - 1345 m Shale 60%, Siltstone 30%, as above. Limestone 10%,

light grey, grey/white, brittle, microcrystalline, sucrosic to granular, tight.

- 1345 - 1350 m Shale 60%, dark grey, firm, subfissile, earthy, silty, slightly calcareous, rarely micaceous. Limestone 20%, Siltstone 10%, as above. Anhydrite 10%, white, soft, amorphous.
- 1350 - 1355 m Shale 40%, Limestone 40%, Siltstone 10%, Anhydrite 10%, as above.
- 1355 - 1360 m Limestone 50%, light grey, firm to brittle, cryptocrystalline to locally microcrystalline, waxy to marly, locally sucrosic, trace sparry calcite, argillaceous in part, tight. Shale 50%, as above.

Slave Point 1361.0 m (-611.9m)

- 1360 - 1365 m Limestone 80%, Shale 20%, as above, trace pyrite.
- 1365 - 1375 m Limestone 80%, dark brown, grey/brown, hard to brittle, cryptocrystalline to locally microcrystalline, waxy, occasionally chalky to sucrosic, trace sparry calcite, tight, no show. Shale 20%, as above.
- 1375 - 1380 m Limestone 100%, dark brown, brown/white, hard to brittle, microcrystalline to cryptocrystalline, waxy to sucrosic, tight, no show. Anhydrite trace, white, soft, amorphous.
- 1380 - 1385 m Limestone 90%, Anhydrite 10%, as above.
- 1385 - 1390 m Limestone 90%, dark brown, brown/white, grey/brown, hard to brittle, microcrystalline to locally cryptocrystalline, sucrosic to waxy, trace Crinoid and Belemnites, 0-6% intercrystalline and locally vuggy porosity, no show. Anhydrite 10%, as above.
- 1390 - 1395 m Limestone 60%, dark brown, brown/white, hard, cryptocrystalline, waxy to locally chalky, occasionally fragmental, locally argillaceous, tight. Shale 40%, light to dark grey, firm to brittle, subfissile, earthy, locally mottled, rarely micaceous.
- 1395 - 1400 m Limestone 80%, Shale 10%, as above. Anhydrite 10%, brown/white to white, soft, amorphous to microcrystalline, locally sucrosic.

Watt Mountain 1401.0 m (-651.9 m)

- 1400 - 1405 m Limestone 60%, dark brown, hard, cryptocrystalline to microcrystalline, waxy to sucrosic, trace calcite veins, tight, locally 0-6% pin-point porosity, no show. Shale 30%, light to dark grey, firm to brittle, subfissile, earthy to locally mottled, slightly calcareous, trace pyrite. Anhydrite 10%, as above.

Sulphur Point 1403.0 m (-653.9 m)

- 1405 - 1415 m Limestone 50%, brown/white, hard to brittle, cryptocrystalline, chalky to waxy, mottled in part, fragmented, locally dolomitic, tight, local trace small vuggy and pin-point porosity, no show. Shale 50%, light to dark grey, firm, subfissile, earthy, locally mottled, rarely micaceous, good trace disseminated pyrite.
- 1415 - 1420 m Limestone 60%, brown/white, dark brown, hard to brittle, cryptocrystalline to locally microcrystalline, chalky to waxy, locally sucrosic, fragmented in part, tight, trace pyrite. Shale 40%, Anhydrite trace, as above.
- 1420 - 1425 m Limestone 50%, as above, becoming dolomitic. Shale 50%, Anhydrite trace, as above.
- Muskeg 1423.0 m (-673.9 m)
- 1425 - 1435 m Dolomite 50%, dark brown, brown/white, hard to brittle, cryptocrystalline, waxy, tight, trace pin-point porosity, no show. Anhydrite 30%, white, brown/white, soft to firm, amorphous to crystalline, chalky to sucrosic, Shale 20%, as above.
- 1435 - 1440 m Dolomite 80%, dark brown, grey/brown, hard to brittle, microcrystalline to locally cryptocrystalline, sucrosic to locally waxy, tight to trace pin-point porosity. Anhydrite 20%, as above. Limestone 10%, grey/brown, firm to friable, cryptocrystalline, chalky, peletic, 0-6% pin-point porosity, no show.
- 1440 - 1445 m Dolomite 90%, dark brown, brittle, microcrystalline to fine crystalline, sucrosic to granular, 0-6% intercrystalline to large vuggy porosity, dark brown oil staining, 25% bright yellow fluorescence, instant streaming to cloudy blue/white to pale yellow cut fluorescence, POOR to FAIR SHOW. Anhydrite 10%, as above.
- 1445 - 1455 m Dolomite 90%, dark brown, hard to brittle, microcrystalline to coarse crystalline, locally cryptocrystalline, sucrosic to granular, locally waxy, trace sparry calcite, dominately tight, locally 0-6% pin-point and small vuggy porosity, dark brown oil staining at pore throats, trace pale yellow fluorescence, slow streaming blue/white to pale yellow cut fluorescence, POOR SHOW. Anhydrite 10%, grey/white, brown/white, soft to firm, amorphous to microcrystalline, chalky to sucrosic.
- 1455 - 1460 m Dolomite 70%, Anhydrite 30%, as above, show as above, trace pyrite.
- 1460 - 1465 m Dolomite 90%, dark brown to buff, hard to brittle, cryptocrystalline, locally microcrystalline to fine crystalline, chalky to waxy, locally sucrosic to granular, trace calcite veins, dominately tight,

locally 0-6% pin-point and intercrystalline porosity, trace dark brown oil staining, 10% pale yellow fluorescence, slow streaming blue/white cut fluorescence, POOR SHOW. Anhydrite 10%, as above, trace pyrite.

- 1465 - 1475 m Dolomite 60%, brown/grey, hard, cryptocrystalline to microcrystalline, chalky, waxy to sucrosic, dominately tight, isolated pin-point porosity, no show. Anhydrite 40%, white, brown/white, grey/white, soft to firm, amorphous, chalky.
- 1475 - 1480 m Dolomite 50%, grey/brown, brown/white, hard, cryptocrystalline, waxy, locally grading to limestone. Anhydrite 50%, as above.
- 1480 - 1485 m Dolomite 70%, grey/brown, hard, cryptocrystalline to locally microcrystalline, waxy to locally chalky, occasionally sucrosic, tight. Anhydrite 50%, as above.
- 1485 - 1495 m Anhydrite 60%, grey/white, firm, amorphous, chalky. Dolomite 40%, as above.
- 1495 - 1500 m Dolomite 80%, dark brown, brown/white, hard to brittle, cryptocrystalline to locally microcrystalline, dull to chalky, locally sucrosic to granular, trace pyrite, dominately tight, trace intercrystalline porosity, no show. Anhydrite 20%, as above.

Keg River 1501.0 m (-751.9 m)

- 1500 - 1510 m Dolomite 90%, dark brown, brittle to friable, microcrystalline to very fine crystalline, sucrosic to granular, tight to trace intercrystalline and small vuggy porosity, trace pale yellow fluorescence, slow streaming to cloudy blue/white cut fluorescence, TRACE SHOW. Anhydrite 10%, as above.
- 1510 - 1515 m Dolomite 100%, brown/white, hard to brittle, cryptocrystalline to microcrystalline, waxy to sucrosic, isolated vuggy porosity, dominately tight, trace dark brown oil staining, trace pale yellow fluorescence, slow streaming to cloudy blue/white to pale yellow cut fluorescence, TRACE to POOR SHOW.
- 1515 - 1525 m Dolomite 100%, light brown to brown/white, hard, locally brittle, cryptocrystalline, occasionally microcrystalline waxy to locally sucrosic, tight to trace intercrystalline porosity, TRACE SHOW as above.
- 1525 - 1530 m Dolomite 100%, light to dark brown, brittle to friable, microcrystalline to locally cryptocrystalline, sucrosic to locally waxy, trace intercrystalline porosity, trace dark yellow fluorescence, slow streaming pale yellow cut fluorescence, TRACE SHOW.
- 1530 - 1545 m Dolomite 100%, grey/brown, hard, microcrystalline, sucrosic, argillaceous in part, locally calcareous,

tight, no show.

- 1545 - 1550 m Dolomite 100%, dark brown, brown/white, hard to brittle, microcrystalline, sucrosic, tight, trace intercrystalline porosity, no show, good trace sparry calcite, trace gypsum.
- 1550 - 1555 m Dolomite 90%, brown to grey/brown, brittle to friable, microcrystalline to fine crystalline, locally cryptocrystalline, sucrosic to locally waxy, tight to trace, to 6% intercrystalline porosity, dark yellow fluorescence, very slow streaming pale yellow cut fluorescence, TRACE SHOW. Anhydrite 10%, grey/white, soft, amorphous, waxy.
- 1555 - 1560 m Dolomite 90%, as above. Shale 10%, light green, firm, subfissile, waxy, abundant disseminated pyrite.
- 1560 - 1565 m Dolomite 60%, dark brown, friable, microcrystalline to very fine crystalline, sucrosic, locally argillaceous, tight to trace intercrystalline porosity, TRACE SHOW as above. Anhydrite 40%, brown/white, firm, amorphous, chalky.
- 1565 - 1570 m Logged after trip. 90% Cavings. Dolomite 10%, dark brown, brittle to friable, microcrystalline, sucrosic, tight to trace intercrystalline porosity, no show.
- 1570 - 1575 m Dolomite 100%, as above, trace Belemnites, trace anhydrite and gypsum, good trace sparry calcite.
- 1575 - 1585 m Dolomite 80%, dark brown to red/brown, brittle to friable, microcrystalline to coarse crystalline, sucrosic to granular, abundant coarse calcite crystals, trace gypsum, 0-6% intercrystalline porosity, 10% dark brown oil staining, dull yellow fluorescence, milky pale yellow cut fluorescence, POOR SHOW. Quartz 20%, opaque, translucent, unconsolidated, medium to coarse, subangular to angular, moderate to well sorted, trace white chert, oil show as above.
- 1585 - 1595 m Dolomite 90%, red/brown, hard to brittle, fine crystalline to microcrystalline, granular, mottled in part, trace sparry calcite, tight to locally 0-6% intercrystalline porosity, locally pin-point porosity, no show. Anhydrite 10%, grey/brown, firm, amorphous, chalky.
- 1595 - 1600 m Dolomite 80%, dark brown, brown/white, brittle, microcrystalline, sucrosic, tight, trace gypsum, no show. Anhydrite 20%, grey/brown, firm, amorphous, chalky.
- 1600 - 1605 m Dolomite 60%, grey/brown, firm to hard, cryptocrystalline, chalky to waxy, peletal, tight. Anhydrite 40%, as above.

Granite Wash 1606.0 m (-856.9 m)

1605 - 1615 m Granite Wash 100%, opaque, rose, pink, lime green, unconsolidated, medium to very coarse, angular, poor sorted, 50% feldspar and hornblende, 40% quartz, 10% biotite.

Pre-Devonian 1614.0 m (-864.9)

1615 - 1634 m Amphibolite 60%, lime green, coarse, angular cuttings, 70% hornblende, 30% biotite. Quartzite 40%, clear to translucent, medium to coarse, angular cuttings, 100% quartz, quartz overgrowths.

Total Depth 1634.0 m (-884.9 m)

E. WELL EVALUATION

1. Downhole Logs (In Pocket, At The End)

TABLE 3

DOWNHOLE LOG SUMMARY - Schlumberger

<u>DATE</u>	<u>RUN</u>	<u>TYPE</u>	<u>SCALE</u>	<u>INTERVAL (M)</u>
1990-01-17	1	GR-SP-PHASOR-SFL	1-600 1-240	389.0 - 1635.8 389.0 - 1635.8
	1	GR-CAL-CNL-LDT	1-600 1-240	389.0 - 1635.8 389.0 - 1635.8
	1	GR-ARRAY SONIC-STC WAVE FORMS	1-600 1-240	389.0 - 1635.8 389.0 - 1635.8
	1	GR-CAL-MICROLOG	1-240	389.0 - 1627.7
	1	CYBERLITHOLOGY		134.8 - 1635.8
	1	SAT VELOCITY MONITORLOG		

2. Other Logs

See Geological Well History Log.

3. Synthetic Seismograms

Refer to well service seismic report.

4. Formation Stimulation

Keg River Formation

- 1990-02-25: Computalog perforated the Keg River Formation from 1529 m to 1531 mKB with 13 spm (101.6 mm casing gun), total 27 shots.
- 1990-02-26: Ran in hole with 73 mm tubing, landed at 1607.75 mKB. Displaced hole to oil. Rigged in Nowsco for acid wash and squeeze. Displaced tubing with 0.5 m³ MCA + 2.0 m³ 28% HCL + 2.9 m³ oil to bring MCA by perforations. Overflushed acid with 1.0 m³ oil. Tubing and casing on vacuum. Swabbing, recovered 6.87 m³ and 2.83 m³ water. Total fluid recovery 9.7 m³.
- 1990-02-27: Pulled nine swabs, recovered 10.83 m³ fluid. Water cuts increased to +95% on the last 3 swabs. Displaced hole to salt water. Pulled 11 swabs, recovered 12.22 m³ water. Pulled out of hole with tubing. Rigged in Computalog, set bridge plug 1520 mKB. Pressure tested to 14,000 kPa, pressure kept bleeding off.
- 1990-02-28: Set second bridge plug at 1515 mKB. Pressure tested to 14 mPa. Pressure bled off to 9000 kPa after 15 minutes. Ran in hole with a 101.6 mm casing gun, 13 spm, perforated interval from 1499 mKB to 1501 mKB, total 27 shots. Ran in hole with 73 mm tubing, landed at 1514.71 mKB. Rigged in swabbing equipment. Pulled 17 swabs, recovered 14.82 m³ water. Displaced hole to oil.
- 1990-03-01: Rigged in Nowsco for acid wash on squeeze. Washed perforations with 1.0 m³ 15% MCA and squeezed 4.0 m³ 28% HCL. Overflushed acid with 2.0 m³ oil. Bled off pressure, well flowed back 2.32 m³ fluid. Pulled 20 swabs, recovered 15.85 m³ oil and 3.55 m³ water, total fluid recovered 19.40 m³.

Sulphur Point Formation

- 1990-03-02: Pulled 6 swabs, recovered 3.65 m³ fluid (0.75 m³ oil, 2.90 m³ water). Pulled out of hole with tubing. Rigged in Phoenix Dataline, set bridge at 1450 mKB. Pressure tested bridge plug at 14,000 kPa, held O.K. Ran in hole with a 101.6 mm casing gun, 13 spm. Perforated intervals from 1430.5 m to 1433.0 mKB and from 1425.5 m to 1429.5 mKB.
- 1990-03-03: Ran in hole with 73 mm tubing and a 139.7 mm Cardium DGP packer. Tubing was landed at 1449.74 mKB and the packer was set at 1419.34 mKB. Pulled five swabs, recovered 4.18 m³ salt water.

- 1990-03-04: Rigged in Nowsco for acid wash and squeeze using 0.5 m³ 15% MCA and 3.0 m³ 28% HCL. Formation broke from 12,500 kPa to 0 kPa after the first wash. Squeezed remainder of MCA and acid into formation. Overflushed acid with 1.5 m³ salt water. Pulled 21 swabs, recovered 21.32 m³ salt water with traces of oil.
- 1990-03-05: Pulled 2 swabs, recovered 3.79 m³ salt water. Well flowed for 1/2 hour. Pulled 73 mm tubing and packer. rigged in Phoenix Dataline, set Cardium bridge plug at 1402 mKB.

Slave Point Formation

- 1990-03-05: Ran in hole with 101.6 mm casing gun, 14 spm, perforated interval from 1385 m to 1386 mKB, total 14 shots. Ran in hole with 73 mm tubing and 139.7 mm DGP packer. Tubing landed at 1401.66 mKB and packer set at 1380.67 mKB.
- 1990-03-06: Rigged in Nowsco for acid wash and squeeze with 0.5 m³ 15% MCA and 2.0 m³ 28% HCL. Acid was overflushed with 1.0 m³ salt water. Pulled 9 swabs, recovered 5.41 m³ fluid. Pulled out of hole with 73 mm tubing and packer. Rigged in Phoenix Dataline, ran in hole with a 101.6 mm casing gun, 14 spm, perforated intervals from 1371.5 m to 1374.0 mKB (total 36 shots) and from 1386 m to 1390 mKB (total 57 shots).
- 1990-03-07: Ran in hole with 73 mm tubing and 139.7 mm DGP packer. Tubing landed at 1401.52 mKB and packer set at 1363.41 mKB. Rigged in Nowsco acid wash and squeeze using 2.0 m³ of 15% MCA and 5.0 m³ of 28% HCL, acid was overflushed with 2.5 m³ salt water. No breakdown occurred. Well flowed 0.38 m³ water. Pulled 14 swabs, recovered 11.20 m³ salt water. Pulled out of hole with tubing and packer.
- 1990-03-16: Rigged in Computalog and set a 139.7 mm retrievable bridge plug at 1365 mKB.

5. Formation And Production Test Results

DST #1: Keg River Formation, 1525 m - 1560 m.

Times: 15 / 30 / 45 / 90

Preflow: WAB increasing to SAB in 2 minutes.

V.O.: WAB increasing to SAB, then decreasing to WAB in 20 minutes. Dead in 23 minutes.

Recovery: Recovered 135 m of gassy H₂S cut mud, and
992 m of gassy H₂S cut salt water.

Pressures:	IHP	17485
	IHP	17298
	ISI	10634
	FSI	10634
	VO	7912

See following pages for DST sample analyses.

F. ENVIRONMENTAL REPORT (N/A)



WATER ANALYSIS

CONTAINER IDENTITY		LABORATORY NUMBER	
		G90-3220-1	
LICENCE NUMBER	OPERATOR NAME		
1407	PARAMOUNT RESOURCES LTD.		
LOCATION	WELL NAME		ELEVATIONS (metres)
60°10'N 117°30'W	PARAMOUNT St. at CAMERON I-44		K.B. 746.7 G.A.D. 743.0
FIELD OR AREA	NAME OF SAMPLER		COMPANY
CAMERON	KEG RIVER		BAKER OIL TOOL
TEST TYPE	TEST RECOVERY		
DST	992 METRES		
MULTIPLE RECOVERY	SAMPLING POINT		
Y N	DOWNHOLE SAMPLER #214		
	TYPE OF PRODUCTION		SLUG RESISTIVITY
	PUMPING FLOWING GAS LIFT SWAB		@ 25°C
TEST INTERVAL (meters)	PRODUCTION RATES		
1525 - 1560	WATER m³/d OIL m³/d GAS 10m³/d		
PERFORATIONS (meters)	SEPARATOR TREATER RESERVOIR SOURCE SAMPLED RECEIVED		
	GAUGE PRESSURE kPa		
	SEPARATOR TREATER RESERVOIR SOURCE SAMPLED RECEIVED		
	TEMPERATURE °C		
DATE SAMPLED (Y-M-D)	DATE RECEIVED (Y-M-D)	DATE REPORTED (Y-M-D)	ANALYST
90-01-17	90-01-22	90-01-05	K. TROMBLEY
OTHER INFORMATION			

ION	Mg/l	Mass Fraction	Meq/l	ION	Mg/l	Mass Fraction	Meq/l
Na	34 636	0.3132	1 506.67	Cl	63 500	0.5742	1 790.70
K	1 417	0.0128	36.28	Br			
Ca	7 207	0.0652	359.63	I			
Mg	971	0.0088	79.82	HCO ₃	1 007	0.0091	16.51
Ba				SO ₄	1 844	0.0167	38.36
Str				CO ₃	0	0.0000	0.00
Fe	PRESENT			OH	0	0.0000	0.00
				H ₂ S	NIL		

TOTAL SOLIDS Mg/l

EVAPORATED @ 110°C	EVAPORATED @ 180°C
121 500	
AT IGNITION	CALCULATED
101 500	110 582

ORGANICS: NIL

RELATIVE DENSITY	REFRACTIVE INDEX
1.071 @ 25°C	1.3515 @ 25°C

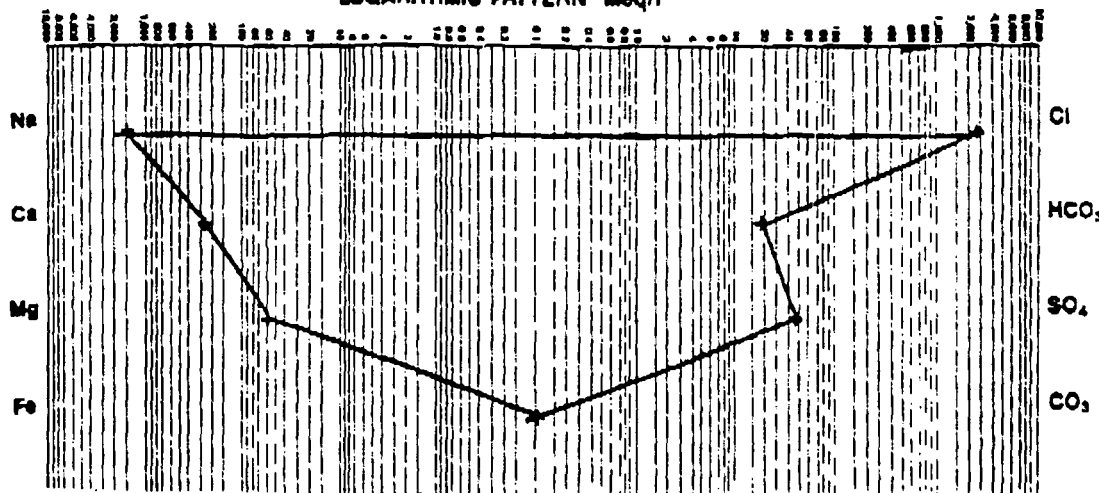
OBSERVED pH	RESISTIVITY (cm m)
6.6 @ 21 °C	0.072 @ 25°C

REMARKS

SAMPLE CONSISTED OF WATER WITH A YELLOW COLORED FILTRATE.

ANALYSIS INDICATIVE OF A SALTY WATER.

LOGARITHMIC PATTERN Meq/l





CONTAINER IDENTITY <div style="border: 1px solid black; height: 20px; width: 100%;"></div>		FEB 13 1998		LABORATORY NUMBER <div style="border: 1px solid black; padding: 2px;">690-3220</div>			
LICENCE NUMBER <div style="border: 1px solid black; padding: 2px;">1407</div>		OPERATOR NAME <div style="border: 1px solid black; padding: 2px;">PARAMOUNT RESOURCES LTD.</div>					
LOCATION <div style="border: 1px solid black; padding: 2px;">60°10'N 117°30'W</div>		WELL NAME <div style="border: 1px solid black; padding: 2px;">PARAMOUNT et al CAMERON L-44</div>		ELEVATIONS (metres) K.S. GRD. <div style="border: 1px solid black; padding: 2px;">746.7</div> <div style="border: 1px solid black; padding: 2px;">743.0</div>			
FIELD OR AREA <div style="border: 1px solid black; padding: 2px;">CAMERON</div>		POOL OR ZONE <div style="border: 1px solid black; padding: 2px;">KEG RIVER</div>		NAME OF SAMPLER <div style="border: 1px solid black; height: 20px; width: 100%;"></div>			
				COMPANY <div style="border: 1px solid black; padding: 2px;">BAKER OIL TOOL</div>			
TEST TYPE <div style="border: 1px solid black; padding: 2px;">DST</div>	NO. <div style="border: 1px solid black; padding: 2px;">1</div>	TEST RECOVERY <div style="border: 1px solid black; padding: 2px;">992 METRES</div>					
MULTIPLE RECOVERY Y N <div style="border: 1px solid black; padding: 2px; text-align: center;">X</div>							
		SAMPLING POINT <div style="border: 1px solid black; padding: 2px;">SEE BELOW</div>		AMT. & TYPE OF CUSHION <div style="border: 1px solid black; height: 20px; width: 100%;"></div>			
				MUD RESISTIVITY <div style="border: 1px solid black; height: 20px; width: 100%;"></div> (at 25°C)			
TEST INTERVAL (HOURS) <div style="border: 1px solid black; padding: 2px;">1525 - 1560</div>		TYPE OF PRODUCTION PUMPING FLOWING GAS LIFT SWAB					
PERFORATIONS (METRES) <div style="border: 1px solid black; height: 60px; width: 100%;"></div>		PRODUCTION RATES					
		WATER m ³ /d		OR m ³ /d			
		GAS 10 ³ m ³ /d					
		SEPARATOR		TREATER			
		RESERVOIR		SOURCE			
		SAMPLED		RECEIVED			
		GAUGE PRESSURE kPa		SEPARATOR		TREATER	
		RESERVOIR		SOURCE			
		SAMPLED		RECEIVED			
		TEMPERATURE °C		SEPARATOR		TREATER	
		RESERVOIR		SOURCE			
		SAMPLED		RECEIVED			
		DATE SAMPLED (Y-M-D)		DATE RECEIVED (Y-M-D)			
		DATE REPORTED (Y-M-D)		ANALYST			
		OTHER INFORMATION					
90-01-17		90-01-22		90-01-05			
K. TROMBLEY							

SAMPLE #1: SAMPLED FROM TOP
THE SAMPLE CONSISTED OF MUDDY WATER WITH A YELLOW COLORED FILTRATE
RESISTIVITY OF THE FILTRATE: 0.305 OHM METRES @ 25C

SAMPLE #2: SAMPLED FROM MIDDLE #1
THE SAMPLE CONSISTED OF MUDDY WATER WITH A YELLOW COLORED FILTRATE
RESISTIVITY OF THE FILTRATE: 0.130 OHM METRES @ 25C

SAMPLE #3: SAMPLED FROM MIDDLE #2
THE SAMPLE CONSISTED OF MUDDY WATER WITH A YELLOW COLORED FILTRATE
RESISTIVITY OF THE FILTRATE: 0.120 OHM METRES @ 25C

SAMPLE #4: SAMPLED FROM MIDDLE #3
THE SAMPLE CONSISTED OF WATER WITH A YELLOW COLORED FILTRATE
RESISTIVITY OF THE FILTRATE: 0.109 OHM METRES @ 25C

SAMPLE #5: SAMPLED FROM MIDDLE #4
THE SAMPLE CONSISTED OF WATER WITH A YELLOW COLORED FILTRATE
RESISTIVITY OF THE FILTRATE: 0.077 OHM METRES @ 25C



CONTAINER IDENTITY		LABORATORY NUMBER	
		G90-3220-10	
LICENCE NUMBER	OPERATOR NAME		
1407	PARAMOUNT RESOURCES LTD.		
LOCATION	WELL NAME		ELEVATIONS (metres)
60°10'N 117°30'W	PARAMOUNT et al CAMERON L-44		K.B. 746.7 G.R.D. 743.0
FIELD OR AREA	POOL OR ZONE	NAME OF SAMPLER	COMPANY
CAMERON	KEG RIVER		BAKER OIL TOOL
TEST TYPE	NO.	TEST RECOVERY	
DST	1	992 METRES	
MULTIPLE RECOVERY	Y N		
	X		
TEST INTERVAL (metres)	SAMPLING POINT		
1525 - 1560	SEE BELOW		
PERFORMANCES (metres)	AFT. & TYPE OF CUSHION		
	MUD RESISTIVITY @ 25°C		
	TYPE OF PRODUCTION		
	PUMPING FLOWING GAS LIFT SWAB		
	PRODUCTION RATES		
	WATER m ³ /d OIL m ³ /d GAS 10 ³ m ³ /d		
	SEPARATOR TREATER RESERVOIR SOURCE SAMPLED RECEIVED		
	GAUGE PRESSURE kPa		
	SEPARATOR TREATER RESERVOIR SOURCE SAMPLED RECEIVED		
	TEMPERATURE °C		
DATE SAMPLED (Y-M-D)	DATE RECEIVED (Y-M-D)	DATE REPORTED (Y-M-D)	ANALYST
90-01-17	90-01-22	90-01-05	K. TROMBLEY
OTHER INFORMATION			

SAMPLE #6: SAMPLED FROM MIDDLE #3
THE SAMPLE CONSISTED OF WATER WITH A YELLOW COLORED FILTRATE
RESISTIVITY OF THE FILTRATE: 0.080 OHM METRES @ 25C

SAMPLE #7: SAMPLED FROM MIDDLE #6
THE SAMPLE CONSISTED OF WATER WITH A YELLOW COLORED FILTRATE
RESISTIVITY OF THE FILTRATE: 0.098 OHM METRES @ 25C

SAMPLE #8: SAMPLED FROM MIDDLE #7
THE SAMPLE CONSISTED OF WATER WITH A YELLOW COLORED FILTRATE
RESISTIVITY OF THE FILTRATE: 0.072 OHM METRES @ 25C

SAMPLE #9: SAMPLED FROM TOP OF TOOL
THE SAMPLE CONSISTED OF MUDDY WATER WITH A YELLOW COLORED FILTRATE
RESISTIVITY OF THE FILTRATE: 0.073 OHM METRES @ 25C

G. APPENDICES TO WELL HISTORY REPORT

1. Oil, Gas, And Water Analyses (See Section E, 5.)
2. Reservoir Engineering Data (N/A)
3. Petrographic Record (N/A)
4. Details Of Formation And Production Testing (See Section E, 4.)
5. Petrological Reports (N/A)
6. Paleontological Reports (N/A)
7. Palynological Reports (N/A)
8. Geochemical Reports (N/A)
9. Age Determinations (K/Ar etc.) (N/A)
10. Processed Combination Of Well Logs (See Cyberlook In Pocket)
11. Deviation Record (See Table 4, See Following Pages)
12. Gas Detector Log Or Mud Log Records
Refer to Composite Well Log (See Section G, 14. In Pocket).
13. Completion Data (See Section E, 4.)
14. Composite Well Record (In Pocket)
15. Final Survey Plat (In Pocket)
16. Mud Data - Logger's Report (See Following Pages)

SECTION G, 10.

PARAMOUNT ET AL CAMERON L-44

PROCESSED COMBINATION OF WELL LOGS

'CYBERLOOK'

SECTION G, 11.

TABLE 4

PARAMOUNT ET AL CAMERON L-44

DEVIATION RECORD

TABLE 4

PARAMOUNT ET AL CAMERON L-44

DEVIATION RECORD

DEPTH (M)	DEVIATION (DEGREES)
37	1/4
63	3/4
91	1 1/8
118	1 1/8
145	3/4
171	0
208	1/4
238	1
305	1
366	1/4
382	1
563	1
679	1 1/2
823	1/2
976	3/4
1120	2
1197	4 1/8
1282	5
1301	4
1329	2 1/2
1358	2
1406	1 1/4
1445	2
1529	2
1634	2

SECTION G, 14.

PARAMOUNT ET AL CAMERON L-44

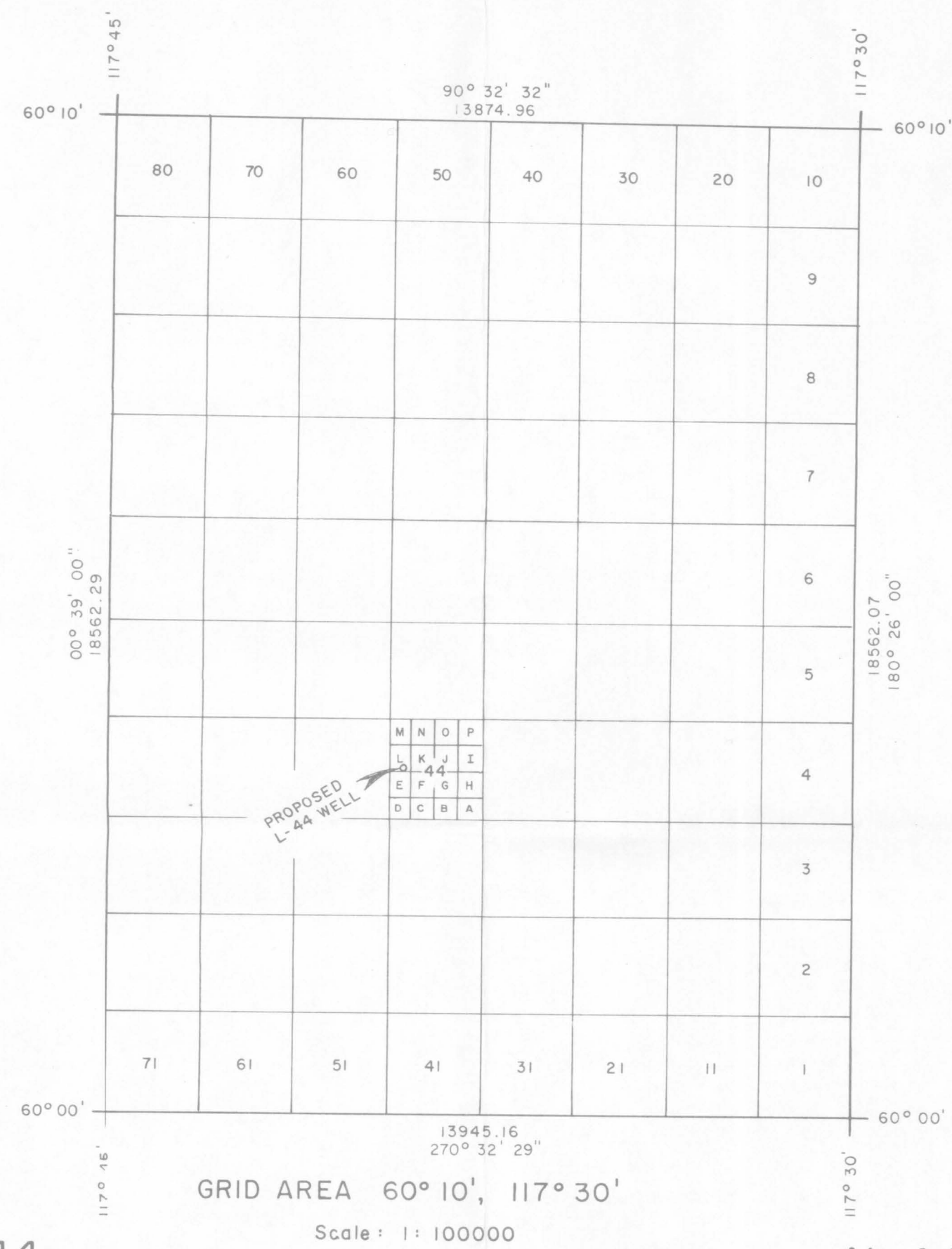
COMPOSITE WELL RECORD

See logs

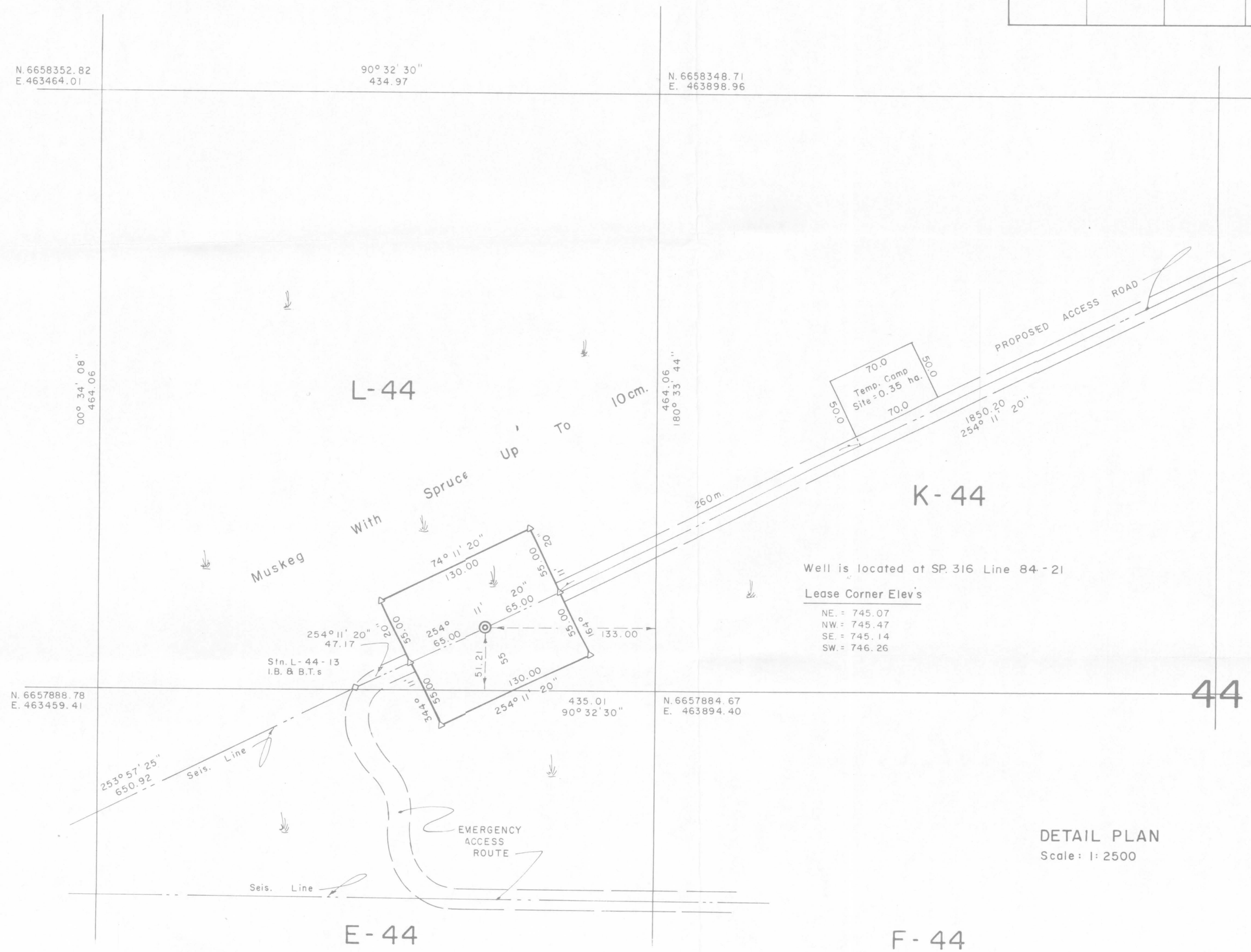
SECTION G, 15.

PARAMOUNT ET AL CAMERON L-44

FINAL SURVEY PLAN



BEARING TREES			
STATION	BEARING	DISTANCE	TYPE OF TREE
L-44-1	212° 29' 20"	9.83	20 cm Pine
" - 3	276° 40' 30"	6.02	16 "
" - 4	333° 03' 00"	11.45	18 "
" - 5	35° 46' 00"	7.01	12 cm Pine
" - 6	87° 54' 40"	6.31	13 "
" - 7	152° 29' 50"	9.82	10 "
" - 8	136° 59' 40"	6.03	10 cm Poplar
" - 9	235° 08' 40"	11.47	10 "
" - 10	289° 04' 20"	6.99	17 "
" - 11	206° 07' 20"	20.04	18 cm Pine
" - 12	271° 54' 20"	5.33	10 " Poplar
" - 13	330° 38' 00"	16.88	15 " Pine
" - 14	207° 01' 55"	6.38	12 cm Poplar
" - 15	265° 27' 20"	3.34	10 "
" - 16	331° 10' 20"	10.23	15 " Pine
" - 17	102° 40' 20"	19.45	11 cm Spruce
" - 18	145° 32' 20"	17.41	16 "
" - 19	220° 59' 40"	4.46	7 "
" - 20	51° 06' 10"	8.58	12 cm Spruce
" - 21	134° 53' 50"	14.76	9 "
" - 22	324° 55' 20"	11.15	13 "
" - 23	212° 12' 40"	9.36	6 cm Spruce
" - 24	276° 21' 10"	5.02	7 "
" - 25	332° 15' 40"	13.65	7 "
" - 26	213° 16' 30"	11.00	5 cm Spruce
" - 27	277° 03' 20"	4.53	8 "
" - 28	321° 52' 50"	12.18	8 "
" - 29	204° 07' 40"	15.83	10 cm Spruce
" - 30	229° 40' 00"	15.91	12 "
" - 31	308° 36' 40"	16.27	8 "
" - 32	52° 33' 50"	7.19	15 cm Spruce
" - 33	106° 32' 00"	8.78	13 "
" - 34	321° 08' 00"	10.14	4 "



SKETCH PLAN SHOWING
PROPOSED EXPLORATORY WELL
PARAMOUNT ET AL CAMERON L-44
IN UNIT L, SECTION 44
GRID AREA 60° 10', 117° 30'
NORTHWEST TERRITORIES

SURVEYED FOR:
PARAMOUNT RESOURCES LTD.

LEGEND:
UTM Co-ordinates are computed for Zone 11, central meridian 117° W.
Distances are expressed in metres and decimals thereof.
Monuments found are shown thus: ▲ 30 cm Iron Spike
Monuments planned are shown thus: △ 30 cm Iron Spike ○ Iron Bar
Distances shown in traverse are measured distances reduced to the horizontal or general ground level.
For the computation of co-ordinates measured distances have been reduced to the U.T.M. plane by multiplying them by an average combined scale factor of 0.99949.
Distances shown on grid subdivisions are U.T.M. plane.

ELEVATION: 745.55 Ground

CO-ORDINATES: UTM REF MERIDIAN: 117°
NORTH: 6657937.14
EAST: 463761.91
LAT. 60° 03' 31.86"
LONG. 117° 39' 02.97"

AREAS: Well Site = 1.430 ha.

I certify that the survey represented by this plan is correct
and true to the best of my knowledge and was completed on
the 5th day of January, 1990.

Anthony Colby
ALBERTA LAND SURVEYOR

Anthony Colby
WITNESS

OPERATOR:
PARAMOUNT RESOURCES LTD.

McELHANNAY LAND SURVEYS (ALTA) LTD.
138, 14315 118th Ave. Edmonton, Alberta.
Phone: 451-3420

JOB N° 50901277

SECTION G, 16.

PARAMOUNT ET AL CAMERON L-44

MUD DATA

TABLE 5

PARAMOUNT ET AL CAMERON L-44

MUD DATA

DATE	DEPTH	WT. (KG/M ³)	VIS.	W.L.	pH	COMMENTS
1990-12-29	55		42			
1990-12-30	343	1250	52			
1990-12-31	391	1280	79		10.0	
1990-01-01	391	1280	79		10.0	
1990-01-02	391	1280	79		10.0	
1990-01-03	391	1280	79		10.0	
1990-01-04	394					Air Drilling
1990-01-05	891					Air Drilling
1990-01-06	1120					Air Drilling
1990-01-07	1120					Air Drilling
1990-02-08	1216					Air Drilling
1990-02-09	1262	1100	44	5.0	10.0	Air Drilling
1990-02-10	1262	1090	47		9.5	
1990-02-11	1350	1130	40	6.0	9.5	
1990-02-12	1448	1125	40	6.8	10.0	
1990-02-13	1537	1125	40	6.0	10.5	
1990-02-14	1568	1120	38	6.4	9.5	
1990-02-15	1634	1120	42	6.0	10.5	
1990-02-16	1634	1130	75	5.2	10.5	
1990-02-17	1634	1130	75	5.2	10.5	
1990-02-18	1634	1130	75	5.2	10.5	
1990-02-19	1634	1110	70	6.8	9.5	
1990-02-20	1634	1060	52			

SECTION E, 1.

PARAMOUNT ET AL CAMERON L-44

DOWNHOLE LOGS