

Geological Report

on

Paramount et al Liard K-29A sidetrack

K-29A intermediate hole

**Well Reached Total Depth on
Sep 20, 2005 @ 14:15**

for

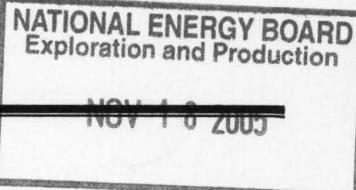
Paramount Resources Ltd.

Prepared For: Paul Price
Paramount Resources

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Chalce Resources

Ken Glover

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Well Abstract

Storage Units:

Metric

Kickoff on Aug 25, 2005 at 5:00 hours. Reach 2520.62 m (MD) on Sept 1, 2005 at 2:30 hours.
Drill string stuck in hole at 2520.62 m, worked at getting unstuck until Sept 6, 2005.
Run abandonment plug from 2435 to 2290 m on Sept 7, 2005.
Begin drilling sidetrack well on Sept 8, 2005.
Successful sidetrack kickoff on Sept 13, 2005.
Reach intermediate casing point on Sept 20, 2005.
Finish logging intermediate hole on Sept 22, 2005 @ 13:45 hours.

Well Summary

Storage Units: Metric

Well Information

Operator: Paramount Resources Ltd.
Well Name: Paramount et al Liard K-29A sidetrack
Location: K-29A
UWI: 300k296030123303
Pool: N/A
Field: Liard K-29
State / Province: Northwest Territories
Country: Canada
License Number: 1125
Well Status:

Surface Co-ordinates	Hole Type: Deviated	Fault Indicator:
	Latitude: 60 28 41.040	Longitude: 123 35 4.100
N / S: 6704591.45		
E / W: 467870.02		

Bottom Hole Co-ordinates	Latitude:	Longitude:
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N / S:

E / W:

Elevations		Reference:	Ground
	Ground Elevation: 409.60	Kelly Bushing to Ground:	6.80
	Kelly Bushing Elevation: 416.40	Cut (-):	
	Casing Flange Elevation:	Fill (+):	

Total Depth		Measured Depth	True Vertical Depth
Total Depth Driller (Tally) :		2,566.00	2,465.17
Total Depth Driller (Strap or SLM):			
Total Depth Logger:		2,568.00	2,466.50

Miscellaneous Depths

Plugback Depth: 2,435.00	Water Depth Reference:
Sidetrack Depth: 2,290.00	Water Depth:

Well Summary

Drilling Contractor: Akita Drilling Rig #58	Spud Date: Aug 25, 2005 @ 05:00
Rig Release Date:	Total Depth Date: Sep 20, 2005 @ 14:15

Cores	#	Formation	Interval	Cut	Recovered	%
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Casing Summary

Casing Type	Casing Size	Landed Depth	Hole Size
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Well Summary

Storage Units: Metric

Logging Summary

Company	Engineer	Total Depth (MD)	Logging tools
Baker Atlas	Tim Fisher	2,566.00	oil based image log; TD to casing window
			Gamma Ray, Caliper, Compensated Z-Density, Compensated Neutron, High Definition Induction, Multipole Array Acoustic; log TD to casing window for second pass with XMAC; High Res: 2000 to 2100 m; 2150 to 2200 m; 2445 to 2505 m
			Gamma Ray, Caliper, Compensated Z-Density, Compensated Neutron, High Definition Induction, Multipole Array Acoustic; log TD to casing window; problems communicating with neutron and induction tools once on bottom

Bit Record Table (IADC Grading System)

Storage Units: Metric

**** For more detailed Bit Information refer to Bit Record ****

Bit #	Make	Type	Size	Depth In	Depth Out	Made	Hours	Avg. P.R.	I.A.D.C. Bit Condition									
									I	O	MDC	Loc	B	G	ODC	RP1	RP2	
1	Hughes	MX20G	216.0	1,859.7	2,287.2	427.5	53.50	7.99	5	7	WT	A	4	2	BT	PR		
2	Hughes	MX30G	216.0	2,287.2	2,463.5	176.2	34.25	5.15	6	7	BT	A	F	8	PB			
5	Hallibur	TB26ST	215.0	2,295.0	2,298.0		3.0	8.00	0.38									
6	Hughes	MX5206D	216.0	2,297.8	2,363.0	65.3	32.25	2.02	4	5	WT	A	3	1	NO	BHA		
7	Hughes	MX-S30D	216.0	2,363.0	2,468.0	105.0	43.00	2.44	4	5	WT	A8		4	BT	HR		
8	Hughes	MX-S30G	216.0	2,468.0	2,566.0	98.0	49.00	2.00										

Total Rotating Hours: 220.00

Bit Record

Pump Data

Pump #1	Model: F-1000	Size: Liner Size:	Type: Stroke Length:	
	Pump Rod Diameter:		152.0	254
	Efficiency Rating (%):			
Pump #2	Model: F-1000	Size: Liner Size:	Type: Stroke Length:	254
	Pump Rod Diameter:		152.0	
	Efficiency Rating (%):			

Bit Data

Bit #:	1	Make:	Hughes	Type:	MX20G	IADC Series / Type:	/
Serial #:	6038026	Size:	216.0 Jets / Nozzles:		17.50 / 17.50 / 17.50 /	T.F.A.:	
Depth In:	1,859.73	Depth Out:	2,287.22	Made:	427.49	Rotating Hours:	53.50
				Average Drill Rate:	7.90	Total Rotating Hours:	53.50

Bit Grade / Condition I.A.D.C.: 5 / 7 / WT / A / 4 / 2 / BT / PR / T / B / G: / /

Remarks:

Formations Drilled: Lower Besa River, Muskwa

Drilling Parameters

	Min	Max		Min	Max
Force on Bit:	12,000	/	17,000		
Pump 1 S.P.M. / Volume:	95	/		Pump 2 S.P.M. / Volume:	
S.P.P.:	7,500	/	8,200	Fluid Density:	935 / 990
Drift Angle:	4.500	/	33.800	Funnel Viscosity:	42 / 53

Annular Velocity	Drill Collars:	71.0	HeavyWeight Drill Pipe:	51.0	Drill Pipe:	51.0
Bottoms Up	Depth:	1,860.00	Theoretical:	36	Actual:	45

Bit #:	2	Make:	Hughes	Type:	MX30G	IADC Series / Type:	/
Serial #:	6037748	Size:	216.0 Jets / Nozzles:		17.50 / 17.50 / 17.50 /	T.F.A.:	
Depth In:	2,287.22	Depth Out:	2,463.45	Made:	176.23	Rotating Hours:	34.25
				Average Drill Rate:	5.15	Total Rotating Hours:	87.75

Bit Grade / Condition I.A.D.C.: 6 / 7 / BT / A / F / 8 / PB / / T / B / G: / /

Remarks:

Formations Drilled: Muskwa

Drilling Parameters

	Min	Max		Min	Max
Force on Bit:	9,000	/	22,000		
Pump 1 S.P.M. / Volume:	95	/		Pump 2 S.P.M. / Volume:	
S.P.P.:	8,200	/	9,000	Fluid Density:	995 / 1,000
Drift Angle:	32.900	/	43.000	Funnel Viscosity:	46 / 53

Annular Velocity	Drill Collars:	71.0	HeavyWeight Drill Pipe:	51.0	Drill Pipe:	51.0
Bottoms Up	Depth:		Theoretical:		Actual:	

Bit Data

Storage Units: Metric

Bit #: 5 Make: Halliburton Type: TB26ST IADC Series / Type: /
 Serial #: 6034568 Size: 215.0 Jets / Nozzles: 11.90 / 11.90 / 11.90 / T.F.A.:
 Depth In: 2,295.00 Depth Out: 2,298.00 Made: 3.00 Rotating Hours: 8.00
 Average Drill Rate: 0.38 Total Rotating Hours: 95.75

Bit Grade / Condition I.A.D.C.: / / / / / / / / / T / B / G: / /

Remarks: sidetrack bit

Formations Drilled: Muskwa

Drilling Parameters

Force on Bit:	Min	Max	Min	Max			
Pump 1 S.P.M. / Volume:	1,000	/	11,000	R.P.M.:	0	/	0
S.P.P.:	80	/	Pump 2 S.P.M. / Volume:	80	/		
Drift Angle:	8,300	/	Fluid Density:	1,225	/	1,225	
	34.600	/	Funnel Viscosity:	58	/	62	

Annular Velocity Drill Collars: 67.0 HeavyWeight Drill Pipe: 46.0 Drill Pipe: 43.0
 Bottoms Up Depth: 2,298.00 Theoretical: 52 Actual: 52

Bit #: 6 Make: Hughes Type: MX5206DX IADC Series / Type: /
 Serial #: 634418 Size: 216.0 Jets / Nozzles: 15.90 / 15.90 / 15.90 / T.F.A.:
 Depth In: 2,297.75 Depth Out: 2,363.00 Made: 65.25 Rotating Hours: 32.25
 Average Drill Rate: 2.02 Total Rotating Hours: 128.00

Bit Grade / Condition I.A.D.C.: 4 / 5 / WT / A / 3 / 1 / NO / BHA / T / B / G: / /

Remarks:

Formations Drilled:

Drilling Parameters

Force on Bit:	Min	Max	Min	Max			
Pump 1 S.P.M. / Volume:	13	/	21	R.P.M.:	28	/	37
S.P.P.:	80	/	Pump 2 S.P.M. / Volume:	80	/		
Drift Angle:	8,300	/	Fluid Density:	1,230	/	1,235	
	27.200	/	Funnel Viscosity:	61	/	64	

Annular Velocity Drill Collars: 67.0 HeavyWeight Drill Pipe: 46.0 Drill Pipe: 43.0
 Bottoms Up Depth: 2,342.00 Theoretical: 53 Actual: 53

Bit #: 7 Make: Hughes Type: MX-S30DX IADC Series / Type: /
 Serial #: 6034455 Size: 216.0 Jets / Nozzles: 15.90 / 15.90 / 15.90 / T.F.A.:
 Depth In: 2,363.00 Depth Out: 2,468.00 Made: 105.00 Rotating Hours: 43.00
 Average Drill Rate: 2.44 Total Rotating Hours: 171.00

Bit Grade / Condition I.A.D.C.: 4 / 5 / WT / A 8 / / 4 / BT / HR / T / B / G: / /

Remarks:

Formations Drilled: Muskwa

Drilling Parameters

Force on Bit:	Min	Max	Min	Max			
Pump 1 S.P.M. / Volume:	15	/	25	R.P.M.:	30	/	33
S.P.P.:	80	/	Pump 2 S.P.M. / Volume:	80	/		
Drift Angle:	7,900	/	Fluid Density:	1,235	/	1,245	
	27.900	/	Funnel Viscosity:	62	/	66	

Annular Velocity Drill Collars: 67.0 HeavyWeight Drill Pipe: 46.0 Drill Pipe: 43.0
 Bottoms Up Depth: 2,390.00 Theoretical: 54 Actual: 54

Bit Data

Storage Units: Metric

Bit #:	8	Make:	Hughes	Type:	X-S30GDX	IADC Series / Type:	/
Serial #:	6022912	Size:	216.0	Jets / Nozzles:	15.90 / 15.90 / 15.90 /	T.F.A.:	
Depth In:	2,468.00	Depth Out:	2,566.00	Made:	98.00	Rotating Hours:	49.00
				Average Drill Rate:	2.00	Total Rotating Hours:	220.00

Bit Grade / Condition	I.A.D.C.:	/	/	/	/	/	/	T / B / G:	/	/
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Remarks:**Formations Drilled:** Muskwa, Nahanni**Drilling Parameters**

	Min	Max		Min	Max		
Force on Bit:	12,000	/	23,000	R.P.M.:	31	/	36
Pump 1 S.P.M. / Volume:	80	/		Pump 2 S.P.M. / Volume:	80	/	
S.P.P.:	8,700	/	9,600	Fluid Density:	1,240	/	1,245
Drift Angle:	35.600	/		Funnel Viscosity:	63	/	68
Annular Velocity	Drill Collars:	67.0	HeavyWeight Drill Pipe:	46.0	Drill Pipe:	43.0	
Bottoms Up	Depth:	2,500.00	Theoretical:	56	Actual:	56	

Wireline Logging Summary

Storage Units: Metric

Logging Suite Number: 1
Wireline Logging Company: Baker Atlas
District: Grande Prairie
Witness: Ken Glover
Engineer: Tim Fisher
Unit Number: 6558

Was Pressure Control Equipment Utilized: No **Maximum Deviation:** 52.400 °
Was the Logging Job Mechanically Assisted: No **Hole Size:** 216.0

Total Lost Time: 12.75

Loggers' Total Down Time:

Total Job Time (From Rig up to Rig down): 34.00

	Measured Depth	True Vertical Depth
Casing Depth Driller	1,853.00	1,840.00
Casing Depth Logger	1,853.00	1,840.00
Total Depth Driller (Tally)	2,566.00	2,465.17
Total Depth Driller (Strap or SLM)		

General Remarks: problems with tool string during logging run #1
lost time due to clean out trip after logging run #1 to remove tight spots and fill on bottom
new tool string was hotshotted to site and arrived during clean out trip
logging run #2 was done with replacement tool string, resulting in no net logger down time
due to tool malfunction

Wireline Logging Summary

Storage Units: Metric

Logging Run #: 1
Date: Sep 21, 2005

Drilling Fluid Data

Drilling Fluid Type:	Invert	Viscosity:	pH:	Fluid Loss:
Fluid Density:	1245.0			
Mud Resistivity (Rm):	@	°		
Mud Resistivity (Rm) @ BHT:	@	°	Maximum Temperature:	113.9 °
Mud Filtrate Resistivity (Rmf):	@	°	Source (Rmf):	
Mud Cake Resistivity (Rmc):	@	°	Source (Rmc):	

Logging Run Information

Date on Bottom: Sep 21, 2005
Total Depth Logger: 2,551.50 (MD) 2,456.03 (TVD)

Logging Tools: Gamma Ray, Caliper, Compensated Z-Density, Compensated Neutron, High Definition Induction, Multipole Array Acoustic; log TD to casing window; problems communicating with neutron and induction tools once on bottom

Remarks: tools on surface @ 11:00 hours; prepare for cleanout trip with bit

Hole Conditions: stuck/tight from 2241 to 2230 m, shut off calipers to get through, pulled 60%; string diameter is 12.4 cm

Wireline Logging Summary

Storage Units: Metric

Logging Run #: 2
Date: Sep 21, 2005

Drilling Fluid Data

Drilling Fluid Type:	invert	Viscosity:	pH:	Fluid Loss:
Fluid Density:	1245.0			
Mud Resistivity (Rm):	@	°		
Mud Resistivity (Rm) @ BHT:	@	°	Maximum Temperature:	114.0 °
Mud Filtrate Resistivity (Rmf):	@	°	Source (Rmf):	
Mud Cake Resistivity (Rmc):	@	°	Source (Rmc):	

Logging Run Information

Date on Bottom: Sep 22, 2005
Total Depth Logger: 2,568.00 (MD) 2,466.98 (TVD)

Logging Tools: Gamma Ray, Caliper, Compensated Z-Density, Compensated Neutron, High Definition Induction, Multipole Array Acoustic;
log TD to casing window for second pass with XMAC;
High Res: 2000 to 2100 m; 2150 to 2200 m; 2445 to 2505 m

Remarks: rig up at 23:45 hours on Sept.21, 2005; out of hole at 5:30 hours on Sept.22, 2005.

Hole Conditions: no problems after cleanout trip

Wireline Logging Summary

Storage Units: Metric

Logging Run #: 3
Date: Sep 22, 2005

Drilling Fluid Data

Drilling Fluid Type:	invert	Fluid Density:	1245.0	Viscosity:	pH:	Fluid Loss:
Mud Resistivity (Rm):	@	°				
Mud Resistivity (Rm) @ BHT:	@	°			Maximum Temperature:	°
Mud Filtrate Resistivity (Rmf):	@	°			Source (Rmf):	
Mud Cake Resistivity (Rmc):	@	°			Source (Rmc):	

Logging Run Information

Date on Bottom: Sep 22, 2005
Total Depth Logger: 2,568.00 (MD) 2,466.98 (TVD)

Logging Tools: oil based image log;
TD to casing window

Remarks: run in hole @ 5:45, out of hole @ 13:45; will process data offsite

Hole Conditions:

Directional Survey Points

Storage Units: Metric

Survey Type: /

Measured Depth	T.V.D.	Drift Angle (°)	Azimuth (°)	+N / -S Distance	+E / -W Distance	Vertical Section	DogLeg Severity
1,854.00	1,847.33	4.500	69.48				
1,864.37	1,857.65	6.900	45.60				
1,874.77	1,867.95	9.300	37.30				
1,881.50	1,874.56	11.700	26.00				
1,890.96	1,883.78	14.100	31.00				
1,900.35	1,892.86	15.700	33.60				
1,909.85	1,901.96	17.400	32.30				
1,919.42	1,911.04	19.500	30.20				
1,928.93	1,919.94	21.800	27.00				
1,938.53	1,928.79	23.900	22.80				
1,948.15	1,937.49	26.400	21.70				
1,957.62	1,945.89	28.700	21.20				
1,967.14	1,954.19	29.900	20.50				
1,976.74	1,962.49	30.500	20.10				
1,986.09	1,970.59	29.400	17.80				
1,995.43	1,978.78	28.200	14.60				
2,004.94	1,987.17	27.900	13.20				
2,014.44	1,995.57	27.700	13.00				
2,023.94	2,004.01	27.000	12.00				
2,033.56	2,012.60	26.600	11.30				
2,042.92	2,020.94	27.300	10.10				
2,052.35	2,029.29	28.000	9.40				
2,061.84	2,037.66	28.300	10.20				
2,071.51	2,046.17	28.400	12.30				
2,081.06	2,054.54	29.200	14.00				
2,090.59	2,062.87	29.000	15.60				
2,099.43	2,070.62	28.400	17.80				
2,109.43	2,079.42	28.300	17.30				
2,119.14	2,087.96	28.500	17.60				
2,128.80	2,096.45	28.600	17.50				
2,138.25	2,104.75	28.400	16.60				
2,147.92	2,113.28	28.000	14.60				
2,157.55	2,121.80	27.500	13.60				
2,167.10	2,130.30	26.600	12.10				
2,176.71	2,138.90	26.600	11.00				
2,186.18	2,147.38	26.200	10.40				

Directional Survey Points

Storage Units: Metric

Survey Type: /

Measured Depth	T.V.D.	Drift Angle (°)	Azimuth (°)	+N / -S Distance	+E / -W Distance	Vertical Section	DogLeg Severity
2,195.83	2,156.07	25.400	9.80				
2,205.31	2,164.64	25.100	14.00				
2,214.96	2,173.34	26.100	16.60				
2,224.47	2,181.87	26.600	19.30				
2,233.70	2,190.08	27.700	20.20				
2,243.31	2,198.52	29.500	21.80				
2,252.79	2,206.69	31.400	19.70				
2,262.33	2,214.79	32.400	18.00				
2,271.82	2,222.78	32.900	17.00				
2,281.47	2,230.84	33.800	15.40				
2,290.86	2,238.61	34.600	14.30				
2,300.20	2,246.39	32.400	13.30				
2,309.78	2,254.55	31.000	9.00				
2,319.35	2,262.80	29.900	7.50				
2,328.90	2,271.13	28.600	7.20				
2,338.32	2,279.45	27.400	3.40				
2,346.73	2,286.92	27.200	359.50				
2,356.12	2,295.25	27.800	355.20				
2,365.70	2,303.69	28.800	352.20				
2,375.27	2,312.09	28.300	347.90				
2,384.82	2,320.50	28.300	345.10				
2,394.24	2,328.78	28.600	343.60				
2,403.83	2,337.19	28.900	342.70				
2,413.35	2,345.55	28.200	341.10				
2,422.89	2,353.97	27.900	340.60				
2,432.50	2,362.45	28.200	341.80				
2,442.02	2,370.79	29.300	341.80				
2,451.41	2,378.94	30.400	340.70				
2,461.05	2,387.21	31.500	338.80				
2,470.50	2,395.18	33.300	336.50				
2,480.26	2,403.23	35.600	336.20				
2,489.72	2,410.82	37.700	336.40				
2,499.08	2,418.17	38.900	334.00				
2,508.50	2,425.44	40.100	333.20				
2,517.90	2,432.53	41.800	333.10				
2,527.39	2,439.49	43.900	333.40				

Directional Survey Points

Storage Units: Metric

Survey Type: /

Measured Depth	T.V.D.	Drift Angle (°)	Azimuth (°)	+N / -S Distance	+E / -W Distance	Vertical Section	DogLeg Severity
2,536.72	2,446.07	46.400	332.40				
2,546.31	2,452.58	48.100	331.30				
2,550.00	2,455.03	48.900	331.30				

Abandonment Plug Summary

Storage Units: Metric

Plug #: 1
From: 2,220.0 **To:** 2,435.0
Amount of Cement Used: 12.5 **Volume:**
Density: 1,876
Cement Blend: Thermal 40 Ft St John
0.5% TLF-HT
0.3% THR-100
0.5% TA-1
0.5% CFR-10

Date / Time Plug Down: Sep 6, 2005 @ 21:15

Plug Felt or Logged By: Trican
Representative:
Date / Time Plug Felt or Logged: Sep 7, 2005 @ 09:45
Depth Plug Felt: 2,180.0

Remarks: unsuccessful sidetrack kickoff in this plug;
cement remains soft after 72 hours

Plug #: 2
From: 2,220.0 **To:** 2,375.0
Amount of Cement Used: 11.7 **Volume:**
Density: 2,100
Cement Blend: 0.5% TLF-HT
0.1% TDH
0.5% TA-1
0.8% CFR-10
0.5% LTR

Date / Time Plug Down: Sep 10, 2005 @ 18:00

Plug Felt or Logged By: Trican
Representative:
Date / Time Plug Felt or Logged: Sep 11, 2005 @ 03:00
Depth Plug Felt: 2,220.0

Remarks: successful sidetrack kickoff drilled from 2295 m to 2298 m

Drilling Fluid Summary

Storage Units:

Metric

Drilling Fluid Type:	Produced Water	From:	1,853	To:	1,860
Drilling Fluid Type:	Invert	From:	1,860	To:	2,520

Work Schedule

Storage Units: Metric

Company: Chalce Resources
Geologist: Ken Glover

Work Performed **From:** Aug 24, 2005 **To:** Sep 12, 2005
Depths Logged **From:** 1,855.0 **To:** 2,520.0

Remarks: abandoned stuck bottom hole assembly and drilled sidetrack well

Company: Chalce Resources
Geologist: Ken Glover

Work Performed **From:** Sep 13, 2005 **To:** Sep 22, 2005
Depths Logged **From:** 2,295.0 **To:** 2,566.0

Remarks: Fishing and cementing abandonment plugs from Sep 1 to Sep 12, 2005.

Formation Top Summary

Storage Units:

Metric

Kelly Bushing Elevation:	416.40	Casing Flange Elevation:
Ground Elevation:	409.60	

***** All Depths measured from Kelly Bushing Elevation *****

Group Formation Member	Prognosis (TVD)	Sample Top (MD)	Sample Top (TVD)	Log Top (MD)	Log Top (TVD)	Subsea	Thickness
<i>Muskwa</i>	2174.00	2238.00	2193.90			-1777.50	
<i>Nahanni</i>	2454.00	2553.00	2457.02	2552.80	2456.89	-2040.49	
<i>Intermediate Casing P</i>	2455.00	2566.00	2465.17	2568.00	2466.50	-2050.10	

Sample Descriptions

Storage Units: Metric

1,855.00 to 1,860.00 (5.00)	Shale Mainly medium gray to dark gray to green gray, soft, occasional bentonitic, weakly fissile, micromicaceous, silty in places, minor calcareous; trace light gray to medium gray siltstone stringers, moderately calcareous matrix ? with quartz grains. No shows.
1,860.00 to 1,865.00 (5.00)	Shale Shale with siltstone stringers as above. Trace microcrystalline pyrite along siltstone bedding, especially at contacts with shale. Trace micro organic fragments (angular and black) in siltstone stringers.
1,865.00 to 1,870.00 (5.00)	Shale Shale with quartzose siltstone stringers as above.
1,870.00 to 1,875.00 (5.00)	Shale Medium gray to occasional green gray and bentonitic, silty in places, micromicaceous. Trace medium brown gray calcareous marlstone. Trace dark gray to black shale. Trace slickensides.
1,875.00 to 1,880.00 (5.00)	Shale Medium gray to occasional green gray and bentonitic, silty in places, micromicaceous. Trace light gray calcareous quartzose siltstone, tight, no shows.
1,880.00 to 1,885.00 (5.00)	Shale Shale as above. Trace brown gray marlstone. Trace slickensides.
1,885.00 to 1,890.00 (5.00)	Shale Shale as above. Very rare brown gray marlstone.
1,890.00 to 1,895.00 (5.00)	Shale Medium gray to green gray and bentonitic, micromicaceous, moderately indurated. Minor brown gray earthy marlstone.
1,895.00 to 1,900.00 (5.00)	Shale Shale as above.
1,900.00 to 1,905.00 (5.00)	Shale Medium gray to brown gray, micromicaceous, weak to moderately fissile. Minor light to medium gray calcareous siltstone stringers, tight, no shows. Rare dark gray to black shale, laminated, fissile.
1,905.00 to 1,910.00 (5.00)	Shale Medium gray to brown gray shale as above. Trace disseminated pyrite in medium gray shale. Trace black organic ? flecks in shale.
1,910.00 to 1,915.00 (5.00)	Shale Shale as above.
1,915.00 to 1,920.00 (5.00)	Shale Medium gray to brown gray, micromicaceous, weak to moderately fissile, common clusters of black organic ? flecks. Trace light gray to brown gray marlstone. Trace slickensides.

Sample Descriptions

Storage Units: Metric

1,920.00 to 1,925.00 (5.00)	Shale Shale as above. Trace light gray to brown gray marlstone.
1,925.00 to 1,930.00 (5.00)	Shale Medium gray to brown gray shale as above. Rare light gray to brown gray marlstone.
1,930.00 to 1,935.00 (5.00)	Shale Medium gray to brown gray, micromicaceous, moderately fissile, Rare non calcareous quartzose siltstone stringers.
1,935.00 to 1,940.00 (5.00)	Shale Shale as above with indurated non calcareous silty bituminous. Trace brown gray marlstone. Trace slickensides.
1,940.00 to 1,945.00 (5.00)	Shale Medium gray, micromicaceous, weak to moderately fissile. Minor light to medium gray calcareous siltstone stringers. Trace slickensides.
1,945.00 to 1,950.00 (5.00)	Shale Medium gray shale as above.
1,950.00 to 1,955.00 (5.00)	Shale Medium to dark gray, micromicaceous, fissile, with minor dark gray to black, fissile laminations. Weak to moderately laminated. Trace siltstone laminations with trace disseminated pyrite. Trace slickensides.
1,955.00 to 1,960.00 (5.00)	Shale Medium to dark gray with minor green gray and bentonitic, micromicaceous, fissile, slightly calcareous.
1,960.00 to 1,965.00 (5.00)	Shale Shale as above. Trace silty calcareous stringers.
1,965.00 to 1,970.00 (5.00)	Shale Dark gray to black, fissile, micromicaceous in places with trace microfractures and minor slickensides, some slicksided surfaces are curved. Trace light to medium gray very calcareous silty marlstone with occasional milky white flecks (shell fragments ?)
1,970.00 to 1,975.00 (5.00)	Shale Dark gray shale as above. Increased very silty marlstone.
1,975.00 to 1,980.00 (5.00)	Shale Dark gray shale with silty marlstone as above.
1,980.00 to 1,985.00 (5.00)	Shale Gray, laminated with black wisps along laminations, common microcrystalline pyrite nodules <0.1 mm diameter, silty in places, trace dark gray to black shale laminations. Occasional light to medium gray siltstone stringers or laminations in shale, micromicaceous, occasional calcareous. No shows.

Sample Descriptions

Storage Units: Metric

1,985.00 to 1,990.00 (5.00)	Shale Gray shale as above but with increased dark gray to black shale laminations. Trace microfractures. One visible calcite fracture fill shows some calcite mineral cleavage, 0.5 mm thickness preserved in contact with shale, has associated irregular microfractures emanating from a smooth and regular primary fracture surface.
1,990.00 to 1,995.00 (5.00)	Shale Medium gray to green gray and bentonitic with minor brown gray, micromicaceous, occasional laminated, trace black shale.
1,995.00 to 2,000.00 (5.00)	Shale Shale as above. Slightly calcareous in places.
2,000.00 to 2,005.00 (5.00)	Shale Shale as above.
2,005.00 to 2,010.00 (5.00)	Shale Medium gray to green gray and bentonitic to minor brown gray, micromicaceous, occasional laminated. Common black organic flecks. Trace very thin (<0.05 mm thick) calcite healed microfractures.
2,010.00 to 2,015.00 (5.00)	Shale Shale as above.
2,015.00 to 2,020.00 (5.00)	Shale Medium gray, dark gray in places, very thin (0.05 mm thick) light gray siltstone laminae in places, micromicaceous in places, moderately fissile
2,020.00 to 2,025.00 (5.00)	Shale As above. Increasing dark gray shale, usually laminated. Trace curvilinear slickensided surfaces.
2,025.00 to 2,030.00 (5.00)	Shale Medium to dark gray with occasional black shale. Rare calcite fracture fill up to 0.2 mm thick, translucent with a smooth undulating surface. Trace clacareous light gray siltstone.
2,030.00 to 2,035.00 (5.00)	Shale As above. Increasing finely laminated, fissile black shale. Trace dolomitic light gray siltstone.
2,035.00 to 2,040.00 (5.00)	Shale Medium gray to black, variably laminated, variably fissile, occasionally micromicaceous. Trace microcrystalline pyrite. Trace calcite fracture fill up to 0.2 mm thick.
2,040.00 to 2,045.00 (5.00)	Shale As above. Trace light gray soft marlstone.

Sample Descriptions

Storage Units: Metric

2,045.00 to 2,050.00 (5.00)	Shale Medium gray with trace dark gray shale, occasionally micromicaceous, weakly fissile. Trace water sensitive light gray non calcareous shale with wisps of black organics. Trace calcareous.
2,050.00 to 2,055.00 (5.00)	Shale As above with increasing dark gray shale.
2,055.00 to 2,060.00 (5.00)	Shale As above.
2,060.00 to 2,065.00 (5.00)	Shale Medium to dark gray, weakly fissile, micromicaceous. Trace calcite healed microfractures. trace disseminated pyrite. Trace fissile, very finely laminated black shale.
2,065.00 to 2,070.00 (5.00)	Shale As above.
2,070.00 to 2,075.00 (5.00)	Shale As above. Increasing black shale.
2,075.00 to 2,080.00 (5.00)	Shale As above.
2,080.00 to 2,085.00 (5.00)	Shale Medium gray, laminated with 0.05 to 0.1 mm thick laminations of medium gray and black and dark gray shale bands. Fissile, micromicaceous. Trace very small (<0.05 mm diameter) milky white nodules in banding.
2,085.00 to 2,090.00 (5.00)	Shale As above.
2,090.00 to 2,095.00 (5.00)	Shale Medium to dark gray to black banded shale. Banding is less common than above. Micromicaceous.
2,095.00 to 2,100.00 (5.00)	Shale medium gray to dark gray. Trace black shale. Micromicaceous.
2,100.00 to 2,105.00 (5.00)	Shale As above. Trace slickensides.
2,105.00 to 2,110.00 (5.00)	Shale Medium gray to dark gray. Trace black shale. Occasionally laminated, weakly fissile, micromicaceous.
2,110.00 to 2,115.00 (5.00)	Shale As above.
2,115.00 to 2,120.00 (5.00)	Shale Dark gray to medium gray with occasional laminated black shale. Fissile. Micromicaceous.

Sample Descriptions

Storage Units: Metric

2,120.00 to 2,125.00 (5.00)	Shale Medium gray to dark gray. Weakly fissile to fissile.
2,125.00 to 2,130.00 (5.00)	Shale As above. Poor sample.
2,130.00 to 2,135.00 (5.00)	Shale Medium gray. Trace dark gray shale. Micromicaceous.
2,135.00 to 2,140.00 (5.00)	Shale Dark gray to medium gray, variably fissile. Medium gray shale is micromicaceous, dark gray shale less show of oil. Trace disseminated pyrite in medium gray shale.
2,140.00 to 2,145.00 (5.00)	Shale As above, but more medium gray shale.
2,145.00 to 2,150.00 (5.00)	Shale As above, but increasing dark gray shale. Trace slickensides.
2,150.00 to 2,155.00 (5.00)	Shale As above.
2,155.00 to 2,160.00 (5.00)	Shale Medium to dark gray, micromicaceous, variably fissile, trace slickensides
2,160.00 to 2,165.00 (5.00)	Shale As above
2,165.00 to 2,170.00 (5.00)	Shale medium to dark gray, micromicaceous, fissile, variably laminated, occasional slickensides, trace translucent calcite fracture fill with some up to 0.4 mm thick. Some fracture mineralisation contacts are preserved, showing fractures at about 45 degrees to laminations and calcite crystal growth at about 45 degrees to fracture face. Minor light gray marly siltstone.
2,170.00 to 2,175.00 (5.00)	Shale Medium to dark gray, micromicaceous, fissile, variably laminated, trace microcrystalline pyrite in dark gray shale. Rare calcite healed micro fractures. Trace water sensitive light gray shale with black organic ? wisps.
2,175.00 to 2,180.00 (5.00)	Shale Medium to dark gray, micromicaceous, fissile, variably laminated, trace unattached translucent calcite crystals. Rare Black Shale: micromicaceous, laminated, fissile. Rare light gray marly very fine grained sand to siltstone.
2,180.00 to 2,185.00 (5.00)	Shale As above with more of the dark gray shale component. Trace calcite healed microfractures.
2,185.00 to 2,190.00 (5.00)	Shale As above.

Sample Descriptions

Storage Units: Metric

2,190.00 to 2,195.00 (5.00)	Shale Medium gray with minor dark gray, micromicaceous, fissile, occasionally laminated. Trace marly siltstone as above.
2,195.00 to 2,200.00 (5.00)	Shale Dark gray to medium gray, micromicaceous, fissile with minor laminated black shale stringers. Trace microcrystalline pyrite, especially in black shale.
2,200.00 to 2,205.00 (5.00)	Shale Medium to dark gray, fissility and moderate lamination in dark gray shale, weak fissility in medium gray shale. Hard, micromicaceous. Rare light gray marly siltstone.
2,205.00 to 2,210.00 (5.00)	Shale As above.
2,210.00 to 2,215.00 (5.00)	Shale Dark gray to medium gray, micromicaceous, variable fissility. Occasional light gray marly siltstone.
2,215.00 to 2,220.00 (5.00)	Shale Medium gray, micromicaceous, trace microcrystalline pyrite, slickensides, fissile, moderately laminated.
2,220.00 to 2,225.00 (5.00)	Shale As above. Trace fracture fill: beige, dolomitic, translucent, up to 0.4 mm thick with a rough surface.
2,225.00 to 2,230.00 (5.00)	Shale Very dark gray to black with some medium gray shale. Sub blocky to fissile, micromicaceous, common slickensides throughout, laminated. Some very dark gray to black silty marlstone, dolomitic in part.
2,230.00 to 2,235.00 (5.00)	Shale Very dark gray to black with occasional medium gray shale but less than above. Common slickensides throughout, laminated, fissile, occasional cubic pyrite crystals 0.01 to 0.03 mm across in black shale laminae. Minor dark gray silty marlstone as above but more calcareous.

Muskwa: 2,238.00 MD, 2,193.90 TVD, -1,777.50 SSL

2,235.00 to 2,240.00 (5.00)	Shale Very dark gray to black shale, micromicaceous, laminated, common slickensides throughout, common microcrystalline pyrite cubes along laminae. Trace calcite healed microfractures.
2,240.00 to 2,245.00 (5.00)	Shale Black shale, fissile, moderately indurated, occasional microcrystalline pyrite, also trace disseminated pyrite, laminated, common slickensides. Occasional black silty marlstone.

Sample Descriptions

Storage Units: Metric

2,245.00 to 2,250.00 (5.00)	Shale Black, fissile, micromicaceous, weak to moderate lamination, common isolated cubic pyrite crystals along laminations. Trace microcrystalline pyrite clusters. Occasional very hard dark gray siltstone. Trace slickensides.
2,250.00 to 2,255.00 (5.00)	Shale As above.
2,255.00 to 2,260.00 (5.00)	Shale As above.
2,260.00 to 2,265.00 (5.00)	Shale Dark gray to black, fissile, micromicaceous, occasional microcrystalline pyrite. Trace slickensides.
2,265.00 to 2,270.00 (5.00)	Shale Black with minor dark gray. Trace clusters of microcrystalline pyrite. Rare massive pyrite chunks to 2 mm across.
2,270.00 to 2,275.00 (5.00)	Shale Black to dark gray, micromicaceous, siliceous, fissile, laminated in places, occasional microcrystalline pyrite, Trace hard light to medium gray shale. Common light gray calcareous cemented Siltstone, hard, quartzose.
2,275.00 to 2,280.00 (5.00)	Shale Black to dark gray, fissile, hard, siliceous, occasional hard black grains of chert? that is silica cemented with microcrystalline calcite. Occasional microcrystalline pyrite. Variably laminated.
2,280.00 to 2,285.00 (5.00)	Shale Dark gray to black, micromicaceous, fissile, trace disseminated pyrite along laminations in black shale. Trace pyrite mineralisation along fracture surfaces. Slickensided fracture surface. Minor calcareous silty bituminous containing hard black chert? grains. Rare pyrite nodules <0.1 mm thick.
2,285.00 to 2,290.00 (5.00)	Shale Dark gray to black as above, hard. Trace calcite healed microfractures. Pyritic. Common microcrystalline pyrite nodules.
2,290.00 to 2,295.00 (5.00)	Shale Dark gray to black, very hard, siliceous, pyritic, trace calcite healed microfractures.
2,295.00 to 2,300.00 (5.00)	Shale Black to dark gray, occasional calcareous silty, blocky to laminated, moderately argillaceous, fissile, trace slickensides, bituminous, rare loose quartz crystals, common pyrite throughout with occasional very pyritic laminae. Trace calcite healed microfractures and trace loose quartz crystals. Minor medium grey shale, hard, siliceous, massive to blocky.
2,300.00 to 2,305.00 (5.00)	Shale Dark grey to black, hard, siliceous, pyritic as above. Decreasing medium grey shale. Trace black to brown, soft, earthy shale.

Sample Descriptions

Storage Units: Metric

2,305.00 to 2,310.00 (5.00)	Shale Dark grey to black, hard, siliceous. Trace colorless quartz healed microfractures up to 0.01 mm aperture, <1 mm spacing, parallel with non uniform thickness, perpendicular to fissility. Common microcrystalline pyrite. Trace black, soft carbonaceous flecks up to 0.2 mm in black shale.
2,310.00 to 2,315.00 (5.00)	Shale Dark grey to black shale as above, with increasing black shale. Rare dark grey calcareous shale.
2,315.00 to 2,320.00 (5.00)	Shale Black to dark grey as above, with increasing calcareous dark grey shale. Occasional colorless, microcrystalline, spherical, well sorted, well rounded calcite peloids (no visible nucleus), matrix supported in soft, non calcareous dark grey shale.
2,320.00 to 2,325.00 (5.00)	Shale Dark grey to black, micromicaceous, pyritic, hard, siliceous, rarely laminated to commonly platy, fissile. Minor medium to dark grey shale, calcareous, micromicaceous, pyritic. Trace calcite healed microfractures, trace slickensides. Trace peloidal shale as above.
2,325.00 to 2,330.00 (5.00)	Shale Dark grey, micromicaceous, brittle but not very hard, pyritic in places, fissile, laminated to blocky, trace slickensides. Rare loose creamy white calcite crystals up to 0.4 mm.
2,330.00 to 2,335.00 (5.00)	Shale Dark grey as above. Trace calcite healed microfractures. Slightly calcareous in places.
2,335.00 to 2,340.00 (5.00)	Shale As above. Occasional loose calcite crystals. Minor brown grey shale, calcareous, soft, rounded cuttings. Trace slickensides.
2,340.00 to 2,345.00 (5.00)	Shale As above, with decreasing brown grey shale. Rare light grey shale, micromicaceous, slightly argillaceous, pyritic, moderately hard.
2,345.00 to 2,350.00 (5.00)	Shale As above, but moderately calcareous in places. Rare loose drusy white quartz crystals to 1 mm.
2,350.00 to 2,355.00 (5.00)	Shale Dark grey, micromicaceous, occasional disseminated pyrite bands, fissile, trace slickensides, occasionally laminated, moderately calcareous in places but mostly siliceous. Minor brown grey marlstone, soft, earthy, calcareous with very weak fissility.
2,355.00 to 2,360.00 (5.00)	Shale Lithologies as above with decreasing brown grey shale. Rare white non calcareous specks.

Sample Descriptions

Storage Units: Metric

2,360.00 to 2,365.00 (5.00)	Shale Dark grey, micromicaceous, trace disseminated pyrite bands, trace brown grey marly shale, soft, earthy, calcareous. Rare light grey, siliceous, micromicaceous shale with a slaty lustre.
2,365.00 to 2,370.00 (5.00)	Shale Dark grey to black, platy, micromicaceous, microcrystalline pyrite to disseminated in lenses parallel to bedding. Trace calcite healed microfractures. Trace light grey pyritic argillaceous shale as above.
2,370.00 to 2,375.00 (5.00)	Shale Black to dark grey, platy, micromicaceous, pyritic, weakly calcareous, trace calcite healed microfractures and loose calcite crystals. Trace dark grey silty marlstone with common microcrystalline pyrite.
2,375.00 to 2,380.00 (5.00)	Shale Black to dark grey, weakly laminated to sub blocky, micromicaceous, pyritic, weakly calcareous, trace calcite healed microfractures up to 0.2 mm thick. Trace loose calcite crystals. Trace dark grey silty marlstone with common microcrystalline pyrite.
2,380.00 to 2,385.00 (5.00)	Shale Black to dark grey, platy, micromicaceous, pyritic, moderately calcareous, minor interbeds of very calcareous dark grey marlstone. Trace slickensides.
2,385.00 to 2,390.00 (5.00)	Shale black to dark grey, calcareous to very calcareous, micromicaceous. Trace loose calcite crystals.
2,390.00 to 2,395.00 (5.00)	Shale Black to dark grey, micromicaceous, pyritic in places. Minor stringers of very very calcareous dark grey marlstone.
2,395.00 to 2,400.00 (5.00)	Shale Black to dark grey, micromicaceous, pyritic in places as above, trace slickensides. Trace dark grey marlstone, occasionally silty.
2,400.00 to 2,405.00 (5.00)	Shale Black, fissile, laminated to platy, pyritic, calcareous, micromicaceous, common slickensides.
2,405.00 to 2,410.00 (5.00)	Shale Dark grey and black but mostly very dark grey, micromicaceous, pyritic, trace loose calcite crystals, trace slickensides.
2,410.00 to 2,415.00 (5.00)	Shale Dark grey and black, fissile, as above. Rare silty marlstone. Rare brownish dark grey marlstone, not fissile.
2,415.00 to 2,420.00 (5.00)	Shale Equal parts shale as above and marlstone as above.

Sample Descriptions

Storage Units: Metric

2,420.00 to 2,425.00 (5.00)	Shale Dark grey, calcareous, fissile, platy to blocky, pyritic, trace slickensides. Also brownish dark grey marlstone, softer, very calcareous, rarely silty.
2,425.00 to 2,430.00 (5.00)	Shale Dark grey to black, fissile, calcareous, hard, pyritic with occasional microcrystalline pyrite cubes. Lesser brownish grey marlstone, pyritic in places, very calcareous. Occasional silt sized calcareous rounded white specks in marlstone. Trace silty zones. Trace slickensides. Trace calcite healed microfractures in black shale, up to 0.4 mm thick.
2,430.00 to 2,435.00 (5.00)	Shale Shale as above. Minor stringers of dark grey marlstone, soft. Rare greenish medium grey shale, bentonitic lustre, waxy looking.
2,435.00 to 2,440.00 (5.00)	Shale Dark grey to black, fissile, pyritic, micromicaceous, very calcareous. Increasing stringers of very calcareous grey marlstone. Rare rounded translucent loose quartz crystals. Trace calcite healed microfractures, mainly in shale. Rare beige microcrystalline dolomitic pieces comprising <<1% of cuttings, trace interstitial porosity.
2,440.00 to 2,445.00 (5.00)	Marlstone Grey, as above. Occasional white flecks as above, also trace milky white calcareous shell fragments or fossil fragments as wisps parallel to bedding planes. Lesser dark grey shale as above, with trace calcite healed microfractures, with occasional euhedral crystalline habit.
2,445.00 to 2,450.00 (5.00)	Marlstone Grey to dark grey, micromicaceous in places, weakly fissile in places, common silt sized rounded white calcareous flecks comprising up to 10% of the rock. Trace calcite healed microfractures, but more commonly loose milky white calcite crystals.
2,450.00 to 2,455.00 (5.00)	Marlstone Medium to light grey, very calcareous, commonly with white silt sized calcareous flecks, trace pyrite flecks of similar size and distribution pattern. Trace wispy fossil fragments. Trace slickensides.
2,455.00 to 2,460.00 (5.00)	Shale Dark grey, micromicaceous, pyritic, very calcareous to marly in places. Trace medium grey marlstone as above. Trace slickensides. Trace calcite healed microfractures. Rare light grey, micromicaceous, non calcareous water sensitive shale.
2,460.00 to 2,465.00 (5.00)	Marlstone Medium grey, very calcareous, rounded to platy, calcite healed microfractures becoming more common. Lesser dark grey shale as above. Rare drusy loose quartz crystals.

Sample Descriptions

Storage Units: Metric

2,465.00 to 2,470.00 (5.00)	Shale Dark grey to black, fissile, micromicaceous, rare microcrystalline pyrite, platy to sub blocky, calcareous, occasional calcite healed microfractures up to 0.4 mm aperture. Loose calcite crystals. Trace milky white calcite laminae parallel to bedding. Common slickensides. Grey to dark grey marlstone stringers, calcareous silt sized fragments in places. Trace fossiliferous. Rare loose quartz crystals.
2,470.00 to 2,475.00 (5.00)	Shale Dark grey to black as above. Very calcareous. Decreasing marlstone stringers as above.
2,475.00 to 2,480.00 (5.00)	Marlstone Medium grey to dark grey, very calcareous, slickensides, silty in places, common calcite fracture fill and loose pieces with smeared edges. Rare euhedral calcite crystals in fractures. Minor dark grey to black calcareous shale as above.
2,480.00 to 2,485.00 (5.00)	Marlstone Lithologies as above, with increasing shale. Less calcareous silty fragments.
2,485.00 to 2,490.00 (5.00)	Shale Black to very dark grey, micromicaceous, rarely laminated to sub blocky, microcrystalline pyrite in places, slickensides, very calcareous, common fractures cemented with calcite up to 0.4 mm thick, also loose calcite crystals and crystal agglomerates. Trace brownish grey marlstone, very calcareous with calcareous fossil fragments up to 0.01 mm diameter.
2,490.00 to 2,495.00 (5.00)	Shale Dark grey to black, micromicaceous, pyritic in places, rarely laminated to sub blocky, very calcareous, common calcite mineralised fractures and occasional loose crystals. Common slickensides. Minor marlstone stringers with occasional fossiliferous fragments.
2,495.00 to 2,500.00 (5.00)	Shale As above, with less fracturing.
2,500.00 to 2,505.00 (5.00)	Shale Dark grey, very calcareous to marly, micromicaceous, hard, common calcite healed microfractures, slickensides. Minor lighter grey marly stringers, trace chalky calcareous lenses up to 2 mm wide.
2,505.00 to 2,510.00 (5.00)	Shale Dark grey to black, micromicaceous, pyritic with occasional microcrystalline pyrite, very calcareous, laminated to sub blocky, slickensides, trace calcite healed microfractures, trace loose calcite crystals up to 3 mm. Minor stringers of lighter brownish grey marlstone, very calcareous, trace calcareous white specks.
2,510.00 to 2,515.00 (5.00)	Shale As above, with trace black, shiny, carbonaceous?, angular fragments. Slightly less marlstone than above.

Sample Descriptions

Storage Units: Metric

2,515.00 to 2,520.00 (5.00)	Shale Dark grey, fissile, micromicaceous, pyritic, hard, calcareous, marly in places grading to marlstone. Trace calcite healed microfractures. Lesser marlstone, brownish grey, softer, very calcareous.
2,520.00 to 2,525.00 (5.00)	Shale As above, platy to blocky, fracture fill more common. Rare rounded loose quartz crystals. Lesser distinct dark grey marlstone, very calcareous, fossiliferous in places, calcareous white specks, trace slickensides.
2,525.00 to 2,530.00 (5.00)	Marlstone Brownish grey to dark grey, soft, trace soft chalky white calcareous wisps, trace slickensides. Minor dark grey shale as above.
2,530.00 to 2,535.00 (5.00)	Marlstone Medium to dark grey, very calcareous, soft, fossiliferous in places, common soft chalky white calcareous flecks. Minor dark brownish grey marlstone, rarely fossiliferous. Occasional calcite healed microfractures. Minor hard fissile dark grey shale as above.
2,535.00 to 2,540.00 (5.00)	Marlstone Brownish grey to dark grey, fossiliferous in places, occasional calcareous white specks. Minor soft, grey, fossiliferous marlstone with occasional soft chalky white calcareous specks. Minor hard, fissile, dark grey shale as above.
2,540.00 to 2,545.00 (5.00)	Marlstone Mixed calcareous marlstones as above. Minor hard, fissile dark grey shale as above.
2,545.00 to 2,550.00 (5.00)	Marlstone Dirty dark grey, very calcareous, occasional chalky calcareous white flecks to fossiliferous. Minor dark grey, hard, calcareous, micromicaceous, pyritic. Rare loose calcite crystals? weak acid response but stains dark red.

Nahanni: 2,553.00 MD, 2,457.02 TVD, -2,040.62 SSL

2,550.00 to 2,555.00 (5.00)	Marlstone Medium to dark grey, very minor dark grey fissile shale. Minor dolomite, fine to coarse crystalline, bitumen (invert?) plugging intercrystalline porosity. Trace coarse crystalline dolomite rhombs cemented into weakly calcareous/dolomitic marl.
2,555.00 to 2,560.00 (5.00)	Marlstone/dolomite Marlstone with minor dark grey fissile shale as above. Minor dolomite, light to medium grey, microcrystalline to coarse crystalline, trace coarse crystalline loose rhombs, poor to fair intercrystalline porosity mostly bitumen filled.

Sample Descriptions

Storage Units: Metric

2,560.00 to 2,566.00 (6.00)	Dolomite Light to medium grey, microcrystalline to coarse crystalline, medium to coarse crystalline dolomite rhombs, poor intercrystalline porosity with bitumen partially filling pore space (may be gilsonite from invert in some cases). Trace pinpoint porosity. Trace loose clear hexagonal quartz crystals. Minor cuttings of calcareous dark grey fissile shale and marlstone, presumed to be cavings.
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Appendix A

Geological Report

on

Paramount et al Liard K-29A intermediate hole

Well Reached Total Depth on

for

Paramount Resources Ltd.

Prepared For: Paul Price
Paramount Resources

Prepared By: Ken Glover
Chalce Resources

Ken Glover

Well Abstract

Storage Units:

Metric

Kickoff on Aug 25, 2005 at 5:00 hours. Reach 2520.62 m (MD) on Sept 1, 2005 at 2:30 hours.
Drill string stuck in hole at 2520.62 m, worked at getting unstuck until Sept 6, 2005.
Run abandonment plug from 2435 to 2290 m on Sept 7, 2005.
Begin drilling sidetrack well on Sept 8, 2005.

Well Summary

Storage Units: Metric

Well Information

Operator: Paramount Resources Ltd.
Well Name: Paramount et al Liard
Location: K-29A intermediate hole
UWI: 300K-29A-6030-123302
Pool: N/A
Field: Liard K-29
State / Province: Northwest Territories
Country: Canada
License Number: 1125
Well Status: abandoned

Surface Co-ordinates	Hole Type: Deviated	Fault Indicator:
	Latitude: 60 28 41.040	Longitude: 123 35 4.100
N / S: 6704591.45		
E / W: 467870.02		

Bottom Hole Co-ordinates	Latitude:	Longitude:
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N / S:
E / W:

Elevations		Reference:	Ground
Ground Elevation:	409.60	Kelly Bushing to Ground:	6.80
Kelly Bushing Elevation:	416.40	Cut (-):	
Casing Flange Elevation:		Fill (+):	

Total Depth	Measured Depth	True Vertical Depth
Total Depth Driller (Tally) :	2,520.62	2,418.92
Total Depth Driller (Strap or SLM):		
Total Depth Logger:		

Miscellaneous Depths

Plugback Depth:	2,435.00	Water Depth Reference:
Sidetrack Depth:	2,290.00	Water Depth:

Well Summary

Drilling Contractor:	Akita Drilling Rig #58	Spud Date:	Aug 25, 2005 @ 05:00
Rig Release Date:		Total Depth Date:	

Cores	#	Formation	Interval	Cut	Recovered	%
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Casing Summary

Casing Type	Casing Size	Landed Depth	Hole Size
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Logging Summary

Company	Engineer	Total Depth (MD)	Logging tools
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Bit Record Table (IADC Grading System)

Storage Units: Metric

*** For more detailed Bit Information refer to Bit Record ***

Bit #	Make	Type	Size	Depth In	Depth Out	Made	Hours	Avg. P.R.	I.A.D.C. Bit Condition									
									I	O	MDC	Loc	B	G	ODC	RP1	RP2	
1	Hughes	MX20G	216.0	1,859.7	2,287.2	427.5	53.50	7.99	5	7	WT	A	4	2	BT	PR		
2	Hughes	MX30G	216.0	2,287.2	2,463.5	176.2	34.25	5.15	6	7	BT	A	F	8	PB			
3	Hughes	MX-30G	216.0	2,463.0	2,520.0		57.0	10.50	5.43									

Total Rotating Hours: 98.25

Paramount Resources Ltd.
UWI 300K-29A-6030-123302

Paramount et al Liard
K-29A intermediate hole
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Bit Record

Pump Data

Pump #1	Model:	Size:	Type:
	Pump Rod Diameter:	Liner Size:	Stroke Length:
	Efficiency Rating (%):		
Pump #2	Model:	Size:	Type:
	Pump Rod Diameter:	Liner Size:	Stroke Length:
	Efficiency Rating (%):		

Bit Data

			Storage Units:	Metric
Bit #:	1	Make:	Hughes	Type: MX20G IADC Series / Type: /
Serial #:	6038026	Size:	216.0 Jets / Nozzles:	11.90 / / / T.F.A.: /
Depth In:	1,859.73	Depth Out:	2,287.22	Made: 427.49 Rotating Hours: 53.50
				Average Drill Rate: 7.90 Total Rotating Hours: 53.50

Bit Grade / Condition I.A.D.C.: 5 / 7 / WT / A / 4 / 2 / BT / PR / T / B / G: / /

Remarks:

Formations Drilled: Lower Besa River, Muskwa

Drilling Parameters

	Min	Max	Min	Max
Force on Bit:	/		R.P.M.:	/
Pump 1 S.P.M. / Volume:	/		Pump 2 S.P.M. / Volume:	/
S.P.P.:	/		Fluid Density:	/
Drift Angle:	/		Funnel Viscosity:	/

Annular Velocity Bottoms Up	Drill Collars: Depth:	HeavyWeight Drill Pipe: Theoretical:	Drill Pipe: Actual:
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Bit #:	2	Make:	Hughes	Type:	MX30G	IADC Series / Type:	/
Serial #:	6037748	Size:	216.0 Jets / Nozzles:	/	/	T.F.A.:	/
Depth In:	2,287.22	Depth Out:	2,463.45	Made:	176.23	Rotating Hours:	34.25
				Average Drill Rate:	5.15	Total Rotating Hours:	87.75

Bit Grade / Condition I.A.D.C.: 6 / 7 / BT / A / F / 8 / PB / / T / B / G: / /

Remarks:

Formations Drilled: Muskwa

Drilling Parameters

	Min	Max	Min	Max
Force on Bit:	/		R.P.M.:	/
Pump 1 S.P.M. / Volume:	/		Pump 2 S.P.M. / Volume:	/
S.P.P.:	/		Fluid Density:	/
Drift Angle:	/		Funnel Viscosity:	/

Annular Velocity Bottoms Up	Drill Collars: Depth:	HeavyWeight Drill Pipe: Theoretical:	Drill Pipe: Actual:
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Bit Data

Storage Units: Metric

Bit #:	3	Make:	Hughes	Type:	MX-30G	IADC Series / Type:	/	
Serial #:	6037749	Size:	216.0 Jets / Nozzles		/	/	/	T.F.A.:
Depth In:	2,463.00	Depth Out:	2,520.00	Made:	57.00	Rotating Hours:	10.50	
				Average Drill Rate:	5.43	Total Rotating Hours:	98.25	
Bit Grade / Condition	I.A.D.C.:	/	/	/	/	T / B / G:	/	/
Remarks:	abandoned							
Formations Drilled:								
Drilling Parameters								
		Min		Max			Min	Max
Force on Bit:		/			R.P.M.:		/	
Pump 1 S.P.M. / Volume:		/			Pump 2 S.P.M. / Volume:		/	
S.P.P.:		/			Fluid Density:		/	
Drift Angle:		/			Funnel Viscosity:		/	
Annular Velocity	Drill Collars:	HeavyWeight Drill Pipe:			Drill Pipe:			
Bottoms Up	Depth:	Theoretical:			Actual:			

Directional Survey Points

Storage Units: Metric

Survey Type: /

Measured Depth	T.V.D.	Drift Angle (°)	Azimuth (°)	+N / -S Distance	+E / -W Distance	Vertical Section	DogLeg Severity
1,854.00	1,847.33	4.500	69.48				
1,864.37	1,857.65	6.900	45.60				
1,874.77	1,867.95	9.300	37.30				
1,881.50	1,874.56	11.700	26.00				
1,890.96	1,883.78	14.100	31.00				
1,900.35	1,892.86	15.700	33.60				
1,909.85	1,901.96	17.400	32.30				
1,919.42	1,911.04	19.500	30.20				
1,928.93	1,919.94	21.800	27.00				
1,938.53	1,928.79	23.900	22.80				
1,948.15	1,937.49	26.400	21.70				
1,957.62	1,945.89	28.700	21.20				
1,967.14	1,954.19	29.900	20.50				
1,976.74	1,962.49	30.500	20.10				
1,986.09	1,970.59	29.400	17.80				
1,995.43	1,978.78	28.200	14.60				
2,004.94	1,987.17	27.900	13.20				
2,014.44	1,995.57	27.700	13.00				
2,023.94	2,004.01	27.000	12.00				
2,033.56	2,012.60	26.600	11.30				
2,042.92	2,020.94	27.300	10.10				
2,052.35	2,029.29	28.000	9.40				
2,061.84	2,037.66	28.300	10.20				
2,071.51	2,046.17	28.400	12.30				
2,081.06	2,054.54	29.200	14.00				
2,090.59	2,062.87	29.000	15.60				
2,099.43	2,070.62	28.400	17.80				
2,109.43	2,079.42	28.300	17.30				
2,119.14	2,087.96	28.500	17.60				
2,128.80	2,096.45	28.600	17.50				
2,138.25	2,104.75	28.400	16.60				
2,147.92	2,113.28	28.000	14.60				
2,157.55	2,121.80	27.500	13.60				
2,167.10	2,130.30	26.600	12.10				
2,176.71	2,138.90	26.600	11.00				
2,186.18	2,147.38	26.200	10.40				

Directional Survey Points

Storage Units: Metric

Survey Type: /

Measured Depth	T.V.D.	Drift Angle (°)	Azimuth (°)	+N / -S Distance	+E / -W Distance	Vertical Section	DogLeg Severity
2,195.83	2,156.07	25.400	9.80				
2,205.31	2,164.64	25.100	14.00				
2,214.96	2,173.34	26.100	16.60				
2,224.47	2,181.87	26.600	19.30				
2,233.70	2,190.08	27.700	20.20				
2,243.31	2,198.52	29.500	21.80				
2,252.79	2,206.69	31.400	19.70				
2,262.33	2,214.79	32.400	18.00				
2,271.82	2,222.78	32.900	17.00				
2,281.47	2,230.84	33.800	15.40				
2,290.86	2,238.61	34.600	14.30				
2,300.44	2,246.46	35.200	12.90				
2,310.01	2,254.27	35.500	12.90				
2,319.56	2,262.06	35.200	14.30				
2,328.98	2,269.78	34.600	14.40				
2,338.57	2,277.73	33.500	14.50				
2,348.09	2,285.70	32.900	13.70				
2,357.63	2,293.68	33.400	12.60				
2,367.24	2,301.66	34.300	10.60				
2,376.76	2,309.49	35.100	9.70				
2,386.15	2,317.19	34.700	9.00				
2,395.79	2,325.10	35.000	5.20				
2,405.21	2,332.76	36.400	1.40				
2,415.00	2,340.56	37.900	359.00				
2,424.46	2,347.98	38.800	357.90				
2,433.82	2,355.24	39.400	354.50				
2,443.24	2,362.44	41.000	350.20				
2,452.64	2,369.48	42.000	344.10				
2,462.13	2,376.48	43.000	341.10				
2,471.46	2,383.30	43.100	337.00				
2,481.05	2,390.31	42.900	332.60				
2,490.35	2,397.11	43.300	327.70				
2,499.93	2,404.06	43.600	325.00				

Drilling Fluid Summary

Storage Units: Metric

Drilling Fluid Type:	Produced Water	From:	1,853	To:	1,860
Drilling Fluid Type:	Invert	From:	1,860	To:	2,520

Work Schedule

Storage Units: Metric

Company: Chalce Resources
Geologist: Ken Glover

Work Performed **From:** Aug 25, 2005 **To:** Sep 01, 2005
Depths Logged **From:** 1,854.0 **To:** 2,520.0

Remarks: Arrive onsite on Aug 21, 2005. Kickoff on Aug 25, 2005. Reach TD of 2520.62 m on Sept 1, 2005. Run abandonment plug from 2435 to 2290 m on Sept 7, 2005.

Sample Descriptions

Storage Units: Metric

1,855.00 to 1,860.00 (5.00)	Shale Mainly medium gray to dark gray to green gray, soft, occasional bentonitic, weakly fissile, micromicaceous, silty in places, minor calcareous; trace light gray to medium gray siltstone stringers, moderately calcareous matrix ? with quartz grains. No shows.
1,860.00 to 1,865.00 (5.00)	Shale Shale with siltstone stringers as above. Trace microcrystalline pyrite along siltstone bedding, especially at contacts with shale. Trace micro organic fragments (angular and black) in siltstone stringers.
1,865.00 to 1,870.00 (5.00)	Shale Shale with quartzose siltstone stringers as above.
1,870.00 to 1,875.00 (5.00)	Shale Medium gray to occasional green gray and bentonitic, silty in places, micromicaceous. Trace medium brown gray calcareous marlstone. Trace dark gray to black shale. Trace slickensides.
1,875.00 to 1,880.00 (5.00)	Shale Medium gray to occasional green gray and bentonitic, silty in places, micromicaceous. Trace light gray calcareous quartzose siltstone, tight, no shows.
1,880.00 to 1,885.00 (5.00)	Shale Shale as above. Trace brown gray marlstone. Trace slickensides.
1,885.00 to 1,890.00 (5.00)	Shale Shale as above. Very rare brown gray marlstone.
1,890.00 to 1,895.00 (5.00)	Shale Medium gray to green gray and bentonitic, micromicaceous, moderately indurated. Minor brown gray earthy marlstone.
1,895.00 to 1,900.00 (5.00)	Shale Shale as above.
1,900.00 to 1,905.00 (5.00)	Shale Medium gray to brown gray, micromicaceous, weak to moderately fissile. Minor light to medium gray calcareous siltstone stringers, tight, no shows. Rare dark gray to black shale, laminated, fissile.
1,905.00 to 1,910.00 (5.00)	Shale Medium gray to brown gray shale as above. Trace disseminated pyrite in medium gray shale. Trace black organic ? flecks in shale.
1,910.00 to 1,915.00 (5.00)	Shale Shale as above.
1,915.00 to 1,920.00 (5.00)	Shale Medium gray to brown gray, micromicaceous, weak to moderately fissile, common clusters of black organic ? flecks. Trace light gray to brown gray marlstone. Trace slickensides.

Sample Descriptions

Storage Units: Metric

1,920.00 to 1,925.00 (5.00)	Shale Shale as above. Trace light gray to brown gray marlstone.
1,925.00 to 1,930.00 (5.00)	Shale Medium gray to brown gray shale as above. Rare light gray to brown gray marlstone.
1,930.00 to 1,935.00 (5.00)	Shale Medium gray to brown gray, micromicaceous, moderately fissile, Rare non calcareous quartzose siltstone stringers.
1,935.00 to 1,940.00 (5.00)	Shale Shale as above with indurated non calcareous silty bituminous. Trace brown gray marlstone. Trace slickensides.
1,940.00 to 1,945.00 (5.00)	Shale Medium gray, micromicaceous, weak to moderately fissile. Minor light to medium gray calcareous siltstone stringers. Trace slickensides.
1,945.00 to 1,950.00 (5.00)	Shale Medium gray shale as above.
1,950.00 to 1,955.00 (5.00)	Shale Medium to dark gray, micromicaceous, fissile, with minor dark gray to black, fissile laminations. Weak to moderately laminated. Trace siltstone laminations with trace disseminated pyrite. Trace slickensides.
1,955.00 to 1,960.00 (5.00)	Shale Medium to dark gray with minor green gray and bentonitic, micromicaceous, fissile, slightly calcareous.
1,960.00 to 1,965.00 (5.00)	Shale Shale as above. Trace silty calcareous stringers.
1,965.00 to 1,970.00 (5.00)	Shale Dark gray to black, fissile, micromicaceous in places with trace microfractures and minor slickensides, some slickensided surfaces are curved. Trace light to medium gray very calcareous silty marlstone with occasional milky white flecks (shell fragments ?)
1,970.00 to 1,975.00 (5.00)	Shale Dark gray shale as above. Increased very silty marlstone.
1,975.00 to 1,980.00 (5.00)	Shale Dark gray shale with silty marlstone as above.
1,980.00 to 1,985.00 (5.00)	Shale Gray, laminated with black wisps along laminations, common microcrystalline pyrite nodules <0.1 mm diameter, silty in places, trace dark gray to black shale laminations. Occasional light to medium gray siltstone stringers or laminations in shale, micromicaceous, occasional calcareous. No shows.

Sample Descriptions

Storage Units: Metric

1,985.00 to 1,990.00 (5.00)	Shale Gray shale as above but with increased dark gray to black shale laminations. Trace microfractures. One visible calcite fracture fill shows some calcite mineral cleavage, 0.5 mm thickness preserved in contact with shale, has associated irregular microfractures emanating from a smooth and regular primary fracture surface.
1,990.00 to 1,995.00 (5.00)	Shale Medium gray to green gray and bentonitic with minor brown gray, micromicaceous, occasional laminated, trace black shale.
1,995.00 to 2,000.00 (5.00)	Shale Shale as above. Slightly calcareous in places.
2,000.00 to 2,005.00 (5.00)	Shale Shale as above.
2,005.00 to 2,010.00 (5.00)	Shale Medium gray to green gray and bentonitic to minor brown gray, micromicaceous, occasional laminated. Common black organic flecks. Trace very thin (<0.05 mm thick) calcite healed microfractures.
2,010.00 to 2,015.00 (5.00)	Shale Shale as above.
2,015.00 to 2,020.00 (5.00)	Shale Medium gray, dark gray in places, very thin (0.05 mm thick) light gray siltstone laminae in places, micromicaceous in places, moderately fissile
2,020.00 to 2,025.00 (5.00)	Shale As above. Increasing dark gray shale, usually laminated. Trace curvilinear slickensided surfaces.
2,025.00 to 2,030.00 (5.00)	Shale Medium to dark gray with occasional black shale. Rare calcite fracture fill up to 0.2 mm thick, translucent with a smooth undulating surface. Trace clacareous light gray siltstone.
2,030.00 to 2,035.00 (5.00)	Shale As above. Increasing finely laminated, fissile black shale. Trace dolomitic light gray siltstone.
2,035.00 to 2,040.00 (5.00)	Shale Medium gray to black, variably laminated, variably fissile, occasionally micromicaceous. Trace microcrystalline pyrite. Trace calcite fracture fill up to 0.2 mm thick.
2,040.00 to 2,045.00 (5.00)	Shale As above. Trace light gray soft marlstone.

Sample Descriptions

Storage Units: Metric

2,045.00 to 2,050.00 (5.00)	Shale Medium gray with trace dark gray shale, occasionally micromicaceous, weakly fissile. Trace water sensitive light gray non calcareous shale with wisps of black organics. Trace calcareous.
2,050.00 to 2,055.00 (5.00)	Shale As above with increasing dark gray shale.
2,055.00 to 2,060.00 (5.00)	Shale As above.
2,060.00 to 2,065.00 (5.00)	Shale Medium to dark gray, weakly fissile, micromicaceous. Trace calcite healed microfractures. trace disseminated pyrite. Trace fissile, very finely laminated black shale.
2,065.00 to 2,070.00 (5.00)	Shale As above.
2,070.00 to 2,075.00 (5.00)	Shale As above. Increasing black shale.
2,075.00 to 2,080.00 (5.00)	Shale As above.
2,080.00 to 2,085.00 (5.00)	Shale Medium gray, laminated with 0.05 to 0.1 mm thick laminations of medium gray and black and dark gray shale bands. Fissile, micromicaceous. Trace very small (<0.05 mm diameter) milky white nodules in banding.
2,085.00 to 2,090.00 (5.00)	Shale As above.
2,090.00 to 2,095.00 (5.00)	Shale Medium to dark gray to black banded shale. Banding is less common than above. Micromicaceous.
2,095.00 to 2,100.00 (5.00)	Shale medium gray to dark gray. Trace black shale. Micromicaceous.
2,100.00 to 2,105.00 (5.00)	Shale As above. Trace slickensides.
2,105.00 to 2,110.00 (5.00)	Shale Medium gray to dark gray. Trace black shale. Occasionally laminated, weakly fissile, micromicaceous.
2,110.00 to 2,115.00 (5.00)	Shale As above.
2,115.00 to 2,120.00 (5.00)	Shale Dark gray to medium gray with occasional laminated black shale. Fissile. Micromicaceous.

Sample Descriptions

Storage Units: Metric

2,120.00 to 2,125.00 (5.00)	Shale Medium gray to dark gray. Weakly fissile to fissile.
2,125.00 to 2,130.00 (5.00)	Shale As above. Poor sample.
2,130.00 to 2,135.00 (5.00)	Shale Medium gray. Trace dark gray shale. Micromicaceous.
2,135.00 to 2,140.00 (5.00)	Shale Dark gray to medium gray, variably fissile. Medium gray shale is micromicaceous, dark gray shale less show of oil. Trace disseminated pyrite in medium gray shale.
2,140.00 to 2,145.00 (5.00)	Shale As above, but more medium gray shale.
2,145.00 to 2,150.00 (5.00)	Shale As above, but increasing dark gray shale. Trace slickensides.
2,150.00 to 2,155.00 (5.00)	Shale As above.
2,155.00 to 2,160.00 (5.00)	Shale Medium to dark gray, micromicaceous, variably fissile, trace slickensides
2,160.00 to 2,165.00 (5.00)	Shale As above
2,165.00 to 2,170.00 (5.00)	Shale medium to dark gray, micromicaceous, fissile, variably laminated, occasional slickensides, trace translucent calcite fracture fill with some up to 0.4 mm thick. Some fracture mineralisation contacts are preserved, showing fractures at about 45 degrees to laminations and calcite crystal growth at about 45 degrees to fracture face. Minor light gray marly siltstone.
2,170.00 to 2,175.00 (5.00)	Shale Medium to dark gray, micromicaceous, fissile, variably laminated, trace microcrystalline pyrite in dark gray shale. Rare calcite healed micro fractures. Trace water sensitive light gray shale with black organic ? wisps.
2,175.00 to 2,180.00 (5.00)	Shale Medium to dark gray, micromicaceous, fissile, variably laminated, trace unattached translucent calcite crystals. Rare Black Shale: micromicaceous, laminated, fissile. Rare light gray marly very fine grained sand to siltstone.
2,180.00 to 2,185.00 (5.00)	Shale As above with more of the dark gray shale component. Trace calcite healed microfractures.
2,185.00 to 2,190.00 (5.00)	Shale As above.

Sample Descriptions

Storage Units: Metric

2,190.00 to 2,195.00 (5.00)	Shale Medium gray with minor dark gray, micromicaceous, fissile, occasionally laminated. Trace marly siltstone as above.
2,195.00 to 2,200.00 (5.00)	Shale Dark gray to medium gray, micromicaceous, fissile with minor laminated black shale stringer. Trace microcrystalline pyrite, especially in black shale.
2,200.00 to 2,205.00 (5.00)	Shale Medium to dark gray, fissility and moderate lamination in dark gray shale, weak fissility in medium gray shale. Hard, micromicaceous. Rare light gray marly siltstone.
2,205.00 to 2,210.00 (5.00)	Shale As above.
2,210.00 to 2,215.00 (5.00)	Shale Dark gray to medium gray, micromicaceous, variable fissility. Occasional light gray marly siltstone.
2,215.00 to 2,220.00 (5.00)	Shale Medium gray, micromicaceous, trace microcrystalline pyrite, slickensides, fissile, moderately laminated.
2,220.00 to 2,225.00 (5.00)	Shale As above. Trace fracture fill: beige, dolomitic, translucent, up to 0.4 mm thick with a rough surface.
2,225.00 to 2,230.00 (5.00)	Shale Very dark gray to black with some medium gray shale. Sub blocky to fissile, micromicaceous, common slickensides throughout, laminated. Some very dark gray to black silty marlstone, dolomitic in part.
2,230.00 to 2,235.00 (5.00)	Shale Very dark gray to black with occasional medium gray shale but less than above. Common slickensides throughout, laminated, fissile, occasional cubic pyrite crystals 0.01 to 0.03 mm across in black shale laminae. Minor dark gray silty marlstone as above but more calcareous.

Muskwa: 2,238.00 MD, 2,193.90 TVD, -1,777.50 SSL

2,235.00 to 2,240.00 (5.00)	Shale Very dark gray to black shale, micromicaceous, laminated, common slickensides throughout, common microcrystalline pyrite cubes along laminae. Trace calcite healed microfractures.
2,240.00 to 2,245.00 (5.00)	Shale Black shale, fissile, moderately indurated, occasional microcrystalline pyrite, also trace disseminated pyrite, laminated, common slickensides. Occasional black silty marlstone.

Sample Descriptions

Storage Units: Metric

2,245.00 to 2,250.00 (5.00)	Shale Black, fissile, micromicaceous, weak to moderate lamination, common isolated cubic pyrite crystals along laminations. Trace microcrystalline pyrite clusters. Occasional very hard dark gray siltstone. Trace slickensides.
2,250.00 to 2,255.00 (5.00)	Shale As above.
2,255.00 to 2,260.00 (5.00)	Shale As above.
2,260.00 to 2,265.00 (5.00)	Shale Dark gray to black, fissile, micromicaceous, occasional microcrystalline pyrite. Trace slickensides.
2,265.00 to 2,270.00 (5.00)	Shale Black with minor dark gray. Trace clusters of microcrystalline pyrite. Rare massive pyrite chunks to 2 mm across.
2,270.00 to 2,275.00 (5.00)	Shale Black to dark gray, micromicaceous, siliceous, fissile, laminated in places, occasional microcrystalline pyrite, Trace hard light to medium gray shale. Common light gray calcareous cemented Siltstone, hard, quartzose.
2,275.00 to 2,280.00 (5.00)	Shale Black to dark gray, fissile, hard, siliceous, occasional hard black grains of chert? that is silica cemented with microcrystalline calcite. Occasional microcrystalline pyrite. Variably laminated.
2,280.00 to 2,285.00 (5.00)	Shale Dark gray to black, micromicaceous, fissile, trace disseminated pyrite along laminations in black shale. Trace pyrite mineralisation along fracture surfaces. Slickensided fracture surface. Minor calcareous silty bituminous containing hard black chert? grains. Rare pyrite nodules <0.1 mm thick.
2,285.00 to 2,290.00 (5.00)	Shale Dark gray to black as above, hard. Trace calcite healed microfractures. Pyritic. Common microcrystalline pyrite nodules. Trace Marlstone, medium grey, dolomitic
2,290.00 to 2,295.00 (5.00)	Shale Dark gray to black, very hard, siliceous, pyritic, trace calcite healed microfractures.
2,295.00 to 2,300.00 (5.00)	Shale Black to dark gray, occasional calcareous silty bituminous, rare loose quartz crystals, common pyrite throughout.
2,300.00 to 2,305.00 (5.00)	Shale Black to dark gray, micromicaceous, pyritic, siliceous and hard. Occasional dark gray siltstone stringers ? with hard black grains and calcite cement. Trace quartz healed microfractures.

Sample Descriptions

Storage Units: Metric

2,305.00 to 2,310.00 (5.00)	Shale Black with minor dark gray. Oily and very hard to clean. Hard, fissile to platy, micromicaceous, pyritic, trace quartz healed microfractures.
2,310.00 to 2,315.00 (5.00)	Shale Dark gray with lesser black shale. Micromicaceous, pyritic, fissile to platy, hard. Trace quartz healed microfractures. Trace dark gray siltstone with hard black grains and calcite cement.
2,315.00 to 2,320.00 (5.00)	Shale Dark gray with minor black shale bituminous as above. Occasional dark gray calcareous siltstone.
2,320.00 to 2,325.00 (5.00)	Shale Very dark gray, micromicaceous, micro pyritic, hard. Dark gray marlstone, silty in places, very calcareous.
2,325.00 to 2,330.00 (5.00)	Shale Very dark gray, micromicaceous, micro pyritic, fissile, hard.
2,330.00 to 2,335.00 (5.00)	Shale As above
2,335.00 to 2,340.00 (5.00)	Shale As above.
2,340.00 to 2,345.00 (5.00)	Shale Very dark gray, micromicaceous, common microcrystalline pyrite, occasional pyrite nodules, hard, fissile. Minor very dark gray calcareous marlstone, silty in places.
2,345.00 to 2,350.00 (5.00)	Shale Very dark gray, micromicaceous, pyritic, hard, fissile, oily. Minor very dark gray calcareous marlstone, silty in places.
2,350.00 to 2,355.00 (5.00)	Shale As above.
2,355.00 to 2,360.00 (5.00)	Shale Very dark gray, fissile, pyritic, hard, trace slickensides, oily. Minor dark gray silty marlstone.
2,360.00 to 2,365.00 (5.00)	Marlstone Dark gray, silty in places, pyritic, oily. Minor dark gray shale, fissile, micromicaceous, pyritic.
2,365.00 to 2,370.00 (5.00)	Shale Dark gray to black, pyritic in places, laminated to platy. Trace calcite healed microfractures, most cuttings vertically through shale laminations. Minor dark gray silty marlstone.

Sample Descriptions

Storage Units: Metric

2,370.00 to 2,375.00 (5.00)	Shale Black to very dark gray, platy, micromicaceous, pyritic, moderately calcareous, trace calcite healed microfractures and loose calcite crystals. Trace dark gray silty bituminous.
2,375.00 to 2,380.00 (5.00)	Shale Black to dark gray, laminated to sub blocky, pyritic, micromicaceous, occasional white calcite grains and silty bituminous. Trace calcite healed microfractures and loose calcite crystals up to 0.1 mm thick.
2,380.00 to 2,385.00 (5.00)	Shale Dark gray to black, calcareous to very calcareous, micromicaceous, pyritic, laminated to sub blocky, trace calcite healed microfractures up to 0.5 mm thick.
2,385.00 to 2,390.00 (5.00)	Shale Black to dark gray, trace blacky loose pyrite clasts, calcareous, micromicaceous, trace slickensides, trace silty bituminous, interbedded with minor dark to medium gray marlstone, occasionally silty, very calcareous, occasional very fine laminae of opaque white calcite.
2,390.00 to 2,395.00 (5.00)	Shale As above, but only minor marlstone interbeds. Trace loose calcite crystals.
2,395.00 to 2,400.00 (5.00)	Shale Very dark gray, micromicaceous, pyritic, trace loose calcite crystals, trace slickensides, trace calcite healed microfractures, very calcareous, trace white calcareous specks.
2,400.00 to 2,405.00 (5.00)	Shale Very dark gray, micromicaceous, pyritic in places, trace loose calcite crystals, rare loose subrounded quartz crystals. Minor black shale, micromicaceous, pyritic, fissile, laminated to platy, calcareous.
2,405.00 to 2,410.00 (5.00)	Shale Black, fissile, laminated to platy, very calcareous, pyritic, micromicaceous, trace loose subrounded quartz crystals, trace slickensides, trace silty bituminous.
2,410.00 to 2,415.00 (5.00)	Shale Dark gray with black, fissile, pyritic, micromicaceous shale stringers, very calcareous, pyritic, trace calcite healed microfractures, trace loose calcite crystals, trace opaque angular quartz crystals. Occasional silty bituminous.
2,415.00 to 2,420.00 (5.00)	Shale Dark gray, laminated to platy, moderately fissile, very calcareous, micromicaceous, pyritic, trace slickensides, silty in places, rare calcite healed microfractures. Minor stringers of medium gray marlstone, silty in places.
2,420.00 to 2,425.00 (5.00)	Shale Black, sub blocky to platy, micromicaceous, pyritic, hard, trace slickensides, trace silty bituminous, calcareous to very calcareous.

Sample Descriptions

Storage Units: Metric

2,425.00 to 2,430.00 (5.00)	Shale As above but softer and less marlstone.
2,430.00 to 2,435.00 (5.00)	Shale Very dark gray to black, very calcareous, micromicaceous, pyritic, trace light to medium gray silty marlstone. Rare loose bituminous or drusy quartz fracture fill.
2,435.00 to 2,440.00 (5.00)	Shale Dark gray, platy, very calcareous, silty in places, micromicaceous, pyritic, trace light to medium gray silty marlstone.
2,440.00 to 2,445.00 (5.00)	Shale Dark with minor medium gray, micromicaceous, weakly fissile, laminated to platy, trace calcite healed microfractures, trace microcrystalline pyrite, trace milky white calcareous specks, trace slickensides. Trace light to medium gray marlstone, silty in places.
2,445.00 to 2,450.00 (5.00)	Shale Dark gray, micromicaceous, trace slickensides. Minor light to medium gray marlstone, dolomitic in places. Rare green gray bentonitic shale, dolomitic in part.
2,450.00 to 2,455.00 (5.00)	Shale Dark gray with trace medium gray stringers. Micromicaceous, hard, siliceous, very calcareous. Trace slickensides. Trace pyrite chinks <1 mm across. Common calcite healed microfractures up to 1 mm thick. Trace loose calcite crystals up to 0.8 mm across. Rare green gray bentonitic shale, weakly calcareous.
2,455.00 to 2,460.00 (5.00)	Shale Very dark gray to black, platy to sub blocky, hard, calcareous, common calcite healed microfractures up to 2 mm aperture. Trace loose calcite crystals, trace pyrite clasts. Trace light gray calcareous marlstone.
2,463.45 to 2,465.00 (1.55)	Shale Dark gray, platy to sub blocky, variably fissile, micromicaceous, calcareous, hard, pyritic in places, trace calcite healed microfractures, common loose calcite crystals, rare loose quartz crystals. Trace light to medium gray dolomitic marlstone, silty in places.
2,465.00 to 2,470.00 (5.00)	Shale Dark gray as above, but calcite fracture fill and loose crystals are common. Trace slickensides, trace calcareous specks. Trace light to medium gray, platy, marly siltstone stringers.
2,470.00 to 2,475.00 (5.00)	Shale Dark gray, micromicaceous, pyritic in places, platy to laminated, very calcareous, hard, trace calcite healed microfractures associated with thicker (up to 0.5 mm) calcite filled fractures.

Sample Descriptions

Storage Units: Metric

2,475.00 to 2,480.00 (5.00)	Shale Dark gray, micromicaceous, trace calcareous white specks, trace pyritic zones, trace calcite healed fractures to 1 mm aperture, trace slickensides. Trace light to medium gray silty marlstone.
2,480.00 to 2,485.00 (5.00)	Shale Dark gray and fractured as above with trace silty marlstone as above. Very hard, very calcareous.
2,485.00 to 2,490.00 (5.00)	Shale Dark gray, micromicaceous, platy variably fissile, calcareous, trace calcite healed microfractures and common loose calcite crystals. Occasional stringers of common (10 to 25% by volume) calcareous milky white flecks. Minor light to medium gray marly siltstone.
2,490.00 to 2,495.00 (5.00)	Shale Dark gray with trace dark brownish gray, common calcite fracture fill throughout from <0.05 mm to >1 mm. Laminated to platy with occasional very pyritic laminae. Trace gray marly siltstone that occasionally grades to very fine sandstone, calcareous cemented.
2,495.00 to 2,500.00 (5.00)	Shale Dark gray, non calcareous to calcareous, hard, calcite fracture fill from <0.05 mm to about 1 mm thick, trace slickensides.
2,500.00 to 2,505.00 (5.00)	Shale Dark gray, fissile, laminated to platy, with abundant calcite healed microfractures and common loose calcite crystals, occasionally euhedral in crystal form. Some fracture surfaces show smeared calcite veneers.
2,505.00 to 2,510.00 (5.00)	Shale Dark gray as above. Abundant fractures as above.
2,510.00 to 2,515.00 (5.00)	Shale Dark gray, micromicaceous, trace very pyritic lenses, abundant calcite healed microfractures (0.01 mm to 1 mm) with loose calcite crystals throughout.
2,515.00 to 2,519.00 (4.00)	Shale Dark gray and fractured as above, with trace slickensides.

Appendix B

DAILY GEOLOGICAL WELL REPORT

Paramount et al Liard K-29A

Date:	Wednesday, August 24, 2005	Well Report #	1
Report To:	Paul Price / Craig Chappell	Report From:	Ken Glover
Report Period:	Aug. 23 @ 8:00 to Aug. 24 @ 8:00	Site Telephone #	403 451-3136
Kick Off Date:	N/A	Day From Kick Off:	N/A
Ground Elevation:	409.60 m	K.B. Elevation:	418.80 m
24:00 Hour Depth:	1855.63 m (MD)	Formation:	Lower Besa River

24 Hour Progress: 0.13 m
Average Drilling Rate: N/A
24:00 Hour Status: Pulling out of hole to inspect mill bit.

8:00 Hour Depth: 1859.00 (MD) **Formation:** Lower Besa River
Average Drilling Rate: 0.5 metres/hour
8:00 Hour Status: Milling window in casing.

Operations Summary Last 24 Hour Period: Set whipstock @ 1853.05 m @ 10:00 hrs 8/23/05. Begin to mill through casing @ 11:00 hrs with mill bit and gyroscope assembly. Top of window milled @ 1855.5 m @ 15:00 hrs. Pull out of hole @ 1855.63 m @ 16:00 hrs due to concern over slow milling. Inspect and modify mill bit assembly, begin running in hole @ 21:00 hrs. Resume milling window @ 2:00 hrs 8/24/05. Continue window milling to 1858.00 m.

Forecast Operations Next 24 Hour Period: Continue milling window to 1862.00 m. Drill 8 metres of additional hole with mill bit and gyroscope assembly. Displace mud and changeover to invert mud system. Pull out of hole to pick up directional/MWD tools.

Mud Properties:

Density: 1055 kg/m³ **Viscosity:** 28 s/L
Water Loss: cm³/30 min **pH:** 6.5

Comments: Using produced water from Nahanni Formation during the milling of the casing window.

COMMENTS:

DAILY GEOLOGICAL WELL REPORT

Paramount et al Liard K-29A

Date:	Thursday, August 25, 2005	Well Report #	2
Report To:	Paul Price / Craig Chappell	Report From:	Ken Glover
Report Period:	Aug. 24 @ 8:00 to Aug. 25 @ 8:00	Site Telephone #	403 451-3136
Kick Off Date:	Aug. 25, 2005	Day From Kick Off:	0
Ground Elevation:	409.60 m	K.B. Elevation:	418.80 m
24:00 Hour Depth:	1859.85 m (MD)	Formation:	Lower Besa River

24 Hour Progress: 8.65 m
Average Drilling Rate: N/A
24:00 Hour Status: Pulling out of hole to inspect mill bit.

8:00 Hour Depth: 1868.50 (MD) **Formation:** Lower Besa River
Average Drilling Rate: 6 metres/hour
8:00 Hour Status: Begin drilling ahead from kick off point.

Operations Summary Last 24 Hour Period: Finish window milling @ 1859.85 m @ 9:15 hrs on 8/24/05. Change mud system over to invert. Pull out of hole @ 13:30 hrs. Make up directional tools, run in hole at 23:00 hrs with tricone bit #1. Kick off point @ 1859.85 m @ 5:00 hrs on 8/25/05.

Forecast Operations Next 24 Hour Period: Drill ahead with directional and MWD tools.

Mud Properties:

Density:	940 kg/m ³	Viscosity:	47 s/L
Water Loss:	cm ³ /30 min	pH:	
Comments:			

COMMENTS:

Started drilling this morning from kick off point with tricone bit #1.

DAILY GEOLOGICAL WELL REPORT

Paramount et al Liard K-29A

Date:	Friday, August 26, 2005	Well Report #	3
Report To:	Paul Price / Craig Chappell	Report From:	Ken Glover
Report Period:	Aug. 25 @ 8:00 to Aug. 26 @ 8:00	Site Telephone #	403 451-3136
Kick Off Date:	Aug. 25, 2005	Day From Kick Off:	1
Ground Elevation:	409.60 m	K.B. Elevation:	416.60 m
24:00 Hour Depth:	1887.77 m (MD)	Formation:	Lower Besa River

24 Hour Progress: 66.24 m
Average Drilling Rate: 7 metres/hour
24:00 Hour Status: Running in hole with modified directional tools.

8:00 Hour Depth: 1934.74 (MD) **Formation:** Lower Besa River
Average Drilling Rate: 10 metres/hour
8:00 Hour Status: Drilling ahead and building angle.

Operations Summary Last 24 Hour Period: Run in hole with temporary directional assembly. Drill ahead from kick off point to 1887.77 m @ 12:15 hrs on 8/25/05. Pull out of hole and make up final directional assembly. Run in hole. Drill ahead to 1934.74 m @ 8:00 hrs on 8/26/05.

Forecast Operations Next 24 Hour Period: Drill ahead. No further trips out of the hole are expected in the near future.

Deviation Surveys:

Measured Depth (m)	Deviation (degrees)	Azimuth
1873.77	9.3	37.3

Mud Properties:

Density:	940 kg/m ³	Viscosity:	46 s/L
Water Loss:	cm ³ /30 min	pH:	
Comments:			

COMMENTS:

DAILY GEOLOGICAL WELL REPORT

Paramount et al Liard K-29A

Date:	Friday, August 27, 2005	Well Report #	4
Report To:	Paul Price / Craig Chappell	Report From:	Ken Glover
Report Period:	Aug. 26 @ 8:00 to Aug. 27 @ 8:00	Site Telephone #	403 451-3136
Kick Off Date:	Aug. 25, 2005	Day From Kick Off:	2
Ground Elevation:	409.60 m	K.B. Elevation:	416.60 m
24:00 Hour Depth:	2048.66 m (MD)	Formation:	Lower Besa River

24 Hour Progress: 160.89 m
Average Drilling Rate: 7 metres/hour
24:00 Hour Status: Drilling ahead.

8:00 Hour Depth: 2105.75 (MD) **Formation:** Lower Besa River
Average Drilling Rate: 10 metres/hour
8:00 Hour Status: Drilling ahead and building angle.

Operations Summary Last 24 Hour Period: Drill ahead from 1934.74 m @ 8:00 hrs on 8/26/05, to 2105.75 m @ 8:00 hrs on 8/27/05.

Forecast Operations Next 24 Hour Period: Drill ahead.

Latest Deviation Survey:

Measured Depth (m)	2081.06	Deviation (degrees)	
		29.2	Azimuth
			14

Mud Properties:

Density:	955 kg/m ³	Viscosity:	48 s/L
Water Loss:	cm ³ /30 min	pH:	
Comments:			

COMMENTS:

DAILY GEOLOGICAL WELL REPORT

Paramount et al Liard K-29A

Date:	Sunday, August 28, 2005	Well Report #	5
Report To:	Paul Price / Craig Chappell	Report From:	Ken Glover
Report Period:	Aug. 27 @ 8:00 to Aug. 28 @ 8:00	Site Telephone #	403 451-3136
Kick Off Date:	Aug. 25, 2005	Day From Kick Off:	3
Ground Elevation:	409.60 m	K.B. Elevation:	416.60 m
24:00 Hour Depth:	2198.02 m (MD)	Formation:	Lower Besa River

24 Hour Progress: 149.36 m
Average Drilling Rate: 6 metres/hour
24:00 Hour Status: Drilling ahead.

8:00 Hour Depth: 2257.51 (MD) **Formation:** Muskwa
Average Drilling Rate: 6 metres/hour
8:00 Hour Status: Drilling ahead.

Operations Summary Last 24 Hour Period: Drill ahead from 2105.75 m @ 8:00 hrs on 8/27/05, to 2257.51 m @ 8:00 hrs on 8/28/05. Wiper trip into casing at 2163.28 m @ 16:30 hrs on 8/27/05.

Forecast Operations Next 24 Hour Period: Drill ahead.
Latest Deviation Survey:

Measured Depth (m)	Deviation (degrees)	Azimuth
2224.47	26.6	19.3

Mud Properties:

Density:	985 kg/m ³	Viscosity:	49 s/L
Water Loss:	cm ³ /30 min	pH:	
Comments:			

COMMENTS:

Drilled into the top of the Muskwa Formation at about 2240 m (MD).

DAILY GEOLOGICAL WELL REPORT

Paramount et al Liard K-29A

Date:	Monday, August 29, 2005	Well Report #	6
Report To:	Paul Price / Craig Chappell	Report From:	Ken Glover
Report Period:	Aug. 28 @ 8:00 to Aug. 29 @ 8:00	Site Telephone #	403 451-3136
Kick Off Date:	Aug. 25, 2005	Day From Kick Off:	4
Ground Elevation:	409.60 m	K.B. Elevation:	416.60 m
24:00 Hour Depth:	2287.22 m (MD)	Formation:	Muskwa

24 Hour Progress: 89.2 m
Average Drilling Rate: 6 metres/hour
24:00 Hour Status: Pulling out of hole to change bits.

8:00 Hour Depth:	2313.89 (MD)	Formation:	Muskwa
Average Drilling Rate:	6 metres/hour		
8:00 Hour Status:	Drilling ahead.		

Operations Summary Last 24 Hour Period: Drill ahead from 2257.51 m @ 8:00 hrs on 8/28/05, to 2313.89 m @ 8:00 hrs on 8/29/05. Pull out of hole at 2287.22 m (MD) @ 14:30 hrs on 8/28/05 to change bits due to concern over bit wear.

Forecast Operations Next 24 Hour Period: Drill ahead.
Latest Deviation Survey:

Measured Depth (m)		Deviation (degrees)	
2281.47		33.8	
			Azimuth
			15.4

Mud Properties:

Density:	980 kg/m ³	Viscosity:	46 s/L
Water Loss:	cm ³ /30 min	pH:	
Comments:			

COMMENTS:

Baker Atlas alerted at 16:00 hrs on Sunday Aug. 28 for anticipated logging on Wednesday Aug. 31.

DAILY GEOLOGICAL WELL REPORT

Paramount et al Liard K-29A

Date:	Tuesday, August 30, 2005	Well Report #	7
Report To:	Paul Price / Craig Chappell	Report From:	Ken Glover
Report Period:	Aug. 29 @ 8:00 to Aug. 30 @ 8:00	Site Telephone #	403 451-3136
Kick Off Date:	Aug. 25, 2005	Day From Kick Off:	5
Ground Elevation:	409.60 m	K.B. Elevation:	416.60 m
24:00 Hour Depth:	2386.13 m (MD)	Formation:	Muskwa

24 Hour Progress: 98.91 m
Average Drilling Rate: 5 metres/hour
24:00 Hour Status: Drilling ahead.

8:00 Hour Depth: 2416.61 (MD) **Formation:** Muskwa
Average Drilling Rate: 5 metres/hour
8:00 Hour Status: Drilling ahead.

Operations Summary Last 24 Hour Period: Drill ahead from 2313.89 m @ 8:00 hrs on 8/29/05, to 2416.61 m @ 8:00 hrs on 8/30/05.

Forecast Operations Next 24 Hour Period: Drill ahead.
Latest Deviation Survey:

Measured Depth (m)	Deviation (degrees)	Azimuth
2386.15	34.7	9.0

Mud Properties:

Density:	990 kg/m ³	Viscosity:	47 s/L
Water Loss:	cm ³ /30 min	pH:	
Comments:			

COMMENTS:

DAILY GEOLOGICAL WELL REPORT

Paramount et al Liard K-29A

Date:	Wednesday, August 31, 2005	Well Report #	8
Report To:	Paul Price / Craig Chappell	Report From:	Ken Glover
Report Period:	Aug. 30 @ 8:00 to Aug. 31 @ 8:00	Site Telephone #	403 451-3136
Kick Off Date:	Aug. 25, 2005	Day From Kick Off:	6
Ground Elevation:	409.60 m	K.B. Elevation:	416.60 m
24:00 Hour Depth:	2463.45 m (MD)	Formation:	Muskwa

24 Hour Progress: 46.84 m
Average Drilling Rate: 2 metres/hour
24:00 Hour Status: Pulling out of hole to change faulty mud motor.

8:00 Hour Depth: 2463.45 (MD) **Formation:** Muskwa
Average Drilling Rate: 3 metres/hour
8:00 Hour Status: Running in hole with new mud motor.

Operations Summary Last 24 Hour Period: Drill ahead from 2416.61 m @ 8:00 hrs on 8/30/05, to 2463.45 m @ 0:00 hrs on 8/31/05. Pull out of hole to change faulty mud motor.

Forecast Operations Next 24 Hour Period: Drill ahead. With bit #2.

Latest Deviation Survey:

Measured Depth (m)	2433.82	Deviation (degrees)	39.4	Azimuth	354.5
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Mud Properties:

Density:	990 kg/m ³	Viscosity:	44 s/L
Water Loss:	cm ³ /30 min	pH:	
Comments:			

COMMENTS:

DAILY GEOLOGICAL WELL REPORT

Paramount et al Liard K-29A

Date:	Thursday, September 1, 2005	Well Report #	9
Report To:	Paul Price	Report From:	Ken Glover
Report Period:	Aug. 31 @ 8:00 to Sept. 1 @ 8:00	Site Telephone #	403 451-3136
Kick Off Date:	Aug. 25, 2005	Day From Kick Off:	7
Ground Elevation:	409.60 m	K.B. Elevation:	416.60 m
24:00 Hour Depth:	2514.01 m (MD)	Formation:	Muskwa

24 Hour Progress: 50.56 m
Average Drilling Rate: 2 metres/hour
24:00 Hour Status: Drilling 5 metre intervals and circulating up samples to find the top of the Nahanni.

8:00 Hour Depth: 2520.84 (MD) **Formation:** Muskwa
Average Drilling Rate: 0 metres/hour
8:00 Hour Status: Stuck in the hole.

Operations Summary Last 24 Hour Period: Run in hole with new mud motor and new bit #3. Drill ahead from 2463.45 m @ 11:00 hrs on 8/31/05, to 2507.00 m @ 20:00 hrs. Begin circulating up samples to locate the top of the Nahanni. Stuck in hole without circulation at 2520.84 m @ 2:30 hrs on 9/01/05. Jarred out 8 metres to 2512 m, freed pipe and regained circulation. Worked pipe and cleaned hole to 2519.68 m. Stuck in hole again at 2519 m. Jarring out again @ 8:00 hrs on 9/01/05.

Forecast Operations Next 24 Hour Period: Clean out bottom of hole and adjust mud properties. Locate top of Nahanni. Clean out trip to prepare for logging.

Latest Deviation Survey:

Measured Depth (m)	Deviation (degrees)	Azimuth
2499.93	43.6	325.0

Mud Properties:

Density:	995 kg/m ³	Viscosity:	45 s/L
Water Loss:	cm ³ /30 min	pH:	
Comments:			

COMMENTS:

DAILY GEOLOGICAL WELL REPORT

Paramount et al Liard K-29A

Date:	Saturday, September 3, 2005	Well Report #	10
Report To:	Paul Price	Report From:	Ken Glover
Report Period:	Sept. 2 @ 8:00 to Sept. 3 @ 8:00	Site Telephone #	403 451-3136
Kick Off Date:	Aug. 25, 2005	Day From Kick Off:	9
Ground Elevation:	409.60 m	K.B. Elevation:	416.60 m
24:00 Hour Depth:	2520.84 m (MD)	Formation:	Muskwa

24 Hour Progress: 0 m
Average Drilling Rate: 0 metres/hour
24:00 Hour Status: Pulling pipe out of hole after backing off with stringshot, at 2429 m.

8:00 Hour Depth: 2520.84 (MD) **Formation:** Muskwa
Average Drilling Rate: 0 metres/hour
8:00 Hour Status: Tripping in the hole with fishing tools.

Operations Summary Last 24 Hour Period: Run in hole with backoff charge on wireline @ 9:00 hrs on 9/03/05. Determine that drill string is stuck at 2455 m. Successfully untwist drill pipe at 2429 m @ 16:45 hrs on 9/03/05, after third attempt. Circulate and condition mud. Pull twisted-off pipe out of hole. Slip and cut drill line. Trip back in hole with fishing tools.

Forecast Operations Next 24 Hour Period: Fish out remainder of drilling assembly.

Latest Deviation Survey:

Measured Depth (m)	Deviation (degrees)	Azimuth
2499.93	43.6	325.0

Mud Properties:

Density:	995 kg/m ³	Viscosity:	76 s/L
Water Loss:	cm ³ /30 min	pH:	
Comments:			

COMMENTS:

DAILY GEOLOGICAL WELL REPORT

Paramount et al Liard K-29A

Date:	Monday, September 5, 2005	Well Report #	11
Report To:	Paul Price	Report From:	Ken Glover
Report Period:	Sept. 4 @ 8:00 to Sept. 5 @ 8:00	Site Telephone #	403 451-3136
Kick Off Date:	Aug. 25, 2005	Day From Kick Off:	11
Ground Elevation:	409.60 m	K.B. Elevation:	416.60 m
24:00 Hour Depth:	2520.84 m (MD)	Formation:	Muskwa

24 Hour Progress: 0 m
Average Drilling Rate: 0 metres/hour
24:00 Hour Status: Running in hole with wireline stringshot.

8:00 Hour Depth: 2520.84 (MD) **Formation:** Muskwa
Average Drilling Rate: 0 metres/hour
8:00 Hour Status: Running in hole with wireline stringshot for backoff attempt at 2457 m.

Operations Summary Last 24 Hour Period: Trip out of hole with washover pipe. Trip in hole with fisherman's jars. Jar on fish with topdrive screwed in. Hold tight on the blocks and run in hole with wireline freepoint. Break free at 2485 m. Pull out freepoint tools and run in with wireline stringshot. Attempt to backoff at 2485.5 m, then at 2475 m, then at 2465.9 m, then at 2457 m.

Forecast Operations Next 24 Hour Period: Attempt to back off with stringshot at 2457 m. Circulate and eventually wash down to the bit. Pull out of hole to make up drilling string. Drill ahead.

Latest Deviation Survey:

Measured Depth (m)	2499.93	Deviation (degrees)	43.6	Azimuth	325.0
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Mud Properties:

Density:	1100 kg/m ³	Viscosity:	76 s/L
Water Loss:	10 cm ³ /30 min	pH:	5.7
Comments:			

COMMENTS:

DAILY GEOLOGICAL WELL REPORT

Paramount et al Liard K-29A

Date:	Tuesday, September 6, 2005	Well Report #	12
Report To:	Paul Price	Report From:	Ken Glover
Report Period:	Sept. 5 @ 8:00 to Sept. 6 @ 8:00	Site Telephone #	403 451-3136
Kick Off Date:	Aug. 25, 2005	Day From Kick Off:	12
Ground Elevation:	409.60 m	K.B. Elevation:	416.60 m
24:00 Hour Depth:	2520.84 m (MD)	Formation:	Muskwa

24 Hour Progress: 0 m

Average Drilling Rate: 0 metres/hour

24:00 Hour Status: Washing down to 2479.2 m with washover pipe.

8:00 Hour Depth: 2520.84 (MD) **Formation:** Muskwa

Average Drilling Rate: 0 metres/hour

8:00 Hour Status: Laying down washover pipe.

Operations Summary Last 24 Hour Period: Run in hole with wireline stringshot and back off @ 2457 m. Trip out of hole, pick up wash pipe, and trip in hole. Wash down with washover pipe from 2467 m to 2479.2 m. Trip out of hole to lay down washover pipe.

Forecast Operations Next 24 Hour Period:

Latest Deviation Survey:

Measured Depth (m)	2499.93	Deviation (degrees)	43.6	Azimuth	325.0
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Mud Properties:

Density:	1120 kg/m ³	Viscosity:	73 s/L
Water Loss:	cm ³ /30 min	pH:	
Comments:			

COMMENTS:

DAILY GEOLOGICAL WELL REPORT

Paramount et al Liard K-29A

Date:	Wednesday, September 7, 2005	Well Report #	13
Report To:	Paul Price	Report From:	Ken Glover
Report Period:	Sept. 6 @ 8:00 to Sept. 7 @ 8:00	Site Telephone #	403 451-3136
Kick Off Date:	Aug. 25, 2005	Day From Kick Off:	13
Ground Elevation:	409.60 m	K.B. Elevation:	416.60 m
24:00 Hour Depth:	2520.84 m (MD)	Formation:	Muskwa

24 Hour Progress: 0 m
Average Drilling Rate: 0 metres/hour
24:00 Hour Status: Pulling out of hole after setting abandonment plug.

8:00 Hour Depth: 2520.84 (MD) **Formation:** Muskwa
Average Drilling Rate: 0 metres/hour
8:00 Hour Status: Tripping in hole with bit.

Operations Summary Last 24 Hour Period: Trip out of hole to lay down washover pipe. Trip in hole. Condition mud and circulate. Set cement abandonment plug from 2435 m to 2220 m. Finish cement job @ 21:15 hrs on 9/06/05. Pull out of hole. Trip in hole with bit.

Forecast Operations Next 24 Hour Period: Trip in hole with bit. Tag abandonment plug with bit. Trip out of hole, pick up directional tools and wait for cement to cure. Begin drilling sidetrack well.

Latest Deviation Survey Above Plug:

Measured Depth (m)	True Vertical Depth (m)	Inclination (degrees)	Azimuth (degrees)
2214.96	2173.34	26.10	16.60

Mud Properties:

Density:	1140 kg/m ³	Viscosity:	63 s/L
Water Loss:	cm ³ /30 min	pH:	
Comments:			

COMMENTS:

DAILY GEOLOGICAL WELL REPORT

Paramount et al Liard K-29A2 (sidetrack)

Date:	Thursday, September 8, 2005	Well Report #	14
Report To:	Paul Price	Report From:	Ken Glover
Report Period:	Sept. 7 @ 8:00 to Sept. 8 @ 8:00	Site Telephone #	403 451-3136
Kick Off Date:	Aug. 25, 2005	Day From Kick Off:	14
Ground Elevation:	409.60 m	K.B. Elevation:	416.60 m
24:00 Hour Depth:	2290 m (MD)	Formation:	Muskwa

24 Hour Progress: 2.32 m

Average Drilling Rate: 0 metres/hour

24:00 Hour Status: Running in hole with directional tools.

8:00 Hour Depth: 2309.58 (MD) **Formation:** Muskwa

Average Drilling Rate: 0.7 metres/hour

8:00 Hour Status: Control drilling .

Operations Summary Last 24 Hour Period: Trip in hole with bit. Tag abandonment plug and drill green cement down to 2247.61 m @ 10:30 hrs on 9/07/05. Circulate and wait for cement to cure. Drill harder cement down to 2290 m @ 16:00 hrs on 9/07/05. Pull out of hole to pick up directional tools. Trip in hole and wash down to 2307 m. Begin directional control drilling out of cement plug @ 2307.26 m @ 4:30 hrs on 9/08/05.

Forecast Operations Next 24 Hour Period: Control drill out of cement plug. Drill ahead in sidetrack well.

Latest Deviation Survey Above Plug:

Measured Depth (m)	True Vertical Depth (m)	Inclination (degrees)	Azimuth (degrees)
2300.44	2246.46	35.20	12.90

Mud Properties:

Density: 1155 kg/m³

Water Loss: cm³/30 min

Comments:

Viscosity: 58 s/L

pH:

DAILY GEOLOGICAL WELL REPORT

Paramount et al Liard K-29A

Date:	Friday, September 9, 2005	Well Report #	15
Report To:	Paul Price	Report From:	Ken Glover
Report Period:	Sept. 8 @ 8:00 to Sept. 9 @ 8:00	Site Telephone #	403 451-3136
Kick Off Date:	Aug. 25, 2005	Day From Kick Off:	15
Ground Elevation:	409.60 m	K.B. Elevation:	416.60 m
24:00 Hour Depth:	2317.96 m (MD)	Formation:	Muskwa

24 Hour Progress: 0 m
Average Drilling Rate: 0 metres/hour
24:00 Hour Status: Sidetracking out of cement plug.

8:00 Hour Depth:	2322.61 m (MD)	Formation:	Muskwa
Average Drilling Rate:	0 metres/hour		
8:00 Hour Status:	Pulling out of hole after sidetracking out of cement plug.		

Operations Summary Last 24 Hour Period: Control drill with tricone bit, attempt to kickoff out of cement plug from 2307.46 m to 2317.47 m. Pull out of hole to put on sidetrack bit, run in hole with sidetrack bit. Control drill with sidetrack bit, attempt to kickoff out of cement plug from 2317.47 to 2322.64 m. Begin drilling into Muskwa @ about 2318 m.

Forecast Operations Next 24 Hour Period: Finish drilling kickoff @ 2323 m. Pull out of hole. Run in hole with tricone bit. Drill ahead from sidetrack kickoff point.

Latest Deviation Survey Above Cement Plug:

Measured Depth (m)	True Vertical Depth (m)	Inclination (degrees)	Azimuth (degrees)
2310.01	2254.27	35.50	12.90

Mud Properties:

Density:	1180 kg/m ³	Viscosity:	58 s/L
Water Loss:	cm ³ /30 min	pH:	
Comments:			

COMMENTS:

Begin drilling new hole into Muskwa @ about 2318 m.

DAILY GEOLOGICAL WELL REPORT

Paramount et al Liard K-29A

Date:	Saturday, September 10, 2005	Well Report #	16
Report To:	Paul Price	Report From:	Ken Glover
Report Period:	Sept. 9 @ 8:00 to Sept. 10 @ 8:00	Site Telephone #	403 451-3136
Kick Off Date:	Aug. 25, 2005	Day From Kick Off:	16
Ground Elevation:	409.60 m	K.B. Elevation:	416.60 m
24:00 Hour Depth:	2344.6 m (MD)	Formation:	Muskwa

24 Hour Progress: 0 m

Average Drilling Rate: 0 metres/hour

24:00 Hour Status: Drilling through cement plug, searching for hard cement.

8:00 Hour Depth: 2375.0 m (MD) **Formation:** Muskwa

Average Drilling Rate: 0 metres/hour

8:00 Hour Status: Running in hole and waiting for cementers.

Operations Summary Last 24 Hour Period: Finish drilling with sidetrack bit to 2322.72 m. Pull out of hole. Run in hole with tricone bit. Attempted to drill ahead from kickoff point but encountered soft cement. Drilled out cement plug to 2375.0 m @ 2:20 hrs on 9/10/05. Pull out of hole and prepare to run new cement plug.

Forecast Operations Next 24 Hour Period: Run in hole and cement new abandonment plug. Wait for cement to cure.

Latest Deviation Survey:

Measured Depth (m)	True Vertical Depth (m)	Inclination (degrees)	Azimuth (degrees)
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Mud Properties:

Density:	1200 kg/m ³	Viscosity:	58 s/L
Water Loss:	cm ³ /30 min	pH:	
Comments:			

COMMENTS:

DAILY GEOLOGICAL WELL REPORT

Paramount et al Liard K-29A

Date:	Sunday, September 11, 2005	Well Report #	17
Report To:	Paul Price	Report From:	Ken Glover
Report Period:	Sept. 10 @ 8:00 to Sept. 11 @ 8:00	Site Telephone #	403 451-3136
Kick Off Date:	Aug. 25, 2005	Day From Kick Off:	17
Ground Elevation:	409.60 m	K.B. Elevation:	416.60 m
24:00 Hour Depth:	0 m (MD)	Formation:	Muskwa

24 Hour Progress: 0 m
Average Drilling Rate: 0 metres/hour
24:00 Hour Status: Running in hole to polish cement plug.

8:00 Hour Depth: 0 m (MD) **Formation:** Muskwa
Average Drilling Rate: 0 metres/hour
8:00 Hour Status: Circulating and waiting on cement.

Operations Summary Last 24 Hour Period: Run in hole. Cement plug #2 from 2375 to 2220 m. Pull out of hole. Run in hole with bit and polish plug. Circulate and wait on cement.

Forecast Operations Next 24 Hour Period: Circulate and polish cement plug. Wait for cement to cure.

Latest Deviation Survey:

Measured Depth (m)	True Vertical Depth (m)	Inclination (degrees)	Azimuth (degrees)
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Mud Properties:

Density:	1210 kg/m ³	Viscosity:	66 s/L
Water Loss:	cm ³ /30 min	pH:	
Comments:	Bringing up viscosity with barite.		

COMMENTS:

DAILY GEOLOGICAL WELL REPORT

Paramount et al Liard K-29A

Date:	Monday, September 12, 2005	Well Report #	18
Report To:	Paul Price	Report From:	Ken Glover
Report Period:	Sept. 11 @ 8:00 to Sept. 12 @ 8:00	Site Telephone #	403 451-3136
Kick Off Date:	Aug. 25, 2005	Day From Kick Off:	18
Ground Elevation:	409.60 m	K.B. Elevation:	416.60 m
24:00 Hour Depth:	0 m (MD)	Formation:	Muskwa

24 Hour Progress: 0 m
Average Drilling Rate: 0 metres/hour
24:00 Hour Status: Circulating and waiting for cement.

8:00 Hour Depth: 0 m (MD) **Formation:** Muskwa
Average Drilling Rate: 0 metres/hour
8:00 Hour Status: Circulating and waiting for cement.

Operations Summary Last 24 Hour Period: Polish cement plug, circulate and wait on cement.

Forecast Operations Next 24 Hour Period: Circulate, polish cement plug, trip out of hole to put on sidetrack bit, run in hole and drill sidetrack kickoff hole.

Latest Deviation Survey:

Measured Depth (m)	True Vertical Depth (m)	Inclination (degrees)	Azimuth (degrees)
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Mud Properties:

Density:	1235 kg/m ³	Viscosity:	60 s/L
Water Loss:	cm ³ /30 min	pH:	
Comments:			

COMMENTS:

DAILY GEOLOGICAL WELL REPORT

Paramount et al Liard K-29A

Date:	Tuesday, September 13, 2005	Well Report #	19
Report To:	Paul Price	Report From:	Ken Glover
Report Period:	Sept. 12 @ 8:00 to Sept. 13 @ 8:00	Site Telephone #	403 451-3136
Kick Off Date:	Aug. 25, 2005	Day From Kick Off:	19
Ground Elevation:	409.60 m	K.B. Elevation:	416.60 m
24:00 Hour Depth:	2295.63 m (MD)	Formation:	Muskwa

24 Hour Progress: 0.63 m
Average Drilling Rate: 0 metres/hour
24:00 Hour Status: Drilling sidetrack kickoff hole.

8:00 Hour Depth: 2298.12 m (MD) **Formation:** Muskwa
Average Drilling Rate: 0 metres/hour
8:00 Hour Status: Pulling out of hole after drilling sidetrack kickoff hole.

Operations Summary Last 24 Hour Period: Polish cement plug, circulate and wait on cement. Pull out of hole. Run in hole with sidetrack bit. Drill sidetrack kickoff hole to 2298.12 m @ 6:00 hrs on 9/13/05. Begin pulling out of hole.

Forecast Operations Next 24 Hour Period: Pull out of hole. Run in hole with tricone bit. Drill ahead in sidetrack hole.

Latest Deviation Survey Above Sidetrack Kickoff:

Measured Depth 2290.86 (m)	True Vertical Depth 2238.61 (m)	Inclination 34.60 (degrees)	Azimuth 14.30 (degrees)
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Mud Properties:

Density: 1225 kg/m ³	Viscosity: 62 s/L
Water Loss: cm ³ /30 min	pH:
Comments:	

COMMENTS:

DAILY GEOLOGICAL WELL REPORT

Paramount et al Liard K-29A

Date:	Wednesday, September 14, 2005	Well Report #	20
Report To:	Paul Price	Report From:	Ken Glover
Report Period:	Sept. 13 @ 8:00 to Sept. 14 @ 8:00	Site Telephone #	403 451-3136
Kick Off Date:	Aug. 25, 2005	Day From Kick Off:	20
Ground Elevation:	409.60 m	K.B. Elevation:	416.60 m
24:00 Hour Depth:	2301.33 m (MD)	Formation:	Muskwa

24 Hour Progress: 5.7 m
Average Drilling Rate: 0.3 metres/hour
24:00 Hour Status: Drilling ahead in sidetrack hole.

8:00 Hour Depth: 2318.14 m (MD) **Formation:** Muskwa
Average Drilling Rate: 2 to 3 metres/hour
8:00 Hour Status: Pulling out of hole after drilling sidetrack kickoff hole.

Operations Summary Last 24 Hour Period: Pull out of hole. Run in hole with tricone bit. Ease tricone bit into sidetrack kickoff hole. Drill ahead in sidetrack hole.

Forecast Operations Next 24 Hour Period: Drill ahead.

Latest Deviation Survey Above Sidetrack Kickoff:

Measured Depth	True Vertical Depth	Inclination	Azimuth
2290.86 (m)	2238.61 (m)	34.60 (degrees)	14.30 (degrees)

Mud Properties:

Density:	1230 kg/m ³	Viscosity:	65 s/L
Water Loss:	cm ³ /30 min	pH:	
Comments:			

COMMENTS:

DAILY GEOLOGICAL WELL REPORT

Paramount et al Liard K-29A

Date:	Thursday, September 15, 2005	Well Report #	21
Report To:	Paul Price	Report From:	Ken Glover
Report Period:	Sept. 14 @ 7:00 to Sept. 15 @ 7:00	Site Telephone #	403 451-3136
Kick Off Date:	Aug. 25, 2005	Day From Kick Off:	21
Ground Elevation:	409.60 m	K.B. Elevation:	416.60 m
24:00 Hour Depth:	2349.3 m (MD)	Formation:	Muskwa

24 Hour Progress: 48 m
Average Drilling Rate: 2 metres/hour
24:00 Hour Status: Drilling ahead in sidetrack hole.

7:00 Hour Depth: 2361.6 m (MD) **Formation:** Muskwa
Average Drilling Rate: 1 - 2 m/h sliding; 2 - 3 m/h rotating
7:00 Hour Status: Drilling ahead in sidetrack hole.

Operations Summary Last 24 Hour Period: Drill ahead.

Forecast Operations Next 24 Hour Period: Drill ahead.

Latest Deviation Survey:

Measured Depth	True Vertical Depth	Inclination	Azimuth
2338.32 (m)	~2275 (m)	27.4 (degrees)	3.4 (degrees)

Mud Properties:

Density:	1230 kg/m ³	Viscosity:	62 s/L
Fluid Loss:	7.38 m ³ /100 m	Yield Point:	5.5 Pa
Comments:	Maintaining high yield point for hole stability.		

COMMENTS:

DAILY GEOLOGICAL WELL REPORT

Paramount et al Liard K-29A

Date:	Friday, September 16, 2005	Well Report #	22
Report To:	Paul Price	Report From:	Ken Glover
Report Period:	Sept. 15 @ 7:00 to Sept. 16 @ 7:00	Site Telephone #	403 451-3136
Kick Off Date:	Aug. 25, 2005	Day From Kick Off:	22
Ground Elevation:	409.60 m	K.B. Elevation:	416.60 m
24:00 Hour Depth:	2366.76 m (MD)	Formation:	Muskwa

24 Hour Progress: 17.5 m
Average Drilling Rate: 0.7 metres/hour
24:00 Hour Status: Drilling ahead in sidetrack hole.

7:00 Hour Depth: 2384.22 m (MD) **Formation:** Muskwa
Average Drilling Rate: 1 - 3 m/h sliding; 4 - 5 m/h rotating
7:00 Hour Status: Drilling ahead in sidetrack hole.

Operations Summary Last 24 Hour Period: Pull out of hole @ 8:00 hrs on 9/15/05. Change bits, mud motor and MWD batteries. Run in hole and begin drilling ahead again @ 22:30 hrs on 9/15/05.

Forecast Operations Next 24 Hour Period: Drill ahead.

Latest Deviation Survey:

Measured Depth 2365.7 (m)	True Vertical Depth ~2290 (m)	Inclination 28.8 (degrees)	Azimuth 352.2 (degrees)
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Mud Properties:

Density: 1235 kg/m ³	Viscosity: 66 s/L
Fluid Loss: 7.40 m ³ /100 m	Yield Point: 5.5 Pa
Comments: Maintaining high yield point for hole stability.	

COMMENTS:

DAILY GEOLOGICAL WELL REPORT

Paramount et al Liard K-29A

Date:	Saturday, September 17, 2005	Well Report #	23
Report To:	Paul Price	Report From:	Ken Glover
Report Period:	Sept. 15 @ 7:00 to Sept. 16 @ 7:00	Site Telephone #	403 451-3136
Kick Off Date:	Aug. 25, 2005	Day From Kick Off:	23
Ground Elevation:	409.60 m	K.B. Elevation:	416.60 m
24:00 Hour Depth:	2427.56 m (MD)	Formation:	Muskwa

24 Hour Progress: 60.78 m
Average Drilling Rate: 2.5 metres/hour
24:00 Hour Status: Drilling ahead in sidetrack hole.

7:00 Hour Depth: 2443.19 m (MD) **Formation:** Muskwa
Average Drilling Rate: 1 – 3 m/h sliding; 2 - 4 m/h rotating
7:00 Hour Status: Drilling ahead in sidetrack hole.

Operations Summary Last 24 Hour Period: Drill ahead.

Forecast Operations Next 24 Hour Period: Drill ahead.

Latest Deviation Survey:

Measured Depth	True Vertical Depth	Inclination	Azimuth
2422.89 (m)	~2348 (m)	27.9 (degrees)	340.6 (degrees)

Mud Properties:

Density:	1240 kg/m ³	Viscosity:	64 s/L
Fluid Loss:	6.77 m ³ /100 m	Yield Point:	5.5 Pa
Comments:	Maintaining high yield point for hole stability.		

COMMENTS:

DAILY GEOLOGICAL WELL REPORT

Paramount et al Liard K-29A

Date:	Sunday, September 18, 2005	Well Report #	24
Report To:	Paul Price	Report From:	Ken Glover
Report Period:	Sept. 17 @ 7:00 to Sept. 18 @ 7:00	Site Telephone #	403 451-3136
Kick Off Date:	Aug. 25, 2005	Day From Kick Off:	24
Ground Elevation:	409.60 m	K.B. Elevation:	416.60 m
24:00 Hour Depth:	2468.75 m (MD)	Formation:	Muskwa

24 Hour Progress: 41.19 m
Average Drilling Rate: 1.7 metres/hour
24:00 Hour Status: Pulling out of hole to examine bit and mud motor.

7:00 Hour Depth: 2468.75 m (MD) **Formation:** Muskwa
Average Drilling Rate: 0 m/hr
7:00 Hour Status: Back in hole, preparing to drill ahead with new bit.

Operations Summary Last 24 Hour Period: Drill ahead to 2468.75 mMD @ 21:10 hrs on 9/17/05. Pull out of hole to change bits. Run in hole with new bit.

Forecast Operations Next 24 Hour Period: Drill ahead.

Latest Deviation Survey:

Measured Depth	True Vertical Depth	Inclination	Azimuth
2451.41 (m)	~2379 (m)	30.4 (degrees)	340.7 (degrees)

Mud Properties:

Density:	1240 kg/m ³	Viscosity:	63 s/L
Fluid Loss:	6.77 m ³ /100 m	Yield Point:	6.5 Pa
Comments:	Maintaining high yield point for hole stability.		

COMMENTS:

DAILY GEOLOGICAL WELL REPORT

Paramount et al Liard K-29A

Date:	Monday, September 19, 2005	Well Report #	25
Report To:	Paul Price	Report From:	Ken Glover
Report Period:	Sept. 18 @ 7:00 to Sept. 19 @ 7:00	Site Telephone #	403 451-3136
Kick Off Date:	Aug. 25, 2005	Day From Kick Off:	25
Ground Elevation:	409.60 m	K.B. Elevation:	416.60 m
24:00 Hour Depth:	2502.6 m (MD)	Formation:	Muskwa

24 Hour Progress: 33.85 m
Average Drilling Rate: 2.1 metres/hour
24:00 Hour Status: Drilling ahead.

7:00 Hour Depth: 2511.00 m (MD) **Formation:** Muskwa
Average Drilling Rate: 2 m/hr
7:00 Hour Status: Drilling ahead.

Operations Summary Last 24 Hour Period: Drill ahead from 2468.75 mMD @ 8:00 hrs on 9/18/05 with new bit.

Forecast Operations Next 24 Hour Period: Drill ahead, locate top of Nahanni.

Latest Deviation Survey:

Measured Depth	True Vertical Depth	Inclination	Azimuth
2489.72 (m)	2410.82 (m)	37.7 (degrees)	336.4 (degrees)

Mud Properties:

Density:	1245 kg/m ³	Viscosity:	65 s/L
Fluid Loss:	6.51 m ³ /100 m	Yield Point:	6.0 Pa
Comments:	Maintaining high yield point for hole stability.		

COMMENTS:

Baker Atlas has been alerted to be onsite by 20:00 hrs on Sept. 19.

DAILY GEOLOGICAL WELL REPORT

Paramount et al Liard K-29A

Date:	Tuesday, September 20, 2005	Well Report #	26
Report To:	Paul Price	Report From:	Ken Glover
Report Period:	Sept. 19 @ 7:00 to Sept. 20 @ 7:00	Site Telephone #	403 451-3136
Kick Off Date:	Aug. 25, 2005	Day From Kick Off:	26
Ground Elevation:	409.60 m	K.B. Elevation:	416.60 m
24:00 Hour Depth:	2540.0 m (MD)	Formation:	Muskwa

24 Hour Progress: 37.4 m
Average Drilling Rate: 1.6 metres/hour
24:00 Hour Status: Drilling ahead, looking for the Nahanni.

7:00 Hour Depth: 2552.7 m (MD) **Formation:** Muskwa
Average Drilling Rate: 1.5 to 2 m/hr
7:00 Hour Status: Drilling ahead, looking for the Nahanni.

Operations Summary Last 24 Hour Period: Drill ahead.

Forecast Operations Next 24 Hour Period: Drill ahead, locate top of Nahanni. Drill at least 5 metres into the Nahanni. Wiper trip. Prepare for logging.

Latest Deviation Survey:

Measured Depth 2536.72 (m)	True Vertical Depth ~2443 (m)	Inclination 43.9 (degrees)	Azimuth 333.4 (degrees)
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Mud Properties:

Density: 1250 kg/m ³	Viscosity: 66 s/L
Fluid Loss: 6.23 m ³ /100 m	Yield Point: 6.0 Pa
Comments: Maintaining high yield point for hole stability.	

COMMENTS:

Baker Atlas arrived onsite at 18:30 hrs on Sept. 19.

DAILY GEOLOGICAL WELL REPORT

Paramount et al Liard K-29A

Date:	Wednesday, September 21, 2005	Well Report #	27
Report To:	Paul Price	Report From:	Ken Glover
Report Period:	Sept. 20 @ 7:00 to Sept. 21 @ 7:00	Site Telephone #	403 451-3136
Kick Off Date:	Aug. 25, 2005	Day From Kick Off:	27
Ground Elevation:	409.60 m	K.B. Elevation:	416.60 m
24:00 Hour Depth:	2566.0 m (MD)	Formation:	Nahanni

24 Hour Progress: 26 m
Average Drilling Rate: 2 metres/hour
24:00 Hour Status: Pulling out of hole to lay down directional tools.

7:00 Hour Depth: 2566.0 m (MD) **Formation:** Nahanni
Average Drilling Rate: m/hr
7:00 Hour Status: Logging.

Operations Summary Last 24 Hour Period: Drill ahead into Nahanni dolomite. Reach intermediate casing point @ 2566 mMD (2465 mTVD) @ 14:15 hrs on 9/20/05. Wiper trip to clean hole and prepare for logging. Rig in loggers @ ??? hrs on 9/21/05. Loggers on bottom @ 7:00 hrs.

Forecast Operations Next 24 Hour Period: Finish logging. Run intermediate casing.

Latest Deviation Survey:

Measured Depth 2536.72 (m)	True Vertical Depth ~2443 (m)	Inclination 43.9 (degrees)	Azimuth 333.4 (degrees)
Projection to ICP: 2566.00 (m)	2465.17 (m)	52.37	330.0

Mud Properties:

Density:	1240 kg/m ³	Viscosity:	65 s/L
Fluid Loss:	6.03 m ³ /100 m	Yield Point:	7.0 Pa
Comments:	Added 130 kg of Gilsonite.		

COMMENTS:

DAILY GEOLOGICAL WELL REPORT

Paramount et al Liard K-29A

Date:	Thursday, September 22, 2005	Well Report #	28
Report To:	Paul Price	Report From:	Ken Glover
Report Period:	Sept. 21 @ 7:00 to Sept. 22 @ 7:00	Site Telephone #	403 451-3136
Kick Off Date:	Aug. 25, 2005	Day From Kick Off:	28
Ground Elevation:	409.60 m	K.B. Elevation:	416.60 m
24:00 Hour Depth:	2566.0 m (MD)	Formation:	Nahanni

24 Hour Progress: m
Average Drilling Rate: metres/hour
24:00 Hour Status: Rigging up loggers.

7:00 Hour Depth:	2566.0 m (MD)	Formation:	Nahanni
Average Drilling Rate:	m/hr		
7:00 Hour Status:	Logging with OBMI.		

Operations Summary Last 24 Hour Period: Logging run #1 with neutron, densilog, sonic, induction and gamma. Problems communicating with neutron and induction. Bottom depth reached was 2552 m. Tight spot around 2240. Clean out trip with rotary assembly after first log run. Begin rigging up loggers for logging run # 2 with new set of logging tools at 0:15 hrs on 9/22/05. Total depth reached on logging run #2 is 2568 m. Finish logging run #2 at 5:45 hrs on 9/22/05. Run in hole with logging run #3 - Oil Based Mud Formation Imager.

Forecast Operations Next 24 Hour Period: Finish logging. Run intermediate casing.

COMMENTS:

Well Information

Operator:	Paramount Resources Ltd.				
Well Name:	Paramount et al Liard K-29A sidetrack				
Location:	K-29A				
UWI:	300k296030123303				
Pool:	N/A				
Field:	Liard K-29				
Province / State:	Northwest Territories				
Country:	Canada				

Elevations

Reference:	Ground	Ground:	409.6 m
Cut(-) / Fill(+):		Kelly Bushing:	416.4 m
K.B. to Ground:	6.8 m	Casing Flange:	m

Total Depth

Measurement Type	Measured Depth	True Vertical Depth
Drillers TD (Tally)	2566 m	2465.17 m
Drillers TD (Strap or SLM)	m	m
Loggers TD	2568 m	2466.5 m

Surface Co - Ordinates

Well Type:	Deviated	Longitude:	123 35 4.100	Latitude:	60 28 41.040
N / S Co - Ordinates:	6704591.45				
E / W Co - Ordinates:	467870.02				

Bottom Hole Co - Ordinates

Longitude:		Latitude:
N / S Co - Ordinates:		
E / W Co - Ordinates:		

Drilling Fluid Summary

Fluid Type	From	To	Type	Hole Size	Casing Size	Landed At
Produced Water	1853 m	1860 m				
Invert	1860 m	2520 m				

Casing Summary

Type	Hole Size	Casing Size	Landed At
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Well Summary

Spud Date:	Aug 25, 2005 @ 05:00hrs	Contractor:	Akita Drilling Rig #58
TD Date:	Sep 20, 2005 @ 14:15hrs	Rig Release Date:	

Work Schedule

Contractor	Geologist	Log Interval	Dates Logged
Chalce Resources	Ken Glover	1855 m - 2520 m	Aug 24, 2005 - Sep 12, 2005
Chalce Resources	Ken Glover	2295 m - 2566 m	Sep 13, 2005 - Sep 22, 2005

Remarks

Legend

Rock Types and Thin Beds							
Whole Bed	Stringer	Nodule	Breccia	Clast	Pebble	Grain	Rock Type
							Anhydrite - primary
							Anhydrite - secondary
							Argillite
							Barite
							Bentonitic
							Bituminous
							Calcareous
							Carbonaceous
							Cherty - dark
							Cherty - fossiliferous
							Cherty - light
							Cherty - tripolitic
							Cherty - varicolored
							Cement
							Conglomerate - mixed
							Conglomerate - dark chert
							Conglomerate - light chert
							Conglomerate - varicolored chert
							Chert - dark
							Chert - fossiliferous
							Chert - light
							Chert - tripolitic
							Chert - varicolored
							Claystone - colored
							Claystone - gray
							Coal
							Dolomite
							Ferruginous
							Feldspar
							Gypsum
							Igneous - acidic
							Igneous - basic
							Igneous - metamorphic
							Limestone - grain supported
							Limestone - mud supported
							Manganese
							Marlstone - calcareous
							Marlstone - dolomitic
							Mudstone
							Paleosol
							Phosphate
							Pyrite
							Quartz
							Salt
							Shale - black
							Shale - dark gray
							Shale - medium gray
							Shale - light gray
							Shale - brown
							Shale - green
							Shale - red
							Siderite
							Sandstone
							Siltstone
							Till - glacial
							Volcanic (Tuff)
							Welded Volcanic (Tuff)

Accessories

Anhydritic	Gibbsitic
Argillaceous	Illitic
Baritic	Kaolinitic
Bentonitic	Lithic Fragment
Bituminous	Marly - calcareous
Calcareous	Marly - dolomitic
Carbonaceous	Micromicaceous
Cherty - dark	Mixed layer clayey
Cherty - fossiliferous	Montmorillonitic
Cherty - light	Phosphate pellets
Cherty - tripolitic	Pyritic
Cherty - varicolored	Salt casts
Chloritic	Sandy
Clayey	Sideritic
Dolomitic	Siliceous
Ferruginous staining	Silty
Fractures	Styloitic
Glaucousitic	Tuffaceous
Gypsiferous	Zeolitic

Fossils (Rock Builders)

Aggregate grains	Euryamphipora
Algae - laminations	Foraminifera
Algae - non descript	Fossil
Algae - ootoid	Fragmental
Algae - skeletal	Gastropod
Amphipora	Graptolite
Belemnite	Hydrozoa
Bioclastic	Intraclast
Brachiopod	Mollusc
Bryozoa	Oncolite
Calciphraea	Oolite
Cephalopod	Ostracod
Chonetes	Pelecypod
Coated grain	Pellet
Conodont	Pisolite
Coral	Plant Remains
Coral - branching	Scaphopod
Coral - head	Spicule
Coral - colonial	Sponge
Coral - solitary	Stromatoporoid
Crinoid	Stromatoporoid - bulbous
Diatom	Stromatoporoid - massive
Echinoid	Stromatoporoid - tabular
Echoid - spine	Tentaculites
Fish Remains	Trilobite

Matrix

Argillaceous	Marl - dolomitic
Bentonitic	Micrite
Bituminous	Mixed Clay
Clay	Montmorillonite
Chlorite	Sand
Gibbsite	Silt
Illite	Sparry Calcite
Kaolinite	Zeolite
Marl - calcareous	

Miscellaneous Grains

Anhydritic	Gibbsitic
Argillaceous	Illitic
Baritic	Kaolinitic
Bentonitic	Lithic Fragment
Bituminous	Marly - calcareous
Calcareous	Marly - dolomitic
Carbonaceous	Micromicaceous
Cherty - dark	Mixed layer clayey
Cherty - fossiliferous	Montmorillonitic
Cherty - light	Phosphate pellets
Cherty - tripolitic	Pyritic
Cherty - varicolored	Salt casts
Chloritic	Sandy
Clayey	Sideritic
Dolomitic	Siliceous
Ferruginous staining	Silty
Fractures	Styloitic
Glaucousitic	Tuffaceous
Gypsiferous	Zeolitic

Textures

Aggregate grains	Euryamphipora
Algae - laminations	Foraminifera
Algae - non descript	Fossil
Algae - ootoid	Fragmental
Algae - skeletal	Gastropod
Amphipora	Graptolite
Belemnite	Hydrozoa
Bioclastic	Intraclast
Brachiopod	Mollusc
Bryozoa	Oncolite
Calciphraea	Oolite
Cephalopod	Ostracod
Chonetes	Pelecypod
Coated grain	Pellet
Conodont	Pisolite
Coral	Plant Remains
Coral - branching	Scaphopod
Coral - head	Spicule
Coral - colonial	Sponge
Coral - solitary	Stromatoporoid
Crinoid	Stromatoporoid - bulbous
Diatom	Stromatoporoid - massive
Echinoid	Stromatoporoid - tabular
Echoid - spine	Tentaculites
Fish Remains	Trilobite

Porosity Type Track

Very poorly sorted - > 10 phi size grade classes	
Poorly sorted - 6-10 phi size grade classes	
Moderately sorted - 3-6 phi size grade classes	
Moderately well sorted - 2-3 phi size grade classes	
Well sorted - < 2 phi size grade classes	

Oil Show Track

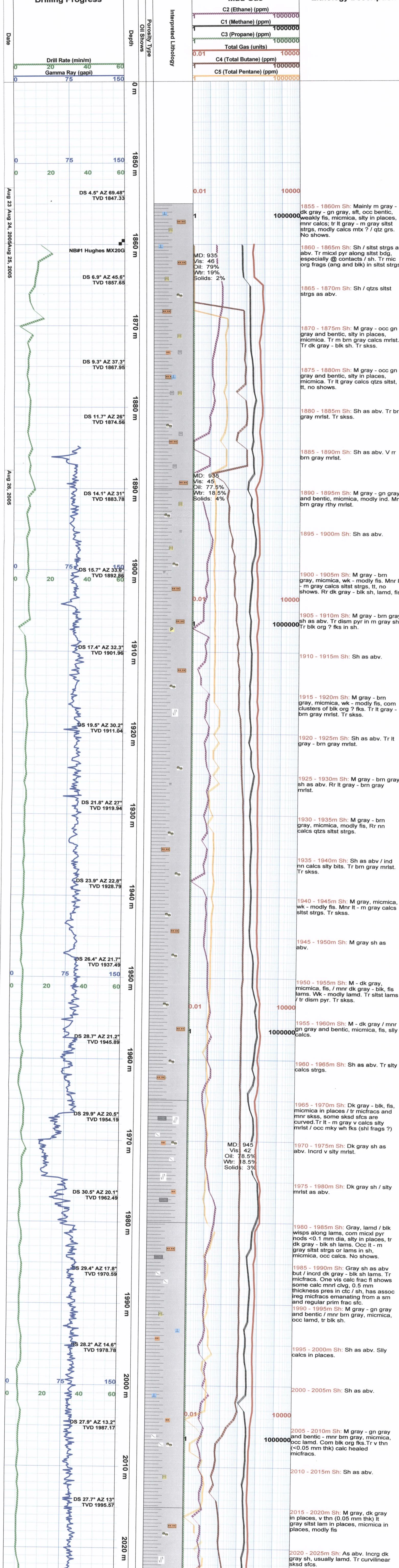
Even staining (75 - 100% of the rock is stained) - fluoresces in solvent	
Spotted staining (50 - 75% of the rock is stained) - fluoresces in solvent	
Spotted staining (25 - 50% of the rock is stained) - fluoresces in solvent	
Questionable oil staining - No fluoresces in solvent	
Dead oil staining - asphaltic - bitumen - pyrobitumen etc.	
Fluoresces - no visible oil staining	

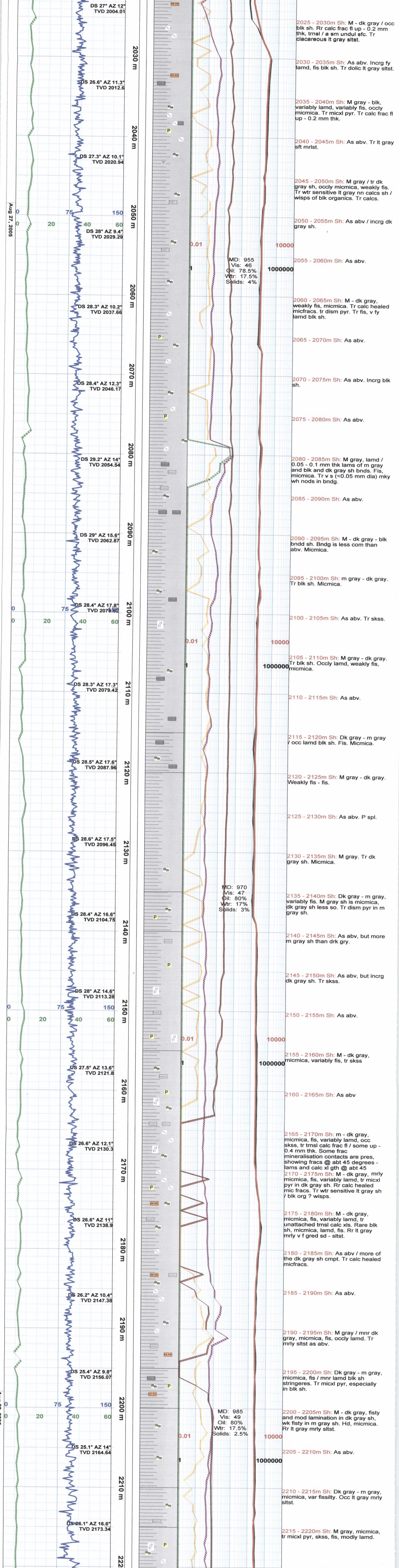
Porosity Type Track

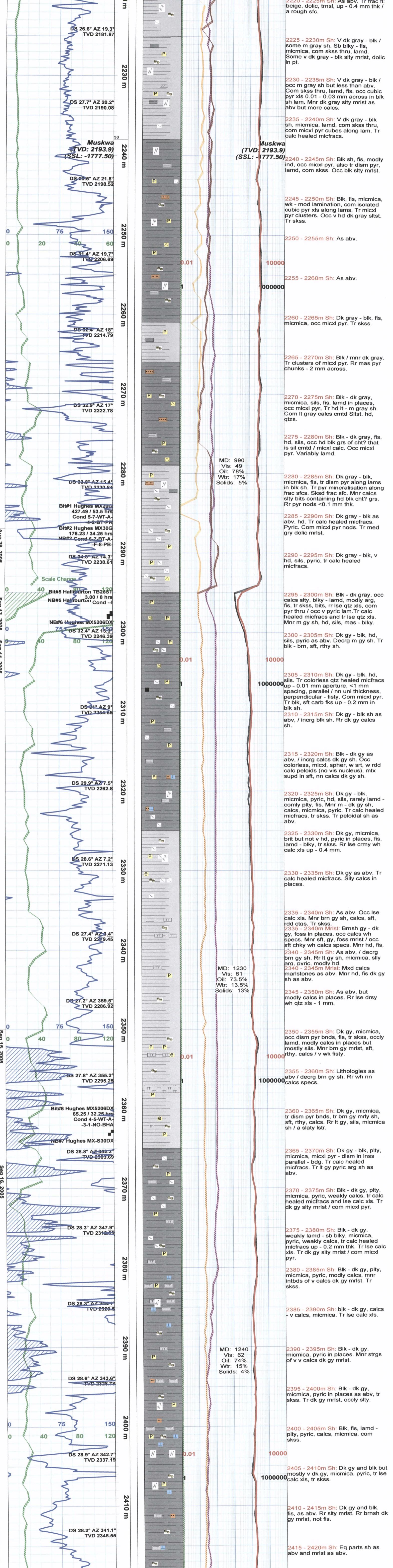
Very poorly sorted - > 10 phi size grade classes	
Poorly sorted - 6-10 phi size grade classes	
Moderately sorted - 3-6 phi size grade classes	
Moderately well sorted - 2-3 phi size grade classes	
Well sorted - < 2 phi size grade classes	

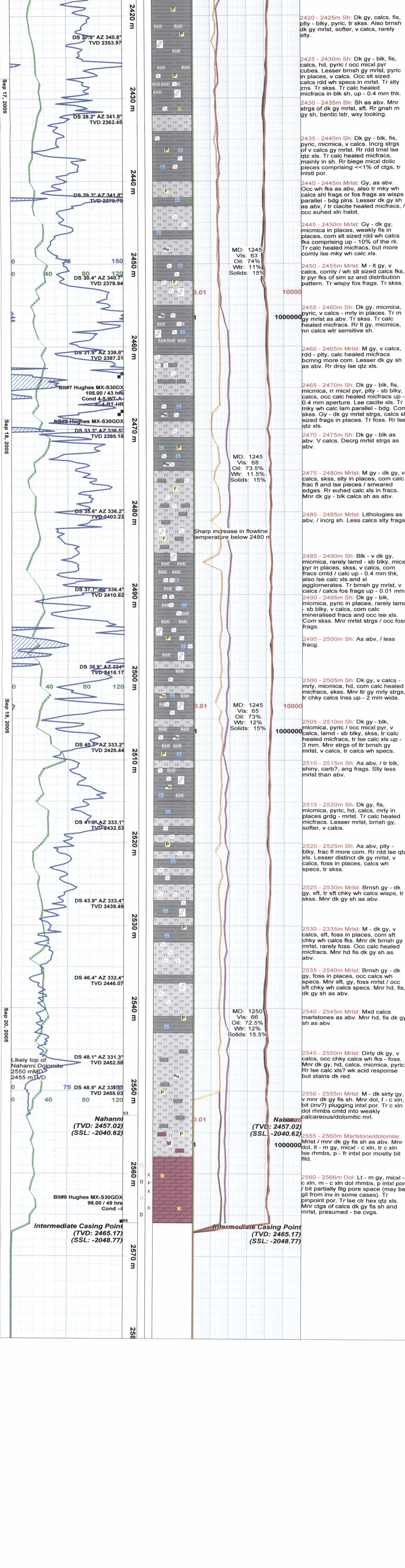
Porosity Type Track

Very poorly sorted - > 10 phi size grade classes	
Poorly sorted - 6-10 phi size grade classes	
Moderately sorted - 3-6 phi size grade classes	
Moderately well sorted - 2-3	









Well Information

Operator: _____

Paramount Resources Ltd.

Well Name: _____

Paramount et al Liard

Location: _____

K-29A

UWI: _____

300K-29A-6030-123302

Pool: _____

N/A

Field: _____

Liard K-29

Province / State: _____

Northwest Territories

Country: _____

Canada

Elevations

Reference: _____ Ground

Ground: _____ 409.6 m

Cut(-) / Fill(+): _____

Kelly Bushing: _____ 416.4 m

K.B. to Ground: _____ 6.8 m

Casing Flange: _____ m

Total Depth

Measurement Type

Measured Depth

True Vertical Depth

Drillers TD (Tally)

2520.62 m

2418.92 m

Drillers TD (Strap or SLM)

m

m

Loggers TD

m

m

Surface Co - Ordinates

Well Type: Deviated Longitude: 123 35 4.100 Latitude: 60 28 41.040

N / S Co - Ordinates: 6704591.45

E / W Co - Ordinates: 467870.02

Bottom Hole Co - Ordinates

Longitude: _____

Latitude: _____

N / S Co - Ordinates: _____

E / W Co - Ordinates: _____

Drilling Fluid Summary

Fluid Type

From

To

Produced Water 1853 m 1860 m

Invert 1860 m 2520 m

Casing Summary

Type

Hole Size

Casing Size

Landed At

Well Summary

Spud Date: Aug 25, 2005 @ 05:00hrs

Contractor: Akita Drilling Rig #58

TD Date: _____

Rig Release Date: _____

Work Schedule

Contractor

Chalce Resources

Geologist

Ken Glover

Log Interval

Dates Logged

1854 m - 2520 m Aug 25, 2005 - Sep 1, 2005

Remarks

This leg of the well was abandoned.

K-29A sidetrack well drilled below 2295 m.

Legend

Rock Types and Thin Beds

Whole Bed	Stringer	Nodule	Breccia	Clast	Pebble	Grain	Rock Type
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							Feldspar
							Gypsum
							Igneous - acidic
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							Limestone - mud supported
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							Phosphate
							Pyrite
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							Shale - medium gray
							Shale - light gray
							Shale - brown
							Shale - green
							Shale - red
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							Sandstone
							Siltstone
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							Volcanic (Tuff)
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Cherty - varicolored	Salt casts
Chloritic	Sandy
Clayey	Sideritic
Dolomitic	Siliceous
Ferruginous staining	Silty
Fractures	Stylolitic
Glaconitic	Tuffaceous
Gypsiferous	Zeolitic

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Bioclastic	Intraclast
Brachiopod	Mollusc
Bryozoa	Oncolite
Calciphæra	Oolite
Cephalopod	Ostracod
Chætae	Pelecypod
Coated grain	Pellet
Conodont	Pisolite
Coral	Plant Remains
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Diatom	Stromatoporoid - massive
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Bituminous	Mixed Clay
Clay	Montmorillonite
Chlorite	Sand
Gibbsite	Silt
Illite	Sparry Calcite
Kaolinite	Zeolite
Marl	

Textures

Argillaceous	Marl - dolomitic
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Gibbsite	Silt
Illite	Sparry Calcite
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