FINAL WELL REPORT
PARAMOUNT ET AL BOVIE C-76
60^0 20' 122^0 45'

Revised on Aug. 25, 98.

Paramount Resources Ltd.

FINAL WELL REPORT

PARAMOUNT ET AL BOVIE C-76

60^0 20' 122^0 45'

Latitude 60^0 15' 14.83" Longitude 122^0 59' 22.34"

NOTE: **As requested by the N.E.B., this report replaces the Final Drilling Report prepared by Mr. David Baillargeon, Reservoir Drilling Services, which was submitted to the N.E.B. in 1997.**

Prepared By: S. Maaskant, C.E.T.
Date: August 25, 1998

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SECTION 1

INTRODUCTION

1. INTRODUCTION

Summary

Paramount Resources Ltd. drilled Bovie C76 to evaluate the gas potential of the Nahanni formation and a secondary objective the Flett . Kenting 22E spudded this well January 15, 1997 and rig released March 30, 1997.

Surface hole was drilled overbalanced with minor losses at 140 m controlled with LCM pills. Deviation remained a problem throughout surface hole.

First intermediate section encountered a fracture in the Flett (10 m under the surface shoe) which required a cement plug. An attempt to drill with air failed as the well was making too much water, so gel/chem was utilized with minor losses occurring. Small amounts of gas were detected after penetrating the Banff. Logs were run over this interval.

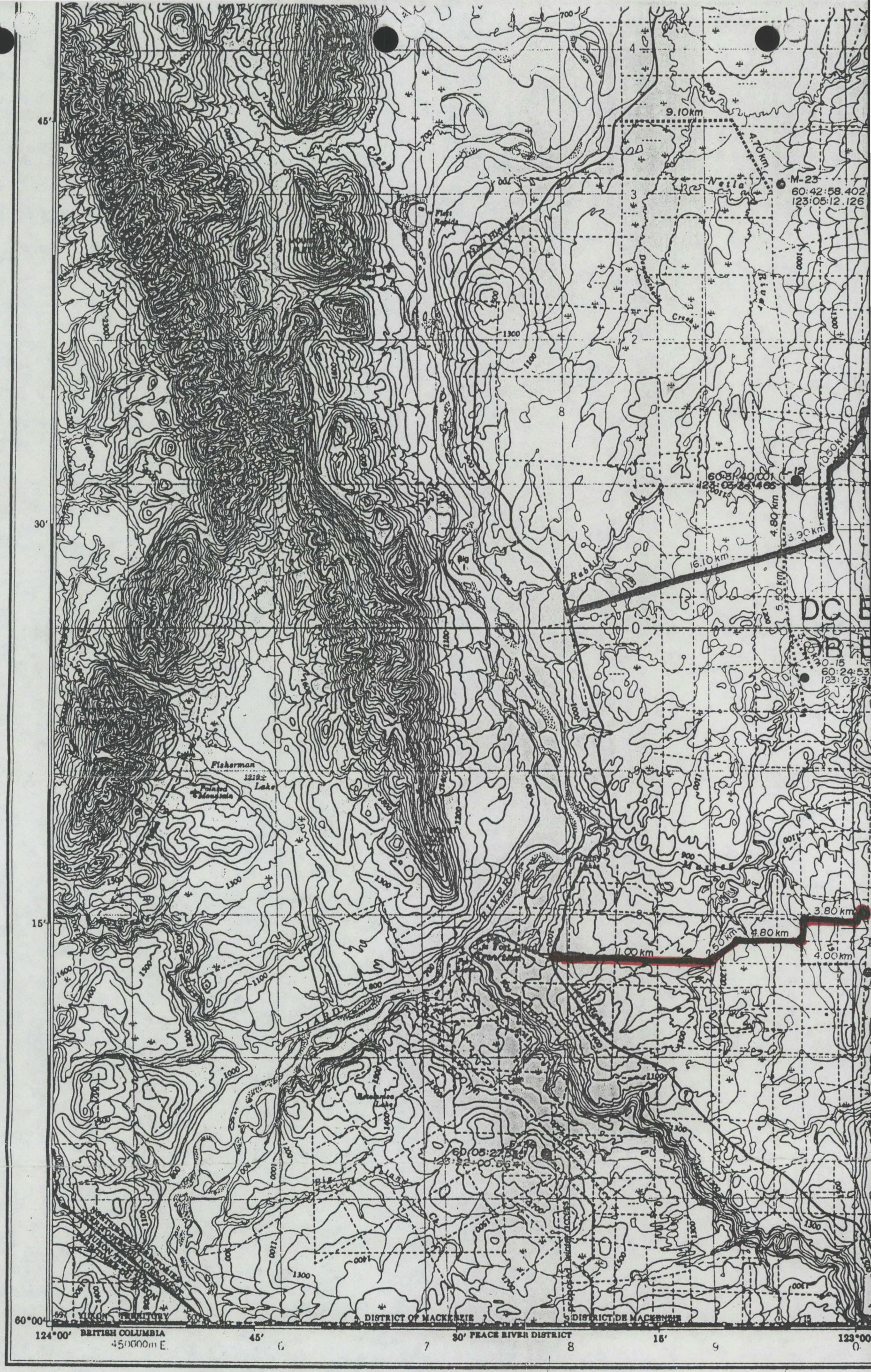
Second intermediate was drilled with an air hammer then displaced to gel/chem to run casing. Mechanical and pumping limitations plus a bottom hole temperature of 170 ° C prevented the cementing of stage #1. The second stage was cemented successfully.

Main hole was also drilled with gel/chem. We were unable to drill underbalanced as originally planned without the first stage of second intermediate casing cemented . Logs were run and liner cemented in place with no time to spare as break-up had arrived.

The well will be completed to evaluate the Nahanni gas potential.

Location Map (See Figure 1, Following Page)

FIGURE 1
LOCATION MAP



Produced by the SURVEYS AND MAPPING BRANCH, DEPARTMENT OF ENERGY, MINES AND RESOURCES. Updated from large scale maps. Information current as shown in diagram. Published in 1985.

Copies may be obtained from the Canada Map Office, Department of Energy, Mines and Resources, Ottawa, or your nearest map dealer.

Information concerning bench marks and horizontal survey monuments can be obtained from Geodetic Survey, Surveys and Mapping Branch, Ottawa.

FORT L

NORTHWEST TERRITORI
TERRITOIRES DU NORD-OUES

Roads
loose or stabilized surface, all weather
Routes
gravier, 2 voies ou plus, toute saison
2 lanes or more
less than 2 lanes

Scale 1:250 00

Miles 5 0 5

SECTION 2

GENERAL DATA

2. GENERAL DATA

WELL NAME:	Paramount et al Bovie C-76
EXPLORATION AGREEMENT:	EL 368
DRILLING AUTHORITY:	1817 Issued January 7, 1997
GRID AREA:	60^0 20' 122^0 45'
CO-ORDINATES:	Latitude 60^0 15' 14.83" Longitude 122^0 59' 22.34"
UNIQUE WELL IDENTIFIER:	300C766020122450
LESSOR:	Shell Canada Ltd. entered into a formal agreement with Paramount covering parcel exploration licence 368.
OPERATOR:	Paramount Resources Ltd. 4000, 350 – 7 Ave. S.W. Calgary, Alberta T2P 3W5
DRILLING CONTRACTOR:	Kenting Drilling Limited Precision Drilling) 7th Floor, 112 - 4 Ave. S.W. Calgary, Alberta T2P 0H3
DRILLING RIG:	Kenting 22E
POSITION KEEPING:	N/A
SUPPORT CRAFT:	N/A
DRILLING UNIT PERFORMANCE	N/A
DIFFICULTIES & DELAYS:	N/A

SECTION 3

SUMMARY OF DRILLING OPERATIONS

3. SUMMARY OF DRILLING OPERATIONS

ELEVATIONS: G.L.: 426.8 m
K.B.: 433.31 m

TOTAL DEPTH: 3222 m Drilled:
3222 m Logged:
3205 m Plug Back

SPUD DATE: 1997 – 01 – 15 @ 0715 hours

COMPLETED DRILLING DATE: 1997 – 03 – 25 @ 0230 hours

RIG RELEASE: 1997 – 03 – 30 @ 2100 hours

WELL STATUS: STANDING CASED

HOLE SIZES, CASING See Bit Record in this Section

	Hole Size mm	Csg. Size mm	Wt. kg/m	Grade	Landed m
Surface	444	339.7	81.1	K55, ST&C	453
Intermediate 1	311	244.5	69.9	L80, LT&C	1713
Intermediate 2	216	177.8	43.2	L80, LT&C	2897
Liner	152	114.3	17.3	K55/L80, S&LT&C	3221

CASING CEMENTING: See Casing & Cementing Reports in this Section

SIDETRACKED HOLE: N/A

DRILLING FLUID: See Fluid Summary in this Section

FISHING: While drilling first intermediate at a depth of 927 m, the drill pipe twisted off the first joint above the HWDP. The fish was recovered in 25 hours

WELL KICKS: N/A

LEAK-OFF TESTS: (see attached)
Gradient at 504 m 18 kPa/m, no breakdown
Gradient at 1716 m 20 kKa/m, no breakdown

TIME DISTRIBUTION:	See Distribution in this Section
DEVIATION SURVEY:	See Surveys in this Section
ABANDONMENT PLUGS:	N/A
COMPOSITE WELL RECORD:	Was submitted in 1997 with initial report

Table 7 - Bit Record

Bit No.	Size	Brand	Type	Depth In	Depth Out	Rot Time	ROP	Cum Time	Dull Condition	Comment
	mm			m	m	hrs	m/hr	hrs		
1A	445	Sec	S33G	0	135	24.25	5.57	24.25	2-2-WT-A-1-1-0-DEV	Angle out to 2.5 deg, Garbutt @130m
2A	445	Hughes	X3A	135	144	4.25	2.12	28.50	2-2-WT-A-1-1-0-PR	Fantasque @ 144m
3A	445	Hughes	R3	144	149	13.25	0.38	41.75	7-8-WT-A-E-I-0-PR	Rough drlg, using 6000 daN and 50 rpm
4A	445	Sec	S21G	149	151	6.25	0.32	48.00	2-2-WT-A-1-1-0-PR	Rough drlg continues, trip to pilot
1B	311	Reed	HP53A	151	182	10.5	2.95	58.50	1-1-0-0-E-I-0-FM	Flett @179m
RR4A	445	Sec	S21G	151	182	22.25	1.39	80.75	Didnt-Trip	Reamed pilot hole and drilled ahead.
RR4A	445	Sec	S21G	182	187	3.5	1.43	84.25	2-4-WT-A-E-I-0-PR	
RR2A	445	Hughes	X3A	187	210	21.5	1.07	105.75	2-3-WT-A-2-I-0-PR	Wont drill using 4000 daN, 140 rpm, trip to pilot
2B	311	Smith	SDGH	210	254	22.25	1.98	128.00	6-6-WT-A-5-3-0-PR	Packed BHA, stab runs into UG hole
3B	311	Reed	HP53A	254	282	31	0.90	159.00	2-5-BT-A-1-I-0-DEV	Angle out to 3 deg, pick-up motor
4B	311	Smith	F2P	282	453	39.75	4.30	198.75	4-6-WT-A-3-I-0-TD	Motor drilling
5A	445		H.O.	210	269	14.75	4.00	213.50	Damaged-PR	
6A	445	Hughes	X3A	269	291	12	1.83	225.50	1-4-WT-A-2-I-0-PR	Dont have another HO (using same WOB, RPM)
7A	445		H.O.	291	379	27	3.26	252.50	Undamaged-PR	No damage, reran
RR 7A	445		H.O.	379	453	24.25	3.05	276.75	Didnt-Say-TD	
1	311	Smith	FDGH	453	463	2.25	4.44	2.25	8-8-BT-A-E-I-8-LC	Rough drilling, trip for shock and jars
2	311	Reed	EHP53A	463	504	11.5	3.57	13.75	Undamaged-LC	Trip to run cmt plug
RR2	311	Reed	EHP53A	504	651	40.75	3.61	54.50	2-2-WT-A-E-I-0-DEV	Angle out to 2 deg, pick-up stabs
3	311	Sec	M44N	651	696	10.75	4.19	65.25	6-7-WT-A-8-4-0-PR	Stabs run into UG hole
4	311	Smith	F2P	696	837	29.25	4.82	94.50	2-4-WT-A-E-2-0-PP	Trip for wash-out
5	311	RBI	C2	837	927	20.25	4.44	114.75	1-3-BT-1-E-I-0-TW	Twisted-off
6	311	Hughes	GTM28	927	1279	62.25	5.65	177.00	1-2-WT-A-E-I-0-DEV	Shunda@975m, Pekisko@1119m, Banff@1163m
7PDC	311	DBS	FM2943	1279	1282	4.75	0.63	181.75	Undamaged-PR	Bit balled-up
RR7	311	DBS	FM2943	1282	1284	2.25	0.89	184.00	Undamaged-PR	Bit balled-up
8	311	Reed	HP43A	1284	1548	33	8.00	217.00	1-1-0-A-E-I-0-BHA	Dev down to 1 deg, drop 2 of 4 stabs
RR8	311	Reed	HP43A	1548	1710	28	5.79	245.00	2-4-BT-A-E-I-0-TD	Exshaw @1646m, Kotcho @1665m
9	216	Reed	HP43A	1710	1716	0.5	12.00	245.50	1-1-1-A-E-I-0-BHA	Run leak-off, change to air hammer
10AIR	216		H45R8	1716	2897	77.5	15.24	323.00	Damaged-TD	Tetcho@2030m, Ft Simp@2162m, Nahanni@2889
11	152	Smith	FV	2897	2907	5.75	1.74	328.75	8-8-WT-A-E-4-0-TQ	
12	152	Reed	HP51A	2907	2940	12	2.75	340.75	1-2-WT-A-E-I-0-BHA	Angle out to 3.25 deg, pick-up stabs
13	152	Smith	F3P	2940	3124	54.25	3.39	395.00	5-3-WT-3-1-I-0-PR	
14	152	Smith	F3P	3124	3222	22.5	4.36	417.50	2-2-WT-A-2-I-0-TD	Manatoe @3129m, Arnica @3184m

PARAMOUNT RESOURCES LTD.

CASING AND CEMENTING REPORT

Date Run: Feb 3, 1997

WELL NAME: Paramount et al Bovie C-76 60° 20' 122° 45' TOTAL DEPTH: 453.0 m

Surveyed Ground Elevation: 426.80 m ASL Cut / Fill: ..... m Actual Ground Elevation: 426.80 m

Dist. GRD. to KB: 6.51 m KB Elev.: 433.31 m KB to CF, Dist. "H": ..... m CF Elev.: 433.31 m

TYPE C, S, I, P	JTS RUN	SIZE mm OD	WEIGHT kg/m	GRADE	THREAD & COUPLING	SMLS ERW	MAKE	TALLY m thrd on	TALLY m thrd off
S	36	339.7	81.10	K-55	8RD ST&C.	SMLS	Sumitomo		446.19 a
					ECP Packer				7.54 b
									c
									d
									e

LINER TOP @: ..... mKB
STAGE TOOL @: ..... mKB

CENTRALIZERS: Make Weatherford
Type: Latch On Qty.: 12
@: Middle #1, 2 over collars of No 5, 10, 15, 20, 25, 30 and 35.

TURBOLIZERS: Make .....
Type: ..... Qty.: .....
@: .....

SCRATCHERS: Make .....
Type: ..... Qty.: .....
@: .....

SHOE: Make Weatherford Type Float SQ / THRD	0.47	f
COLLAR: Make Weatherford Type Float	0.39	g
STAGE CMT. COLLAR: Make		h
LINER HANGER ASSY.: Make		i
DRILL PIPE OR LANDING JOINT IF USED		j
OVERALL TALLY OF STRING, (a+b+...+i+j)	454.59	k
STICK UP ABOVE KB	1.59	l
DEPTH LANDED @, mKB (k-l)	453.00	n
SHOE JOINT OVERALL TALLY, (g+f+csg jts)	13.18	o
EST. PBTD TO FLOAT COLLAR, (n-o)	439.82	p
LENGTH OF CASING CUTOFF	8.10	q
NET CASING TALLY LEFT, (a+b+c+d+e-q)	445.63	r

CASING HEAD: Make ..... S/N: .....
339.7 mm SQ / THRD x 376.1 mm 35000 MPa

Circulated mud 5.75 hrs after casing on bottom at 1600 litre/min. Mud density 1200 kg/m3
Reciprocated casing in 12 m strokes for 60 mins prior to cementing. Viscosity 1.5 s/l YP ..... Pa
Reciprocated casing in 6 m strokes for 70 mins while cementing. PV ..... mPa-sec Gels ..... / .....

LEAD /1st STAGE CEMENT from 453 m to 0 m

Preflush with 3 m3 of Scav.Water at 1 m3/min.
Amount & Blend:
10 tonnes 0:1:0 + 1% Cacl2 5 tonnes 0:1:0 + 1% Cacl2 + .5% T-10 + D24 at .5%
Slurry Volume: 56.8 m3. Density: 1901 kg/m3
Start mix at 03:04 hrs. Finish mix at 04:12 hrs.
Plug down at 05:05 hrs on Feb 3, 1997
Displ. with 34 m3 of Water at 9 m3/min.
Maximum pumping pressure 5000 kPa.
Bumped plug with 10000 kPa, floats held yes / no.
If not, held ..... kPa back pressure for ..... hrs.

TAIL / 2nd STAGE CEMENT from ..... m to ..... m

Preflush with ..... m3 of ..... at ..... m3/min.
Amount & Blend:
Slurry Volume: ..... m3. Density: kg/m3
Start mix at ..... hrs. Finish mix at ..... hrs.
Plug down at ..... hrs on .....
Displ. with ..... m3 of ..... at ..... m3/min.
Maximum pumping pressure ..... kPa.
Bumped plug with ..... kPa, floats held yes / no.
If not, held ..... kPa back pressure for ..... hrs.

Returns while cementing Good cement returns. Circulated out 10 m3 of slurry. Slips set in ..... daN.
Witnessed by ..... for Paramount, ... for contractor, ... for cementers.
REMARKS:

PARAMOUNT RESOURCES LTD.

CASING AND CEMENTING REPORT

Date Run: Mar 2, 1997

WELL NAME: Paramount et al Bovie C-76 60° 20' 122° 45' TOTAL DEPTH: 1713 m

Surveyed Ground Elevation: 426.80 m ASL Cut / Fill: ..... m Actual Ground Elevation: 426.80 m

Dist. GRD. to KB: 6.52 m KB Elev.: 433.32 m KB to CF, Dist. "H": 7.31 m CF Elev.: 426.01 m

TYPE C, S, I, P	JTS RUN	SIZE mm OD	WEIGHT kg/m	GRADE	THREAD & COUPLING	SMLS ERW	MAKE	TALLY m thrd on	TALLY m thrd off	
I (I)	130	244.5	69.94	L-80	8RD LT&C	ERW	ALGOMA		1701.94	a
ECP	1	Packer					Baker			b
									10.53	c
										d
										e

LINER TOP @: ..... mKB
STAGE TOOL @: 1306.67 mKB

CENTRALIZERS: Make W/Ford
Type: Bow Spring Qty.: 28
@: Shoe Joints, 2 Joint every 50 m to surface.

TURBOLIZERS: Make .....
Type: ..... Qty.: .....
@: .....

SCRATCHERS: Make .....
Type: ..... Qty.: .....
@: .....

SHOE: Make W/Ford Type Float ~~BRD~~/ THRD	0.47	f
COLLAR: Make W/Ford Type Float	0.40	g
STAGE CMT. COLLAR: Make Baker	0.58	h
LINER HANGER ASSY.: Make		i
DRILL PIPE OR LANDING JOINT IF USED		j
OVERALL TALLY OF STRING, (a+b+...+i+j)	1713.92	k
STICK UP ABOVE KB	1.20	l
DEPTH LANDED @, mKB (k-l)	1712.72	n
SHOE JOINT OVERALL TALLY, (g+f+csg jts)	14.27	o
EST. PBTD TO FLOAT COLLAR, (n-o)	1698.45	p
LENGTH OF CASING CUTOFF	7.65	q
NET CASING TALLY LEFT, (a+b+c+d+e-q)	1704.82	r

CASING HEAD: Make McEvoy S/N: M5737-1
339.7 mm SO / ~~XXRO~~ x 346.1 mm 35 MPa

Circulated mud 4.50 hrs after casing on bottom at 1400 litre/min. Mud density 1185 kg/m3
Reciprocated casing in 20 m strokes for 270 mins prior to cementing. Viscosity 55 s/l YP ..... Pa
Reciprocated casing in 3 m strokes for 31 mins while cementing. PV ..... mPa-sec Gels ..... / .....

LEAD /1st STAGE CEMENT from 1710 m to 1306 m

Preflush with 4 m3 of H20 at 1 m3/min.
Amount & Blend:
36 tonnes 0:1:0 + 1.1% NFL-3

Slurry Volume: 25.3 m3. Density: 1901 kg/m3
Start mix at 16:47 hrs. Finish mix at 17:18 hrs.
Plug down at 18:30 hrs on Feb 2, 1997
Displ. with 19 m3 of H20 at 1 m3/min.
Maximum pumping pressure 3000 kPa.
Bumped plug with 6500 kPa, floats held yes / no .
If not, held ..... kPa back pressure for ..... hrs.

TAIL / 2nd STAGE CEMENT from 1306 m to 300 m

Preflush with 4 m3 of H20 at 1 m3/min.
Amount & Blend:
3 m3 of Scavenger 60 tonnes 1:1:2 "G" + 5% T-10

Slurry Volume: 54.8 m3. Density: 1683 kg/m3
Start mix at 01:08 hrs. Finish mix at 02:00 hrs.
Plug down at 02:45 hrs on Feb 3, 1997
Displ. with 49.3 m3 of H20 at 1.2 m3/min.
Maximum pumping pressure 10000 kPa.
Bumped plug with 21000 kPa, floats held yes / no .
If not, held ..... kPa back pressure for ..... hrs.

Returns while cementing Full. Circulated out 27 m3 of slurry. Slips set in 75000 daN.
Witnessed by C. Veenstra for Paramount, D. Ross for contractor, B. Pickett for cementers.
REMARKS: Returns of 27 m3 of slurry was cement and mud intermittent circulated mud for 6 hours between stages at a velocity 38.

PARAMOUNT RESOURCES LTD.

CASING AND CEMENTING REPORT

Date Run: Mar 14, 1997

WELL NAME: Paramount et al Bovie C-76 60° 20' 122° 45' TOTAL DEPTH: 2897 m

Surveyed Ground Elevation: 426.80 m ASL Cut / Fill: ..... m Actual Ground Elevation: 426.80 m

Dist. GRD. to KB: 6.52 m KB Elev.: 433.32 m KB to CF, Dist. "H": 7.31 m CF Elev.: 426.01 m

TYPE C, S, I, P	JTS RUN	SIZE mm OD	WEIGHT kg/m	GRADE	THREAD & COUPLING	SMLS ERW	MAKE	TALLY m thrd on	TALLY m thrd off
I	221	177.8	43.16	1.80	8RD LT&C	ERW	ALGOMA		2894.17 a
	ECP			L-80	8RD LT&C	ERW			b
PUP XO	2	177.8	43.16	L-80	8RD LT&C		BAKER		2.70 c
									1.28 d
									e

LINER TOP @: ..... mKB
STAGE TOOL @: 1692.06 mKB

CENTRALIZERS: Make .....
Type: Bowspring Qty.: .....
@: Shoe Joint, Joint #2

TURBOLIZERS: Make .....
Type: ..... Qty.: .....

SCRATCHERS: Make .....
Type: ..... Qty.: .....
@: .....

SHOE: Make W/Ford Type Float SO / THRD	0.40	f
COLLAR: Make W/Ford Type Float	0.35	g
STAGE CMT. COLLAR: Make Baker at 1692 m	0.50	h
LINER HANGER ASSY.: Make		i
DRILL PIPE OR LANDING JOINT IF USED		j
OVERALL TALLY OF STRING, (a+b+..+i+j)	2899.40	k
STICK UP ABOVE KB	1.01	l
DEPTH LANDED @, mKB (k-l)	2898.39	n
SHOE JOINT OVERALL TALLY, (g+f+csg jts)	13.89	o
EST. PBTD TO FLOAT COLLAR, (n-o)	2884.50	p
LENGTH OF CASING CUTOFF	7.52	q
NET CASING TALLY LEFT, (a+b+c+d+e-q)	2890.63	r

CASING HEAD: Make McEvoy S/N: M5731-1
339.7 mm SO / THRD x 346.1 mm 35 MPa

Circulated mud ..... hrs after casing on bottom at ..... litre/min. Mud density 1135 kg/m3
Reciprocated casing in ..... m strokes for ..... mins prior to cementing. Viscosity 120 s/l YP ..... Pa
Reciprocated casing in ..... m strokes for ..... mins while cementing. PV ..... mPa-sec Gels ..... / .....

LEAD /1st STAGE CEMENT from 1692 m to 350 m

Preflush with 4 m3 of H20 at 1 m3/min.
Amount & Blend:
19.5 tonnes 1:1:2 "G" + 5% T-10 +2% R-6

Slurry Volume: 18.2 m3. Density: 1683 kg/m3
Start mix at 03:33 hrs. Finish mix at 13:53 hrs.
Plug down at 04:23 hrs on Mar 16, 1997
Displ. with 32.8 m3 of H20 at 1.1 m3/min.
Maximum pumping pressure 13000 kPa.
Bumped plug with 21000 kPa, floats held yes / no .
If not, held ..... kPa back pressure for ..... hrs.

TAIL / 2nd STAGE CEMENT from 2897 m to 1695 m

Preflush with ..... m3 of ..... at ..... m3/min.
Amount & Blend:

Slurry Volume: ..... m3. Density: kg/m3
Start mix at ..... hrs. Finish mix at ..... hrs.
Plug down at ..... hrs on .....
Displ. with ..... m3 of ..... at ..... m3/min.
Maximum pumping pressure ..... kPa.
Bumped plug with ..... kPa, floats held yes / no .
If not, held ..... kPa back pressure for ..... hrs.

Returns while cementing 100%. Circulated out ..... m3 of slurry. Slips set in 70000 daN.
Witnessed by C. Veenstra for Paramount, D. Ross for contractor, B. Picket for cementers.
REMARKS: Unable to circulate enough to pump stage one cement. Opened stage tool and set packer to cement stage two.

PARAMOUNT RESOURCES LTD.

CASING AND CEMENTING REPORT

Date Run: Mar 28, 1997

WELL NAME: Paramount et al Bovie C-76 60° 20' 122° 45' TOTAL DEPTH: 3222 m

Surveyed Ground Elevation: 426.80 m ASL Cut / Fill: ..... m Actual Ground Elevation: 426.80 m

Dist. GRD. to KB: 6.52 m KB Elev.: 433.32 m KB to CF, Dist. "H": 7.31 m CF Elev.: 426.01 m

TYPE C, S, I, P	JTS RUN	SIZE mm OD	WEIGHT kg/m	GRADE	THREAD & COUPLING	SMLS ERW	MAKE	TALLY m thrd on	TALLY m thrd off	
P	21	114.1	17.26	N-80	LT&C	SMLS	ALGOMA		295.93	a
P	16	114.1	17.26	K-55	AB-STL	SMLS	ALGOMA		182.60	b
	2	114.1	17.26	K-55	ABX LT&C	SMLS	ALGOMA		0.70	c
					LJCX AB					d
										e

LINER TOP @: 2735.24 mKB
STAGE TOOL @: ..... mKB

CENTRALIZERS: Make .....
Type: Bowspring Qty.: .....
@: 3219, 3200, 3170, 3130, 3050, 2900

TURBOLIZERS: Make Cent
Type: Rigid Bar Qty.: 5
@: 2875, 2850, 2800, 2775, 2765, 2750

SCRATCHERS: Make .....
Type: ..... Qty.: .....
@: .....

SHOE: Make Float Type SQ / THRD	0.40	f
COLLAR: Make ..... Type	0.39	g
STAGE CMT. COLLAR: Make		h
LINER HANGER ASSY.: Make Cardium Hanger	6.74	i
DRILL PIPE OR LANDING JOINT IF USED	2734.24	j
OVERALL TALLY OF STRING, (a+b+...+i+j)	3221.00	k
STICK UP ABOVE KB		l
DEPTH LANDED @, mKB (k-l)	3221.00	n
SHOE JOINT OVERALL TALLY, (g+f+csg jts)	15.52	o
EST. PBTD TO FLOAT COLLAR, (n-o)	3205.48	p
LENGTH OF CASING CUTOFF		q
NET CASING TALLY LEFT, (a+b+c+d+e-q)	479.23	r

CASING HEAD: Make ..... S/N: .....
..... mm SQ / THRD x ..... mm ..... MPa

Circulated mud 3 hrs after casing on bottom at 570 litre/min. Mud density 1120 kg/m3
Reciprocated casing in 5 m strokes for 180 mins prior to cementing. Viscosity 49 s/l YP 5 Pa
Reciprocated casing in 5 m strokes for 60 mins while cementing. PV 14 mPa-sec Gels ..... / .....

LEAD /1st STAGE CEMENT from 3222 m to 2635 m	TAIL / 2nd STAGE CEMENT from ..... m to ..... m
Preflush with 3 m3 of H20 at 5 m3/min.	Preflush with ..... m3 of ..... at ..... m3/min.
Amount & Blend: 9 tonnes Thermal 40 F, 4% D-24, 5% T-10, 3% R-6, 5% Gel	Amount & Blend:
Slurry Volume: 6.9 m3. Density: 1876 kg/m3	Slurry Volume: ..... m3. Density: kg/m3
Start mix at 17:53 hrs. Finish mix at 18:12 hrs.	Start mix at ..... hrs. Finish mix at ..... hrs.
Plug down at 13:35 hrs on Mar 28, 1997	Plug down at ..... hrs on .....
Displ. with 4.8 m3 of H20 at 65 m3/min.	Displ. with ..... m3 of ..... at ..... m3/min.
Maximum pumping pressure 11000 kPa.	Maximum pumping pressure ..... kPa.
Bumped plug with 21000 kPa, floats held yes / no .	Bumped plug with ..... kPa, floats held yes / no .
ot, held ..... kPa back pressure for ..... hrs.	If not, held ..... kPa back pressure for ..... hrs.

Returns while cementing Full. Circulated out ..... m3 of slurry. Slips set in ..... daN.
Witnessed by Wilson for Paramount, Ross for contractor, ... for cementers.
REMARKS: Cardium hanger sent top at 2735.24 m

Drilling Fluids

The well was drilled primarily with Gel Chemical mud, with one section drilled with air. Table 8 summarizes the mud systems used in this well. A breakdown of mud products versus hole section follows in Table 9.

Table 8 - Mud Systems

Hole Section	Mud System	Interval
		metres
Surface Hole	Gel Caustic	0 - 453
	* LCM Added	145
Intermediate Hole 1	Gel Chemical	453 - 555
	Air	555 - 555
	Gel Chemical	555 - 1713
	* LCM Added	463
	* PHPA Added	800
Intermediate Hole 2	Water	1713 - 1716
	Air	1716 - 2897
	Gel Chemical	2897 - 2897
	* Barite Added	2897
Main Hole	Gel Chemical	2897 - 3222
	* Barite Added	2897

Table 9 - Mud Product Consumption on Daily Reports

Product	Pkg	First Added	Surf Hole	Interm Hole 1	Interm Hole 2	Main Hole	Total	Billed
		metres						
Gel[1]	40 kg	0	367	962	366	63	1758	1721
Caustic	50 lb	0	21	31	13	11	76	80
Soda Ash	40 kg	0	3	6			9	10
Sawdust	40 lb	145	118	307			425	375
Kwikseal	40 lb	145	7	63			70	50
Desco	25 lb	453	2	10	11	6	29	30
Bicarb	100 lb	500		4			4	5
Lignite	50 lb	700		15		9	24	32
Encapsorfloc	20 L	800		13	6		19	20
VisPlus[2]	50 lb	800		0			0	3
Aquapac	50 lb	950		16	9	16	41	41
SAPP[3]	50 lb	1280		0			0	2
Detergent	20 L	1280		3			3	3
Barite	40 kg	2897			219	108	327	343

[1] Approx 20% was natural Gel in 100 lb bags .
[2] The report for DFS 32 has VisPlus written in, with no entry for amount
[3] Mud rings were reported on DFS 37, with only detergent added

Air Drilling / Underbalanced Drilling

Analysis

Table 12 - Drilling Time Summary

Operation	Start Date	Start Time	Days	Cum Days	Problems	Net Days	Cum Net Days
Prepare to drill	09-Jan-97	14:00	5.72	0.00	0.00	5.72	0.00
Drill 445 mm hole	15-Jan-97	07:15	15.97	15.97	3.67	12.30	12.30
Set 340 mm casing	31-Jan-97	06:30	7.19	23.16	2.21	4.98	17.28
Drill 311 mm hole	07-Feb-97	11:00	20.93	44.08	8.08	12.85	30.12
Run wireline logs	28-Feb-97	09:15	0.66	44.74	0.00	0.66	30.78
Set 245 mm casing	01-Mar-97	01:00	5.19	49.93	0.00	5.19	35.97
Drill 216 mm hole	06-Mar-97	05:30	6.88	56.80	2.13	4.75	40.71
Set 178 mm casing	13-Mar-97	02:30	5.93	62.73	1.00	4.93	45.64
Drill 152 mm hole	19-Mar-97	00:45	6.30	69.03	1.08	5.22	50.86
Run wireline logs	25-Mar-97	08:00	2.78	71.81	1.54	1.24	52.10
Set 114 mm casing	28-Mar-97	02:45	0.97	72.78	0.96	0.01	52.11
Wrap-up	29-Mar-97	02:00	1.79	74.57	0.63	1.16	53.27
Rig Released	30-Mar-97	21:00					

Deviation / Directional

The bottomhole target was directly below surface. The hole was drilled essentially straight down, with 1-3 degrees of deviation resulting from formation dips. Directional surveys were taken only in the short motor drilled section on surface hole. The azimuth was derived from the motor drilled section and was assumed to be 265 deg throughout. The well intersected the Nahanni approximately 89 metres west of the surface location and finished-up approximately 95 metres west of the surface location. (If the well reversed direction or spiralled, the displacements would of course be less.) The well path, based on assumed azimuths, is detailed by the directional survey calculations in Table 10.

Table 10 - Directional Survey Calculations

	Survey				Coordinates					Closure		
	Depth	Drift	Dir	TVD	N/S		E/W		DLS	Length	Dir	VSxn
	m	deg	deg	m	m		m		deg/30m	m	deg	m
1	0	0	0	0.00	0.00	N	0.00	E		0.00	0.0	0.00
2	112	0.75	265	112.00	-0.06	S	-0.73	W	0.20	0.73	265.0	-0.06
3	130	2.5	265	129.99	-0.11	S	-1.24	W	2.92	1.24	265.0	-0.11
4	148	1.5	265	147.98	-0.16	S	-1.86	W	1.67	1.87	265.0	-0.16
5	175	2	265	174.96	-0.23	S	-2.69	W	0.56	2.70	265.0	-0.23
6	253	2.75	265	252.90	-0.52	S	-5.91	W	0.29	5.93	265.0	-0.52
7	337	3	265	336.79	-0.88	S	-10.10	W	0.09	10.14	265.0	-0.88
8	413	1.75	265	412.72	-1.16	S	-13.24	W	0.49	13.29	265.0	-1.16
9	431	1.5	265	430.72	-1.20	S	-13.75	W	0.42	13.80	265.0	-1.20
10	460	1.125	265	459.71	-1.26	S	-14.41	W	0.39	14.47	265.0	-1.26
11	601	1	265	600.69	-1.49	S	-17.02	W	0.03	17.08	265.0	-1.49
12	680	2	265	679.66	-1.67	S	-19.08	W	0.38	19.15	265.0	-1.67
13	780	1.5	265	779.61	-1.94	S	-22.12	W	0.15	22.20	265.0	-1.94
14	952	1.5	265	951.55	-2.33	S	-26.60	W	0.00	26.70	265.0	-2.33
15	1078	2.5	265	1077.47	-2.71	S	-30.98	W	0.24	31.10	265.0	-2.71
16	1277	3	265	1276.24	-3.54	S	-40.49	W	0.08	40.65	265.0	-3.54
17	1431	1	265	1430.14	-4.01	S	-45.85	W	0.39	46.02	265.0	-4.01
18	1520	1.75	265	1519.12	-4.20	S	-47.98	W	0.25	48.16	265.0	-4.20
19	1703	2	265	1702.02	-4.72	S	-53.94	W	0.04	54.15	265.0	-4.72
20	1827	1.5	265	1825.96	-5.05	S	-57.71	W	0.12	57.93	265.0	-5.05
21	2028	0.75	265	2026.92	-5.39	S	-61.64	W	0.11	61.88	265.0	-5.39
22	2276	2	265	2274.84	-5.91	S	-67.57	W	0.15	67.83	265.0	-5.91
23	2658	1.5	265	2656.66	-6.93	S	-79.19	W	0.04	79.50	265.0	-6.93
24	2753	3	265	2751.59	-7.25	S	-82.91	W	0.47	83.23	265.0	-7.25
25	2867	3	265	2865.43	-7.77	S	-88.85	W	0.00	89.19	265.0	-7.77

Coring, Logging and Testing

No cores or drill stem tests were run on this well. Logs were run at two of the four casing points (Table 11). The first set of logs were run without problems. The sonic and density logs failed in

FORMATION PRESSURE TEST

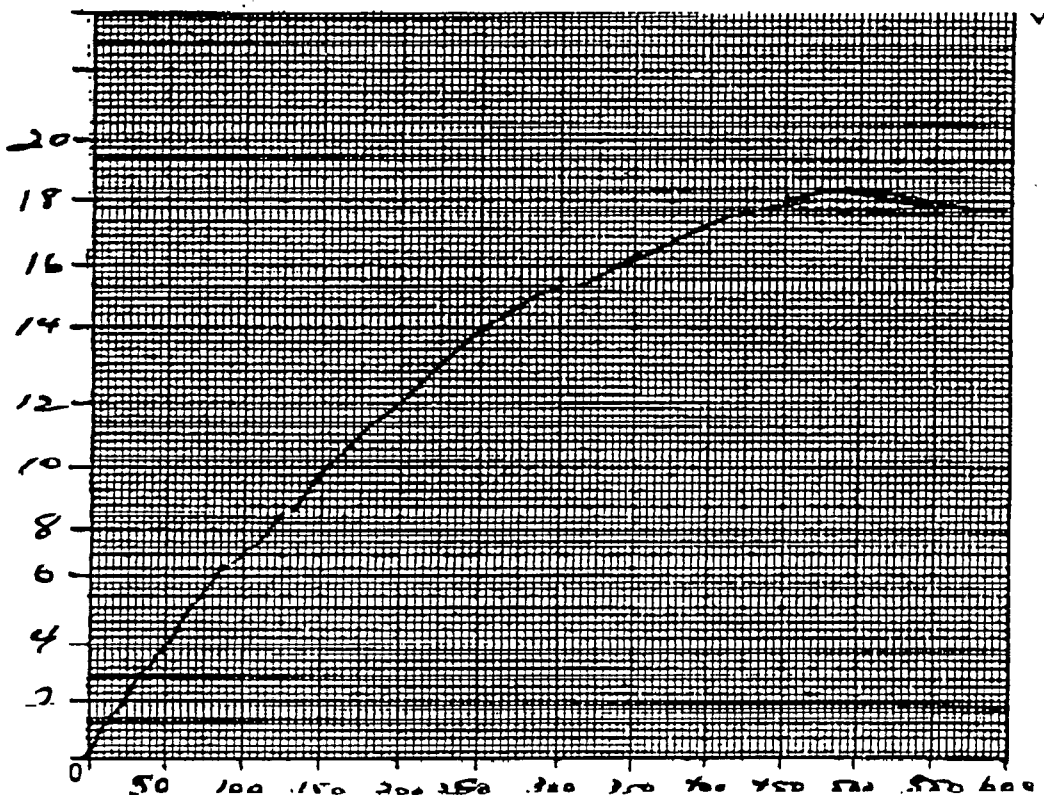
WELL: Paramount ET-AL Beaver Lake C-76 DATE: (y-m-d) 19 97-3 5

MAXIMUM TEST PRESSURE – LESSER OF

(1) B.O.P. Rating _____ kPa (1)

(2) Weakest Casing: _____ mm _____ kg/m _____ Grade

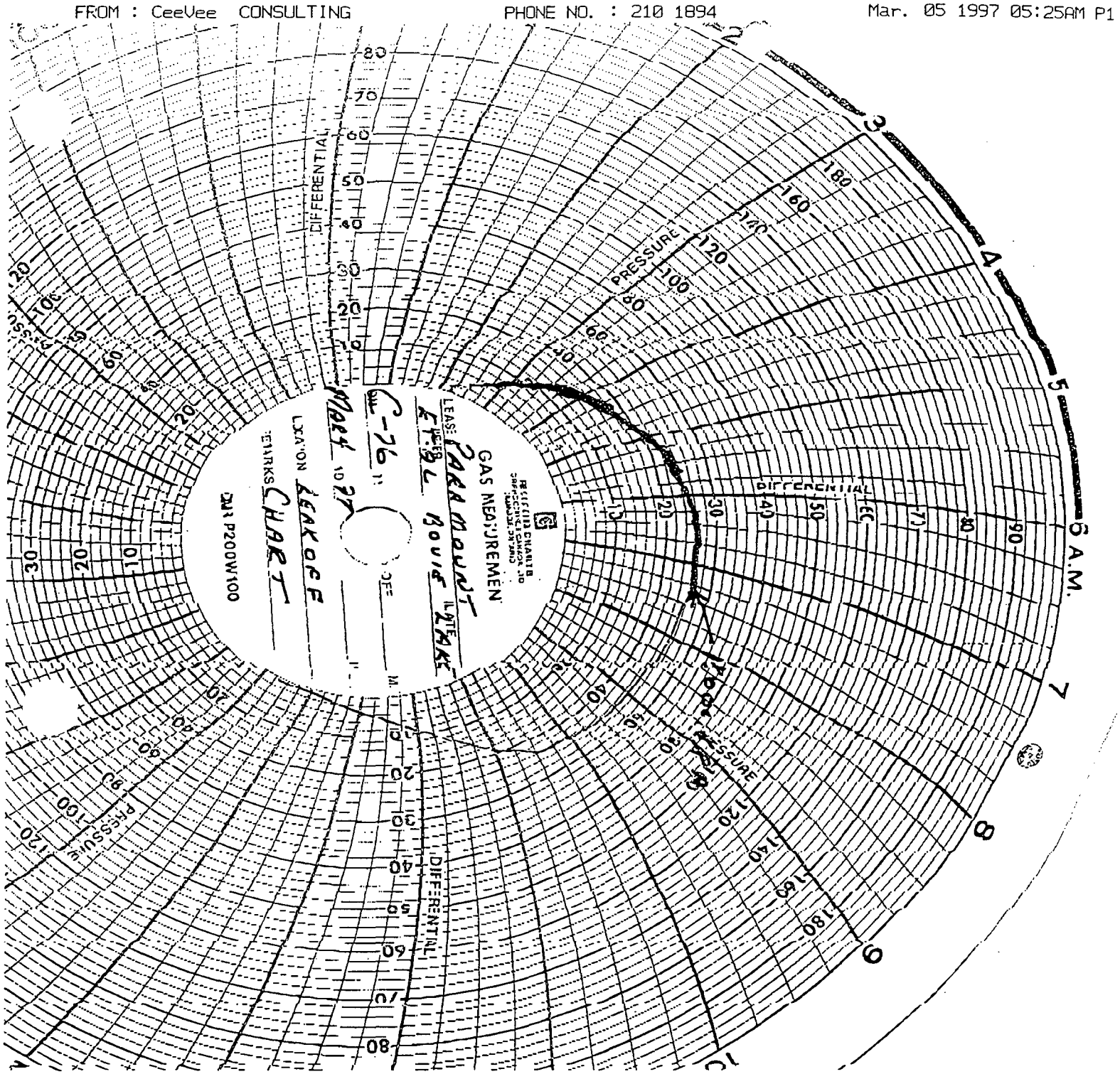
Burst Rating (kPa) _____ x 0.75 = _____ kPa (2)



Volume Pumped Litres	Pressure kPa
50	4000
100	7000
150	10000
200	12000
250	14000
300	15000
350	16000
400	17000
450	18000
500	18200
550	

Depth of casing	a)	1713	m	
Mud gradient	b) (mud density x 0.00981)	9.81	kPa/m	
Hydrostatic pressure	c)	(a x b) 16804	kPa	
Leak-off pressure	d)	(see note below) 18000	kPa	
Total pressure (at shoe)	e)	(c + d) 34804	kPa	
Formation gradient	f)	(e÷a) 20	kPa/m	
Maximum allowable mud density with no annulus pressure	g)	(f÷ 0.00981) 2038	kg/m^3	

Note: The last point ON the straight line plotted above is the leak-off pressure that you enter in line (d)


GAS MEASUREMENT
LEASE Parramount
FIELD Bovine Lake
WELL C-76
DATE 10-27
REMARKS CHART
LEAKOFF
DIFFERENTIAL
PRESSURE
5 A.M.
6
7
8
9
10
11
12
1
2
3
4

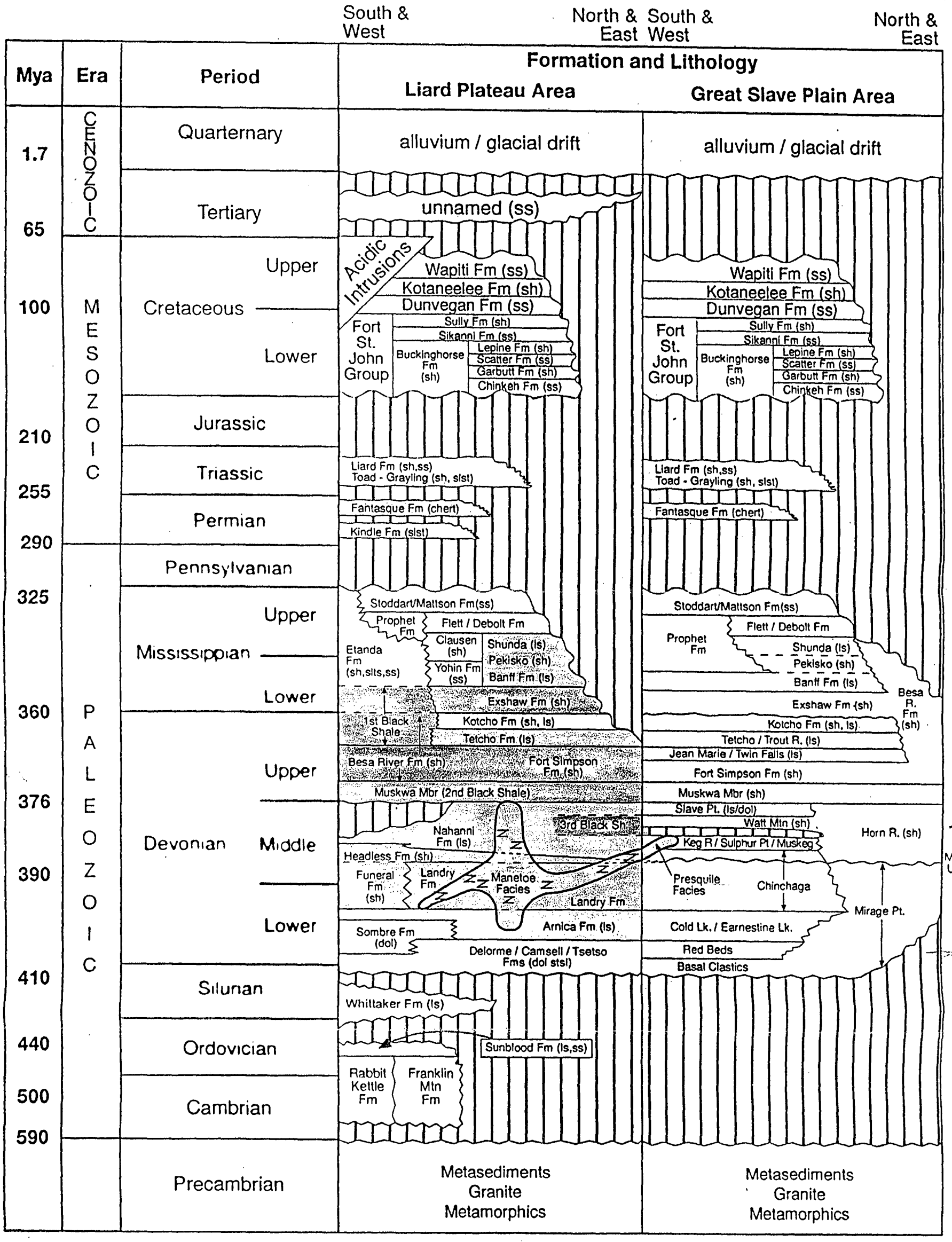
SECTION 4

GEOLOGY

4. GEOLOGY

Drill Cuttings	See following pages for sample descriptions
Sample Distribution:	Washed Cuttings, 5 meter intervals Surface to Total Depth Two Sets I.S.P.G., Calgary One Set Paramount
Cores	N/A
Lithology:	See following pages for descriptions
Stratigraphic Column	Included in this Section
Biostratigraphic Column	N/A

Figure IV-1
Stratigraphic Chart



GEOLOGICAL REPORT

on

Paramount et al Bovie Lake C-76
60 20' 122 45'

in the
NORTH WEST TERRITORIES

for
PARAMOUNT RESOURCES LTD.

Prepared For: J.H.T. RIDDELL P.GEOL
Prepared by: COLIN BREDIN P.GEOL
C.L. Bredin Holdings Ltd.

COLIN BREDIN P.GEOL

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WELL DATA SUMMARY

WELL NAME: PARAMOUNT ET AL BOVIE LAKE C-76
OPERATOR: PARAMOUNT RESOURCES LTD.
LOCATION: 60 20' 122 45'
NS CO-ORDINATES: Approx. 60 15' 14.83"
EW CO-ORDINATES: Approx. 122 59' 22.34"
PROVINCE: N.W.T
AREA: Ft. Liard N.W.T
DRILLING CONTRACTOR: KENTING HI-TOWER DRILLING **Rig #:** 22E
WELL LICENCE NUMBER: EL 369
ELEVATIONS - **GROUND LEVEL:** 426.80m
- **KELLY BUSHING:** 433.32m
SPUD DATE: JAN 15, 1997 at 0715 hours
T.D. DATE: MAR 25, 1997 at 0230 hours
SAMPLE INTERVAL: 250.00m - 3220.00m

ELECTRICAL LOGS RUN:

Rep#	Log#	Description	From(m)	To(m)
1	1	AITH ran as Phasor	1697.60	454.00
1	2	BHC Sonic	1689.10	20.00
1	3	Platform Express Density-Neutron-GR	1700.20	454.00
1	4	Platform Express Microlog	1700.20	454.00
3	1	AITH-TLD-CNL-ML-GR	3219.60	2894.00
3	2	DSI-GR	3214.00	2894.00
3	3	FMS-GR	3221.50	2894.00
3	4	ARI-LDT-CNL-ML-GR	3221.50	2894.00
3	5	DLT-LDT-CNL-ML-GR	3217.50	2894.00

DRILL STEM TESTS:

DST#	From(m)	To(m)

CORES CUT:

Cores#	From(m)	To(m)	Formation

WELL STATUS: Potential Nahanni, Manatoe Gas

CASING SUMMARY

String#	Name	Casing Size (mm)	Hole Size (mm)	Joints (#)	Weight (kg/m)	Landed At (m)	Cement (tonnes)	Cement Type
1	Sumitomo K-55	339.70	444.50	36	81.10	453.00	75.00	0-1-0 + 1% CaCl
2	ALGOMA L-80	244.50	311.20	130	69.94	1712.73	96.00	36 tonnes of 0-1-0 G as tail, 60 tonnes of 1-1-2 G as 2nd stage
3	ALGOMA L-80	177.80	216.00	221	43.16	2897.40	19.50	1-1-2 G, No cement below ECP / stage collar @ 1695m
4	K-55 AB, L-80 Liner	114.10	152.00	N/A	17.00	0.00	N/A	N/A

DAILY DRILLING SUMMARY

Date	0800 Depth (m)	Progress (m)	Hours Drlg.	Mud Weight (kg/m**3)	Vis (s/L)	Fluid Loss (cc/30min)	PH	Activity
JAN 23, 1997	258.00	29.00	18.25	N/A	N/A	N/A	N/A	Drilling pilot hole
JAN 24, 1997	278.00	20.00	23.00	1175.00	58.00	N/A	9.50	Drilling pilot hole
JAN 25, 1997	309.00	31.00	12.75	1175.00	58.00	N/A	9.50	Drilling pilot hole
JAN 26, 1997	405.00	96.00	19.50	1175.00	58.00	N/A	9.50	Drilling pilot hole
JAN 27, 1997	453.00	48.00	12.00	1190.00	50.00	N/A	9.00	Reaming with hole opener
JAN 28, 1997	453.00	0.00	17.75	1190.00	50.00	N/A	9.00	Reaming with hole opener
JAN 29, 1997	453.00	0.00	16.75	1190.00	50.00	N/A	9.00	Reaming with hole opener
JAN 30, 1997	453.00	0.00	19.00	1190.00	50.00	N/A	9.00	Reaming with hole opener
JAN 31, 1997	453.00	0.00	21.00	1190.00	50.00	N/A	9.00	Condition hole for casing
FEB 01, 1997	453.00	0.00	0.00	1190.00	50.00	N/A	9.00	Run and pull surface casing
FEB 02, 1997	453.00	0.00	13.00	1190.00	50.00	N/A	9.00	Ream and condition hole.
FEB 03, 1997	453.00	0.00	2.00	1190.00	50.00	N/A	9.00	Run and cement casing.
FEB 04, 1997	453.00	0.00	0.00	1190.00	50.00	N/A	9.00	Rig for air
FEB 05, 1997	453.00	0.00	0.00	1190.00	50.00	N/A	9.00	Nipple up for air.
FEB 06, 1997	453.00	0.00	0.00	1190.00	50.00	N/A	9.00	Repair
FEB 07, 1997	453.00	0.00	2.00	1190.00	50.00	N/A	9.00	Pressure test and drill out
FEB 08, 1997	466.00	13.00	3.00	1190.00	50.00	N/A	9.00	Drill, mix LCM, Drill
FEB 09, 1997	504.00	38.00	15.50	1020.00	48.00	N/A	9.50	Cement squeeze.
FEB 10, 1997	504.00	0.00	0.00	1020.00	48.00	N/A	9.50	Wait on cement

Date	0800 Depth (m)	Progress (m)	Hours Drlg.	Mud Weight (kg/m**3)	Vis (s/L)	Fluid Loss (cc/30min)	PH	Activity
FEB 11, 1997	538.00	34.00	8.50	1010.00	45.00	N/A	11.50	Drilling 311mm hole.
FEB 12, 1997	605.00	67.00	21.00	1055.00	42.00	N/A	11.00	Drilling 311mm hole
FEB 13, 1997	651.00	46.00	13.50	1055.00	42.00	N/A	11.00	Drill, trip for bit
FEB 14, 1997	696.00	45.00	10.75	1055.00	42.00	N/A	11.00	Drilling, Tripping
FEB 15, 1997	790.00	94.00	20.50	1055.00	42.00	N/A	11.00	Drilling 311mm hole
FEB 16, 1997	847.00	57.00	12.50	1100.00	43.00	11.20	9.00	Tripping, Drilling
FEB 17, 1997	927.00	80.00	18.00	1115.00	49.00	N/A	9.00	Drilling, Fishing
FEB 18, 1997	945.00	18.00	3.00	1115.00	49.00	N/A	9.00	Drilling 311mm hole
FEB 19, 1997	1081.00	136.00	21.00	1110.00	48.00	N/A	8.50	Drilling 311mm hole
FEB 20, 1997	1213.00	132.00	21.00	1130.00	57.00	6.40	8.50	Drilling 311mm hole
FEB 21, 1997	1279.00	66.00	14.00	1130.00	57.00	6.40	8.50	Drill, Trip for Bit
FEB 22, 1997	1282.00	3.00	4.75	1130.00	57.00	6.40	8.50	Tripping
FEB 23, 1997	1341.00	59.00	10.00	1130.00	57.00	6.40	8.50	Trip, Drilling 311mm hole
FEB 24, 1997	1520.00	179.00	21.00	1155.00	50.00	8.20	9.50	Drilling 311mm hole
FEB 25, 1997	1548.00	28.00	3.00	1155.00	50.00	8.20	9.50	Tripping
FEB 26, 1997	1606.00	58.00	11.50	1170.00	80.00	7.00	10.00	Drilling 311mm hole
FEB 27, 1997	1710.00	104.00	17.00	1170.00	95.00	6.00	9.50	Drilling, Wiper trip
FEB 28, 1997	1710.00	0.00	0.00	1170.00	95.00	6.00	9.50	Clean and condition hole
MAR 01, 1997	1710.00	0.00	0.00	1170.00	95.00	6.00	9.50	Logging, Wiper trip for casing

Date	0800 Depth (m)	Progress (m)	Hours Drlg.	Mud Weight (kg/m**3)	Vis (s/L)	Fluid Loss (cc/30min)	PH	Activity
MAR 02, 1997	1710.00	0.00	0.00	1170.00	95.00	6.00	9.50	Run intermediate (1) casing
MAR 03, 1997	1710.00	0.00	0.00	1170.00	95.00	6.00	9.50	Cement casing and nipple up.
MAR 04, 1997	1713.00	3.00	0.00	1170.00	95.00	6.00	9.50	Head up, RIH
MAR 05, 1997	1716.00	3.00	0.50	1170.00	95.00	6.00	9.50	Drill out, Leak off test, Trip for hammer.
MAR 06, 1997	1717.00	1.00	0.50	1170.00	95.00	6.00	9.50	Drill and dry hole
MAR 07, 1997	2100.00	383.00	19.00	1170.00	95.00	6.00	9.50	Drilling 216mm hole
MAR 08, 1997	2419.00	319.00	21.00	1170.00	95.00	6.00	9.50	Drilling 216mm hole
MAR 09, 1997	2700.00	281.00	20.00	1170.00	95.00	6.00	9.50	Drilling 216mm hole
MAR 10, 1997	2897.00	197.00	15.00	1170.00	95.00	6.00	9.50	Trip and mud up
MAR 11, 1997	2897.00	0.00	0.00	1170.00	95.00	6.00	9.50	Clean and condition hole
MAR 12, 1997	2897.00	0.00	0.00	1170.00	95.00	6.00	9.50	Clean and condition hole
MAR 13, 1997	2897.00	0.00	0.00	1170.00	95.00	6.00	9.50	Clean and condition hole

Date	0800 Depth (m)	Progress (m)	Hours Drlg.	Mud Weight (kg/m**3)	Vis (s/L)	Fluid Loss (cc/30min)	PH	Activity
MAR 14, 1997	2897.00	0.00	0.00	1170.00	95.00	6.00	9.50	Lay down pipe, Run Casing
MAR 15, 1997	2897.00	0.00	0.00	1170.00	95.00	6.00	9.50	Run and circulate casing
MAR 16, 1997	2897.00	0.00	0.00	1170.00	95.00	6.00	9.50	Case and cement
MAR 17, 1997	2897.00	0.00	0.00	1170.00	95.00	6.00	9.50	Nipple up, run in hole
MAR 18, 1997	2897.00	0.00	0.00	1170.00	95.00	6.00	9.50	Pressure test, pick up drill string.
MAR 19, 1997	2908.00	11.00	5.00	1170.00	95.00	6.00	9.50	Drilling 152mm hole
MAR 20, 1997	2939.00	31.00	10.50	1170.00	95.00	6.00	9.50	Drilling 152mm hole
MAR 21, 1997	2940.80	1.80	1.00	1170.00	95.00	6.00	9.50	Reaming packed assembly.
MAR 22, 1997	3009.00	68.20	21.00	1170.00	95.00	6.00	9.50	Drilling 152mm hole
MAR 23, 1997	3095.00	86.00	21.00	1170.00	95.00	6.00	9.50	Drilling 152mm hole
MAR 24, 1997	3135.00	40.00	12.00	1170.00	95.00	6.00	9.50	Drilling, Trip for bit.
MAR 25, 1997	3220.00	85.00	18.00	1130.00	58.00	7.80	10.00	Drilling 152mm hole, Circulate

Date	0800 Depth (m)	Progress (m)	Hours Drlg.	Mud Weight (kg/m**3)	Vis (s/L)	Fluid Loss (cc/30min)	PH	Activity
MAR 26, 1997	3220.00	0.00	0.00	1130.00	58.00	7.80	10.00	Logging
MAR 28, 1997	3222.00	0.00	0.00	1130.00	58.00	7.80	10.00	Logging
MAR 29, 1997	3222.00	0.00	0.00	1130.00	58.00	7.80	10.00	Wiper trip, log, run liner.

DEVIATION SURVEYS

Measured Depth (m)	Angle of Inclination (Degree)	Azimuth (Degree)	T.V.D. (m)	Latitude (m)	Departure (m)	Vert. Section (m)	Dog Leg Severity (Deg/30m)
29.00	0.25	N/A	N/A	N/A	N/A	N/A	N/A
57.00	0.50	N/A	N/A	N/A	N/A	N/A	N/A
85.00	0.75	N/A	N/A	N/A	N/A	N/A	N/A
94.00	0.75	N/A	N/A	N/A	N/A	N/A	N/A
112.00	0.75	N/A	N/A	N/A	N/A	N/A	N/A
130.00	2.50	N/A	N/A	N/A	N/A	N/A	N/A
148.00	1.50	N/A	N/A	N/A	N/A	N/A	N/A
160.00	1.50	N/A	N/A	N/A	N/A	N/A	N/A
175.00	2.00	N/A	N/A	N/A	N/A	N/A	N/A
184.00	2.00	N/A	N/A	N/A	N/A	N/A	N/A
194.00	2.00	N/A	N/A	N/A	N/A	N/A	N/A
203.00	2.25	N/A	N/A	N/A	N/A	N/A	N/A
210.00	2.00	N/A	N/A	N/A	N/A	N/A	N/A
224.00	2.50	N/A	N/A	N/A	N/A	N/A	N/A
233.50	2.12	N/A	N/A	N/A	N/A	N/A	N/A
243.00	2.12	N/A	N/A	N/A	N/A	N/A	N/A
253.00	2.75	N/A	N/A	N/A	N/A	N/A	N/A
262.00	3.00	262.500	261.90	0.55	-6.21	0.55	0.93
279.00	2.88	267.000	278.87	0.63	-7.07	0.63	0.47
300.00	2.75	262.500	299.85	0.73	-8.10	0.73	0.36
318.00	2.88	267.500	317.83	0.80	-8.98	0.80	0.45
337.00	3.00	263.500	336.80	0.88	-9.95	0.88	0.38
356.50	3.00	263.500	356.28	1.00	-10.96	1.00	0.00
374.71	2.50	265.500	374.47	1.08	-11.83	1.08	0.84
392.00	2.25	260.500	391.74	1.17	-12.54	1.17	0.56
413.00	1.75	262.500	412.78	0.55	-8.67	0.55	0.72
431.00	1.50	254.500	430.77	0.45	-9.17	0.45	0.56
441.00	1.50	252.500	440.77	0.38	9.42	0.38	0.16
476.00	1.50	N/A	N/A	N/A	N/A	N/A	N/A
505.00	0.88	N/A	N/A	N/A	N/A	N/A	N/A
524.00	1.25	N/A	N/A	N/A	N/A	N/A	N/A
581.00	1.25	N/A	N/A	N/A	N/A	N/A	N/A

Measured Depth (m)	Angle of Inclination (Degree)	Azimuth (Degree)	T.V.D. (m)	Latitude (m)	Departure (m)	Vert. Section (m)	Dog Leg Severity (Deg/30m)
601.00	1.00	N/A	N/A	N/A	N/A	N/A	N/A
639.00	2.00	N/A	N/A	N/A	N/A	N/A	N/A
661.00	1.50	N/A	N/A	N/A	N/A	N/A	N/A
680.00	2.00	N/A	N/A	N/A	N/A	N/A	N/A
704.00	1.50	N/A	N/A	N/A	N/A	N/A	N/A
714.00	1.50	N/A	N/A	N/A	N/A	N/A	N/A
723.00	1.25	N/A	N/A	N/A	N/A	N/A	N/A
741.00	1.50	N/A	N/A	N/A	N/A	N/A	N/A
761.00	1.75	N/A	N/A	N/A	N/A	N/A	N/A
770.00	1.50	N/A	N/A	N/A	N/A	N/A	N/A
780.00	1.50	N/A	N/A	N/A	N/A	N/A	N/A
798.00	2.00	N/A	N/A	N/A	N/A	N/A	N/A
808.00	1.50	N/A	N/A	N/A	N/A	N/A	N/A
817.00	1.25	N/A	N/A	N/A	N/A	N/A	N/A
828.00	1.50	N/A	N/A	N/A	N/A	N/A	N/A
859.00	1.75	N/A	N/A	N/A	N/A	N/A	N/A
878.00	1.50	N/A	N/A	N/A	N/A	N/A	N/A
934.00	1.50	N/A	N/A	N/A	N/A	N/A	N/A
952.00	1.50	N/A	N/A	N/A	N/A	N/A	N/A
982.00	1.25	N/A	N/A	N/A	N/A	N/A	N/A
1010.00	1.75	N/A	N/A	N/A	N/A	N/A	N/A
1039.00	1.88	N/A	N/A	N/A	N/A	N/A	N/A
1049.00	2.00	N/A	N/A	N/A	N/A	N/A	N/A
1068.00	2.25	N/A	N/A	N/A	N/A	N/A	N/A
1078.00	2.50	N/A	N/A	N/A	N/A	N/A	N/A
1096.00	2.25	N/A	N/A	N/A	N/A	N/A	N/A
1112.00	2.50	N/A	N/A	N/A	N/A	N/A	N/A
1125.00	2.25	N/A	N/A	N/A	N/A	N/A	N/A
1153.00	2.00	N/A	N/A	N/A	N/A	N/A	N/A
1183.00	2.50	N/A	N/A	N/A	N/A	N/A	N/A
1210.00	3.00	N/A	N/A	N/A	N/A	N/A	N/A
1220.00	3.00	N/A	N/A	N/A	N/A	N/A	N/A
1230.00	2.88	N/A	N/A	N/A	N/A	N/A	N/A

Measured Depth (m)	Angle of Inclination (Degree)	Azimuth (Degree)	T.V.D. (m)	Latitude (m)	Departure (m)	Vert. Section (m)	Dog Leg Severity (Deg/30m)
1260.00	2.50	N/A	N/A	N/A	N/A	N/A	N/A
1277.00	3.00	N/A	N/A	N/A	N/A	N/A	N/A
1291.00	3.12	N/A	N/A	N/A	N/A	N/A	N/A
1310.00	2.75	N/A	N/A	N/A	N/A	N/A	N/A
1339.00	2.00	N/A	N/A	N/A	N/A	N/A	N/A
1365.00	1.75	N/A	N/A	N/A	N/A	N/A	N/A
1393.00	1.00	N/A	N/A	N/A	N/A	N/A	N/A
1443.00	1.00	N/A	N/A	N/A	N/A	N/A	N/A
1491.00	1.75	N/A	N/A	N/A	N/A	N/A	N/A
1520.00	1.75	N/A	N/A	N/A	N/A	N/A	N/A
1562.00	1.50	N/A	N/A	N/A	N/A	N/A	N/A
1609.00	1.50	N/A	N/A	N/A	N/A	N/A	N/A
1703.00	2.00	N/A	N/A	N/A	N/A	N/A	N/A
1751.00	1.50	N/A	N/A	N/A	N/A	N/A	N/A
1827.00	1.50	N/A	N/A	N/A	N/A	N/A	N/A
1932.00	1.25	N/A	N/A	N/A	N/A	N/A	N/A
2128.00	1.25	N/A	N/A	N/A	N/A	N/A	N/A
2219.00	2.25	N/A	N/A	N/A	N/A	N/A	N/A
2371.00	1.75	N/A	N/A	N/A	N/A	N/A	N/A
2467.00	1.25	N/A	N/A	N/A	N/A	N/A	N/A
2658.00	1.50	N/A	N/A	N/A	N/A	N/A	N/A
2753.00	3.00	N/A	N/A	N/A	N/A	N/A	N/A
2890.00	2.90	N/A	N/A	N/A	N/A	N/A	N/A
2928.00	3.25	N/A	N/A	N/A	N/A	N/A	N/A
2980.00	3.00	N/A	N/A	N/A	N/A	N/A	N/A
3057.00	2.75	N/A	N/A	N/A	N/A	N/A	N/A
3212.00	2.00	N/A	N/A	N/A	N/A	N/A	N/A

LOGGING REPORT

Date: FEB 28, 1997
Logging Company: SCHLUMBERGER
Logging Engineer: Dan Gimpelj
Truck Number: 2025
Hole Size: 311.00mm
Depth (Driller's): 1710.00m
Depth (Strap): 1712.30m
Depth (Logger's): 1701.00m
Last Casing: Depth : 454.00m **Size:** 339.70mm **Weight:** 81.10kg/m

MUD DETAILS

Mud Type: Gel / Chem
Mud Type: 1190.00kg/m**3
Viscosity: 119.00sec/l
pH: 9.00
Fluid Loss: 5.40cc/30min
Salinity: N/Appm

OPERATIONS SUMMARY

Hole conditions prior to logging: Good
Circulation time after T.D.: 1.5 hours
Number of Dummy Trips: 3
Description of Dummy Trips: 15 stand, 1 to casing
Number of Runs in Hole: Total: 2 **Suceeded:** 2 **Failed :** 0

LOGGING SEQUENCE

Logs	Time (Hrs)	Interval From (m)	Interval To (m)	Remarks
AITH ran as Phasor	1.80	1697.60	454.00	Ran in combination with Sonic
BHC Sonic	1.80	1689.10	20.00	Ran in Combination with AITH.
Platform Express Density-Neutron-GR	1.80	1700.20	454.00	Ran in combination with ML.
Platform Express Microlog	1.80	1700.20	454.00	Ran in combination with TLD.

Total Hours Logging: 7.20

FURTHER REMARKS

No problems running tools. About 10m of fill.

Date: MAR 10, 1997
Logging Company: N/A
Logging Engineer: N/A
Truck Number: N/A
Hole Size: 215.90mm
Depth (Driller's): 2897.00m
Depth (Strap): N/Am
Depth (Logger's): N/Am
Last Casing: Depth : 1712.70m **Size:** 244.50mm **Weight:** 69.94kg/m

MUD DETAILS

Mud Type: N/A
Mud Type: N/Akg/m**3
Viscosity: N/Asec/l
pH: N/A
Fluid Loss: N/Acc/30min
Salinity: N/Appm

OPERATIONS SUMMARY

Hole conditions prior to logging: N/A
Circulation time after T.D.: N/A
Number of Dummy Trips: N/A
Description of Dummy Trips: N/A
Number of Runs in Hole: Total: 0 **Suceeded:** N/A **Failed :** N/A

LOGGING SEQUENCE

Logs	Time (Hrs)	Interval From (m)	Interval To (m)	Remarks

Total Hours Logging: 7.20

FURTHER REMARKS

This section was air drilled. Logs waived by NEB.

Date: MAR 25, 1997
Logging Company: Schlumberger
Logging Engineer: Nick McInnes
Truck Number: 3049
Hole Size: 152.00mm
Depth (Driller's): 3220.00m
Depth (Strap): 3221.00m
Depth (Logger's): 3222.00m
Last Casing: Depth : 2893.00m **Size:** 177.80mm **Weight:** 43.16kg/m

MUD DETAILS

Mud Type: Gel Chem
Mud Type: 1130.00kg/m**3
Viscosity: 56.00sec/l
pH: 9.50
Fluid Loss: 7.20cc/30min
Salinity: N/Appm

OPERATIONS SUMMARY

Hole conditions prior to logging: Good
Circulation time after T.D.: 12 hours, WO loggers
Number of Dummy Trips: 1
Description of Dummy Trips: Between run 4 and 5
Number of Runs in Hole: Total: 5 **Suceeded:** 3 **Failed :** 2

LOGGING SEQUENCE

Logs	Time (Hrs)	Interval From (m)	Interval To (m)	Remarks
AITH-TLD-CNL-ML-GR	12.00	3219.60	2894.00	CNL-GR pulled to 1640m. TLD and ML failed.
DSI-GR	6.00	3214.00	2894.00	No problems
FMS-GR	6.00	3221.50	2894.00	No problems
ARI-LDT-CNL-ML-GR	8.00	3221.50	2894.00	CNL-GR pulled through casing, Lat and ML failed, LDT?
DLT-LDT-CNL-ML-GR	6.00	3217.50	2894.00	GR-CNL pulled through casing, LDT?

Total Hours Logging: 45.20

FURTHER REMARKS

Equipment couldn't handle BHT. Last run was with rewired rope socket. Hole was circulated between runs 4 and 5. Logging times estimated.

FORMATION TOPS

Kelly Bushing : 433.32m

Formation	Prognosis (m)	Sample Top (m)	Sample TVD (m)	Log Top (m)	Log TVD (m)	Subsea (m)
FANTASQUE	459.00	144.00	N/A	N/A	N/A	289.32
FLETT	494.00	179.00	N/A	N/A	N/A	254.32
SHUNDA	N/A	983.00	N/A	975.00	N/A	-541.68
PEKISKO	N/A	1116.00	N/A	1119.00	N/A	-685.68
BANFF	1113.00	1164.00	N/A	1163.00	N/A	-729.68
EXSHAW	1659.00	1647.00	N/A	1646.50	N/A	-1213.18
KOTCHO	1669.00	1662.00	N/A	1665.00	N/A	-1231.68
TETCHO	2024.00	2030.00	N/A	2030.00	N/A	-1596.68
KAKISA	N/A	2139.00	N/A	2138.00	N/A	-1704.68
FORT SIMPSON	2114.00	2161.50	N/A	2162.00	N/A	-1728.68
MUSKWA	2754.00	2812.50	N/A	2822.00	N/A	-2388.68
NAHANNI	2829.00	2886.50	N/A	2889.00	N/A	-2455.68
MANATOE	N/A	3129.00	N/A	N/A	N/A	-2695.68
ARNICA	N/A	3184.00	N/A	N/A	N/A	-2750.68
TOTAL DEPTH	3219.00	3220.00	N/A	3222.00	N/A	-2788.68

FORMATION EVALUATIONS

Formation:	FANTASQUE		
Age:	PERMIAN		
Member:	N/A		
Sample Top:	144.00m	**Sample TVD:**	N/A
Log Top:	N/A	**Log TVD:**	N/A
Thickness:	N/A	**Subsea:**	289.32m

Evaluation: Not sampled.

Conclusion: Estimated top from ROP surface.

Formation:	FLETT		
Age:	MISSISSIPPIAN		
Member:	N/A		
Sample Top:	179.00m	**Sample TVD:**	N/A
Log Top:	N/A	**Log TVD:**	N/A
Thickness:	N/A	**Subsea:**	254.32m

Evaluation: Upper Flett 179 to 695m is interbedded LIMESTONE, SHALE and DOLOMITE. Potential reservoirs in DOLOMITE at 292.5 to 297.5m, 320 to 360m, 421.5 to 423.5m, 459 to 463m, 471.5 to 476.5m, 483 to 488.5m, 520 to 531m and 547 to 551m (amber cut). Lower Flett 695 to 975m is interbedded LIMESTONE and SHALE with occasional CHERT.

Conclusion: Top estimated from ROP surface. Best potential in DOL 547 - 551m. No apparent reservoir in lower Flett.

Formation:	SHUNDA		
Age:	MISSISSIPPIAN		
Member:	N/A		
Sample Top:	983.00m	**Sample TVD:**	N/A
Log Top:	975.00m	**Log TVD:**	N/A
Thickness:	N/A	**Subsea:**	-541.68m

Evaluation: Upper Shunda is predominantly calcareous SHALE with occasional carbonate beds. Lower Shunda is predominantly tight LIMESTONE with interbedded SHALE. Slight gas response at 1085m, probable healed fractures.

Conclusion: No apparent reservoir potential.

Formation:	PEKISKO		
Age:	MISSISSIPPIAN		
Member:	N/A		
Sample Top:	1116.00m	**Sample TVD:**	N/A
Log Top:	1119.00m	**Log TVD:**	N/A
Thickness:	N/A	**Subsea:**	-685.68m

Evaluation: Top is DOLOMITE 1116 to 1119m with trace of pin point porosity. The remainder is calcareous SHALE with occasional tight LIMESTONE beds.

Conclusion: No apparent reservoir potential.

Formation:	BANFF
Age:	MISSISSIPPIAN
Member:	N/A

Sample Top:	1164.00m	**Sample TVD:**	N/A
Log Top:	1163.00m	**Log TVD:**	N/A
Thickness:	N/A	**Subsea:**	-729.68m

Evaluation: Predominantly calcareous SHALE with occasional thin argillaceous LIMESTONE beds. Sniff of gas from fractures 1410 to 1415m, 1510 to 1515m, 1543 to 1548m and 1573 to 1575m.

Conclusion: No apparent reservoir potential.

Formation:	EXSHAW		
Age:	MISSISSIPPIAN		
Member:	N/A		
Sample Top:	1647.00m	**Sample TVD:**	N/A
Log Top:	1646.50m	**Log TVD:**	N/A
Thickness:	N/A	**Subsea:**	-1213.18m

Evaluation: SHALE dark brown, dark brown to black, earthy to slightly waxy, petroliferous odor, no fluorescence, fissile, predominantly blocky, common fractures, common slickensided, trace of nodular and disseminated pyrite, gassy mud.

Conclusion: No apparent reservoir potential.

Formation:	KOTCHO		
Age:	DEVONIAN		
Member:	N/A		
Sample Top:	1662.00m	**Sample TVD:**	N/A
Log Top:	1665.00m	**Log TVD:**	N/A
Thickness:	N/A	**Subsea:**	-1231.68m

Evaluation: Upper Kotcho is light to medium gray slightly calcareous SHALE, Middle Kotcho is interbedded calcareous SHALE and tight LIMESTONE, Lower Kotcho is medium gray calcareous SHALE.

Conclusion: No reservoir potential.

Formation:	TETCHO		
Age:	DEVONIAN		
Member:	N/A		
Sample Top:	2030.00m	**Sample TVD:**	N/A
Log Top:	2030.00m	**Log TVD:**	N/A
Thickness:	N/A	**Subsea:**	-1596.68m

Evaluation: Interbedded argillaceous LIMESTONE and calcareous SHALE.

Conclusion: Puff of gas while drilling at top of Tetcho and after surveys. No significant reservoir potential.

Formation:	KAKISA		
Age:	DEVONIAN		
Member:	N/A		
Sample Top:	2139.00m	**Sample TVD:**	N/A
Log Top:	2138.00m	**Log TVD:**	N/A
Thickness:	N/A	**Subsea:**	-1704.68m

Evaluation: LIMESTONE light brown, dark gray brown, dark gray to black, very argillaceous in part, cryptocrystalline, mudstone, tight, trace of sparry calcite, probable healed fractures

Conclusion: No apparent reservoir potential.

Formation:	FORT SIMPSON		
Age:	DEVONIAN		
Member:	N/A		
Sample Top:	2161.50m	**Sample TVD:**	N/A
Log Top:	2162.00m	**Log TVD:**	N/A
Thickness:	N/A	**Subsea:**	-1728.68m

Evaluation: Predominantly medium gray SHALE

Conclusion: No reservoir potential.

Formation:	MUSKWA		
Age:	DEVONIAN		
Member:	N/A		
Sample Top:	2812.50m	**Sample TVD:**	N/A
Log Top:	2822.00m	**Log TVD:**	N/A
Thickness:	N/A	**Subsea:**	-2388.68m

Evaluation: Dark gray to black SHALE, calcareous in part, blocky to platy, slickensided in part, siliceous in part, probable fractures, common nodular and disseminated pyrite, trace af CHERT, trace of sparry calcite and petroliferous odor in lower Muskwa.

Conclusion: No reservoir potential.

Formation:	NAHANNI		
Age:	DEVONIAN		
Member:	N/A		
Sample Top:	2886.50m	**Sample TVD:**	N/A
Log Top:	2889.00m	**Log TVD:**	N/A
Thickness:	N/A	**Subsea:**	-2455.68m

Evaluation: 2890.5 to 2926m DOLOMITE with veined sparry infilling, trace of pin point, vuggy and fracture porosity. 2926 to 3008m LIMESTONE predominantly cryptocrystalline, tight. Probable porous interbedded DOLOMITE at 2990 and 2995m. 3008 to 3084m argillaceous DOLOMITE with sparry veins, probable pin point, vuggy and fracture porosity. 3084 to 3112m predominantly tight LIMESTONE with thin interbedded SHALE. 3112 to 3130m predominantly DOLOMITE with interbedded SHALE

Conclusion: Good reservoir potential throughout dolomites.

Formation:	MANATOE		
Age:	DEVONIAN		
Member:	N/A		
Sample Top:	3129.00m	**Sample TVD:**	N/A
Log Top:	N/A	**Log TVD:**	N/A
Thickness:	N/A	**Subsea:**	-2695.68m

Evaluation: Predominantly sparry secondary hydrothermal DOLOMITE, probable vuggy and fracture porosity throughout.

Conclusion: Good reservoir potential.

Formation:	ARNICA		
Age:	DEVONIAN		
Member:	N/A		
Sample Top:	3184.00m	**Sample TVD:**	N/A
Log Top:	N/A	**Log TVD:**	N/A
Thickness:	N/A	**Subsea:**	-2750.68m

Evaluation: Predominantly DOLOMITE light to medium gray brown, slightly argillaceous in part, cryptocrystalline to microcrystalline, finely crystalline in part, predominantly mudstone to wackestone, sucrosic packstone in part, no stain, no fluorescence, no visible porosity.

Conclusion: No visible reservoir potential.

Formation:	TOTAL DEPTH		
Age:	N/A		
Member:	N/A		
Sample Top:	3220.00m	**Sample TVD:**	N/A
Log Top:	3222.00m	**Log TVD:**	N/A
Thickness:	N/A	**Subsea:**	-2788.68m

Evaluation: N/A

Conclusion: N/A

SAMPLE DESCRIPTIONS

Well Name: PARAMOUNT ET AL BOVIE LAKE C-76
Location: 60 20' 122 45'

250.00 to 255.00m **Interval: 5.00m**	SHALE: 20%, medium gray, dark gray, fissile, predominantly platy LIMESTONE: 80%, light brown white mottled medium gray, cryptocrystalline, mudstone, trace glauconitic, trace with nodular pyrite
255.00 to 260.00m **Interval: 5.00m**	LIMESTONE: 100%, light gray white mottled medium gray, light brown, medium brown, cryptocrystalline mudstone, minor medium brown, dark gray brown, microcrystalline wackestone, slightly argillaceous, silty in part, trace dolomitic, no stain, no visible porosity
260.00 to 265.00m **Interval: 5.00m**	SHALE: 20%, medium gray, dark gray, fissile, platy, dark gray to bk glossy, fissile, platy LIMESTONE: 80%, as above
265.00 to 270.00m **Interval: 5.00m**	LIMESTONE: 100%, light brown white mottled medium gray, predominantly cryptocrystalline mudstone, minor microcrystalline wackestone, no stain, no visible porosity
270.00 to 275.00m **Interval: 5.00m**	LIMESTONE: 100%, light brown cryptocrystalline, light brown white mottled medium gray cryptocrystalline mudstone, trace medium brown cryptocrystalline to microcrystalline, mudstone to wackestone, tight
275.00 to 280.00m **Interval: 5.00m**	LIMESTONE: 100%, as above, medium to dark gray, cryptocrystalline mudstone, slightly argillaceous
280.00 to 285.00m **Interval: 5.00m**	LIMESTONE: 100%, light brown, light gray brown, cryptocrystalline mudstone, mottled in part, LIMESTONE medium gray brown cryptocrystalline to microcrystalline, mudstone to wackestone, slightly dolomitic, no stain, no porosity
285.00 to 290.00m **Interval: 5.00m**	LIMESTONE: 100%, cream to light brown, cryptocrystalline, mudstone, mottled in part, no stain, no porosity
290.00 to 293.00m **Interval: 3.00m**	DOLOMITE: 100%, medium gray brown, cryptocrystalline to finely crystalline, mudstone to wackestone, no stain, very weak blooming wet cut fluorescence, weak dry cut fluorescence, scattered pin point and micro vuggy porosity 6-8%, low permeability
293.00 to 295.00m **Interval: 2.00m**	DOLOMITE: 20%, as above LIMESTONE: 80%, cream to light brown, mottled in part, cryptocrystalline mudstone, tight
295.00 to 300.00m **Interval: 5.00m**	LIMESTONE: 40%, as above DOLOMITE: 60%, medium gray brown, cryptocrystalline to microcrystalline, mudstone to wackestone, predominantly tight, no stain, very weak streaming wet cut fluorescence, trace of pin point porosity 4-5%, low permeability
300.00 to 305.00m **Interval: 5.00m**	DOLOMITE: 10%, as above

	LIMESTONE: 90%, light brown to cream, mottled medium brown, cryptocrystalline mudstone, LIMESTONE medium gray brown, cryptocrystalline to microcrystalline, predominantly mudstone, tight
305.00 to 310.00m Interval: 5.00m	DOLOMITE: 10%, as above
	LIMESTONE: 90%, as above
310.00 to 315.00m Interval: 5.00m	LIMESTONE: 100%, cream to light brown, mottled medium brown, medium gray, cryptocrystalline, mudstone, no stain, no visible porosity
315.00 to 320.00m Interval: 5.00m	SHALE: 20%, dark gray, bk, glossy, fissile, platy
	LIMESTONE: 80%, as above
320.00 to 322.50m Interval: 2.50m	DOLOMITE: 100%, medium brown, cryptocrystalline to microcrystalline, mudstone to wackestone, trace of sucrosic packstone, no stain, very weak blooming wet cut fluorescence, predominantly tight, trace of scattered pin point porosity, trace of intercrystalline porosity 4-6%
322.50 to 325.00m Interval: 2.50m	DOLOMITE: 100%, medium brown, light to medium gray, cryptocrystalline to microcrystalline, mudstone, calcareous in part, no stain, very weak dry cut fluorescence, no visible porosity
325.00 to 330.00m Interval: 5.00m	DOLOMITE: 100%, light brown, mottled in part, cryptocrystalline to microcrystalline, predominantly mudstone, minor wackestone, no stain, very weak blooming wet cut fluorescence, trace of pin point porosity 3-4%
330.00 to 335.00m Interval: 5.00m	DOLOMITE: 100%, as above, trace light to medium brown, finely crystalline sucrosic packstone, very weak blooming wet cut fluorescence, trace of intercrystalline porosity 4-6%
335.00 to 340.00m Interval: 5.00m	DOLOMITE: 100%, light to medium brown, mottled, predominantly cryptocrystalline mudstone, minor microcrystalline wackestone, no stain, very weak blooming wet cut fluorescence, trace of scattered pin point and micro vuggy porosity 6-8%
340.00 to 345.00m Interval: 5.00m	DOLOMITE: 100%, as above
345.00 to 350.00m Interval: 5.00m	DOLOMITE: 100%, as above
350.00 to 355.00m Interval: 5.00m	DOLOMITE: 100%, light to medium brown, mottled, predominantly cryptocrystalline, minor microcrystalline, mudstone, slightly calcareous in part, no stain, no fluorescence, no visible porosity
355.00 to 360.00m Interval: 5.00m	DOLOMITE: 100%, light to medium brown, mottled, predominantly cryptocrystalline, minor microcrystalline, mudstone, minor wackestone, slightly calcareous, no stain, no fluorescence, no visible porosity, DOLOMITE dark gray brown, cryptocrystalline, mudstone, slightly argillaceous, tight.
360.00 to 365.00m Interval: 5.00m	DOLOMITE: 40%, as above
	SHALE: 20%, dark gray, fissile, blocky, very calcareous

	LIMESTONE: 40%, medium gray, crpx to microcrystalline, mudstone, dolomitic, slightly argillaceous, LIMESTONE dark gray, cryptocrystalline, mudstone, very argillaceous, dolomitic
365.00 to 370.00m Interval: 5.00m	LIMESTONE: 100%, light gray white, medium gray, cryptocrystalline, mudstone, no stain, no fluorescence, no porosity, LIMESTONE medium gray, cryptocrystalline, argillaceous
370.00 to 375.00m Interval: 5.00m	LIMESTONE: 70%, as above
	SHALE: 30%, dark gray to black, fissile, blocky, calcareous
375.00 to 380.00m Interval: 5.00m	SHALE: 10%, as above
	LIMESTONE: 90%, light gray white, light brown, medium to dark brown, predominantly cryptocrystalline mudstone, mottled in part, chalky in part, no stain, no porosity
380.00 to 385.00m Interval: 5.00m	LIMESTONE: 100%, light gray white, light brown, medium to dark brown, medium gray, predominantly cryptocrystalline mudstone, mottled in part, chalky in part, very argillaceous in part, no stain, no fluorescence, no porosity
385.00 to 390.00m Interval: 5.00m	LIMESTONE: 20%, as above
	DOLOMITE: 80%, medium gray brown, dark gray brown, microcrystalline, wackestone, argillaceous, no stain, no fluorescence, no visible porosity
390.00 to 395.00m Interval: 5.00m	LIMESTONE: 100%, light brown mottled gray, cryptocrystalline mudstone, medium gray brown cryptocrystalline to microcrystalline, mudstone to wackestone, tight
395.00 to 400.00m Interval: 5.00m	LIMESTONE: 80%, as above
	SHALE: 10%, dark gray, fissile, platy, calcareous
	DOLOMITE: 10%, dark gray, microcrystalline, wackestone, argillaceous, tight
400.00 to 405.00m Interval: 5.00m	LIMESTONE: 40%, light brown mottled gray, medium gray argillaceous, cryptocrystalline mudstone
	DOLOMITE: 50%, medium gray brown, dark gray to brown, cryptocrystalline to microcrystalline, mudstone to wackestone, slightly to very argillaceous in part, no stain, no fluorescence, no visible porosity
	SHALE: 10%, dark gray, calcareous, dolomitic, fissile, platy to blocky
405.00 to 410.00m Interval: 5.00m	LIMESTONE: 100%, medium brown, medium gray, cryptocrystalline to microcrystalline, mudstone, dolomitic, slightly argillaceous in part, no stain, no porosity
410.00 to 415.00m Interval: 5.00m	SHALE: 20%, medium gray, fissile, blocky, calcareous
	LIMESTONE: 80%, as above, light gray white, chalky in part, mottled light brown

415.00 to 420.00m **Interval: 5.00m**	**LIMESTONE:** 100%, as above, light brown mottled, medium brown, dark brown, predominantly cryptocrystalline, mudstone, no stain, no porosity, trace of microcrystalline wackestone
420.00 to 422.50m **Interval: 2.50m**	**LIMESTONE:** 70%, as above
	DOLOMITE: 30%, light to medium brown mottled, predominantly cryptocrystalline mudstone, minor microcrystalline wackestone, trace finely crystalline wackestone, minor spotty oil stain, weak dry fluorescence, strong blooming wet cut fluorescence, trace of scattered pin point and micro vuggy porosity 8-10%, faint petroliferous odor, probable permeability
422.50 to 425.00m **Interval: 2.50m**	**LIMESTONE:** 100%, light to medium gray brown mottled, medium brown, cryptocrystalline mudstone, chalky in part, predominantly dolomitic, tight, trace of DOLOMITE as above, trace of SHALE dark gray, fissile, platy to blocky, calcareous
425.00 to 430.00m **Interval: 5.00m**	**LIMESTONE:** 100%, light to medium mottled gray brown, light to medium brown, cryptocrystalline mudstone, tight, LIMESTONE medium to dark gray brown, argillaceous in part, no stain, no fluorescence, trace of pin point porosity, minor translucent to chalky secondary calcite, trace of LIMESTONE dark gray to black argillaceous, trace of SHALE dark gray, fissile, platy
430.00 to 435.00m **Interval: 5.00m**	**LIMESTONE:** 100%, light to dark mottled gray brown, dark brown, cryptocrystalline mudstone, tight, no stain, no porosity, trace of translucent calcite, trace of SHALE as above
435.00 to 440.00m **Interval: 5.00m**	**LIMESTONE:** 100%, cream to light brown, mottled light to medium gray, cryptocrystalline mudstone, tight, trace of translucent calcite
440.00 to 445.00m **Interval: 5.00m**	**LIMESTONE:** 100%, as above
445.00 to 450.00m **Interval: 5.00m**	**SHALE:** 10%, dark gray, fissile, blocky to platy, calcareous
	LIMESTONE: 90%, as above
450.00 to 453.00m **Interval: 3.00m**	**SHALE:** 10%, as above
	LIMESTONE: 90%, as above
453.00 to 455.00m **Interval: 2.00m**	**LIMESTONE:** 100%, light gray translucent to light brown mottled gray, cryptocrystalline to microcrystalline, predominantly mudstone, trace of sparry calcite, trace of nodular and disseminated pyrite, minor 0-1-0 G cement
455.00 to 460.00m **Interval: 5.00m**	**LIMESTONE:** 80%, as above
	DOLOMITE: 20%, medium brown, cryptocrystalline to microcrystalline, mudstone to wackestone, calcareous, trace veined with sparry calcite and dolomite infilling, trace of spotty oil stain, very weak wet cut fluorescence, trace of pin point porosity
460.00 to 463.00m **Interval: 3.00m**	**DOLOMITE:** 100%, medium to dark gray, microcrystalline, mudstone to wackestone, argillaceous, trace of oil stain, fair blooming wet cut fluorescence, trace of pin point porosity, probable fractures at 456 and 458.5m with sparry dolomite infilling

463.00 to 465.00m **Interval: 2.00m**	**LIMESTONE:** 70%, light gray white, light brown mottled light to medium gray, predominantly cryptocrystalline mudstone, tight
	DOLOMITE: 30%, as above, light to medium brown, microcrystalline, mudstone to wackestone, slightly calcareous, no stain, no visible porosity
465.00 to 467.50m **Interval: 2.50m**	**LIMESTONE:** 100%, light gray white, light brown mottled gray, cryptocrystalline, mudstone, no stain, no porosity, trace of sparry calcite
467.50 to 470.00m **Interval: 2.50m**	**LIMESTONE:** 100%, light brown, light brown mottled gray, cryptocrystalline, mudstone, tight, trace of sparry calcite
470.00 to 475.00m **Interval: 5.00m**	**DOLOMITE:** 100%, medium gray, cryptocrystalline to microcrystalline, mudstone to wackestone, argillaceous, trace of dead oil stain. trace of pin point porosity, trace of sparry calcite, probable fracture at 474.8m
475.00 to 480.00m **Interval: 5.00m**	**DOLOMITE:** 30%, as above
	LIMESTONE: 70%, light brown, cryptocrystalline mudstone, medium gray microcrystalline to finely crystalline, predominantly wackestone, slightly argillaceous, no stain, no fluorescence, no porosity, trace of sparry calcite
480.00 to 485.00m **Interval: 5.00m**	**LIMESTONE:** 20%, as above
	DOLOMITE: 80%, light gray to dark gray, cryptocrystalline to microcrystalline, mudstone to wackestone, argillaceous in part, trace of dead oil stain, trace of pin point porosity, trace veined with sparry calcite, probable fracture at 484.4m
485.00 to 490.00m **Interval: 5.00m**	**DOLOMITE:** 10%, as above
	LIMESTONE: 90%, light gray white, light brown, medium brown, cryptocrystalline, mudstone, tight
490.00 to 495.00m **Interval: 5.00m**	**LIMESTONE:** 100%, light gray white, light brown, light brown mottled gray, medium gray, cryptocrystalline mudstone, tight
495.00 to 500.00m **Interval: 5.00m**	**LIMESTONE:** 100%, light brown white, light brown mottled gray, cryptocrystalline mudstone, tight
500.00 to 504.00m **Interval: 4.00m**	**DOLOMITE:** 50%, medium gray brown, cryptocrystalline to microcrystalline, mudstone, slightly argillaceous, calcareous, no stain, no porosity
	LIMESTONE: 50%, as above, medium to dark gray, cryptocrystalline mudstone, argillaceous, tight
504.00 to 510.00m **Interval: 6.00m**	**LIMESTONE:** 80%, medium brown mottled gray, dark gray brown argillaceous, cryptocrystalline mudstone, tight, trace of sparry calcite
	SHALE: 20%, dark gray, dark gray brown, calcareous, blocky
510.00 to 515.00m **Interval: 5.00m**	**LIMESTONE:** 30%, as above
	DOLOMITE: 70%, light to medium brown, cryptocrystalline, mudstone, calcareous, microcrystalline in part, argillaceous in part, tight

515.00 to 520.00m Interval: 5.00m	LIMESTONE: 90%, light gray, medium gray, cryptocrystalline to microcrystalline, predominantly mudstone, slightly argillaceous in part, dolomitic, tight
	DOLOMITE: 10%, light gray brown, cryptocrystalline to finely crystalline, predominantly mudstone, minor wackestone to packstone, patchy oil stain, fair dry, strong blooming wet cut fluorescence, trace intercrystalline and pin point porosity, probable fracture porosity 6-8%
520.00 to 525.00m Interval: 5.00m	DOLOMITE: 100%, light to medium brown, dark brown, cryptocrystalline to microcrystalline, predominantly mudstone, minor wackestone, trace of oil stain, faint blooming wet cut fluorescence, no visible porosity, probable fracture porosity 522-523, 524-526m, no apparent permeability
525.00 to 530.00m Interval: 5.00m	DOLOMITE: 100%, as above, probable fractures at 528.8 and 529.4m
530.00 to 535.00m Interval: 5.00m	LIMESTONE: 90%, light to medium gray, cryptocrystalline mudstone, argillaceous, slightly dolomitic, tight, trace of sparry calcite
	DOLOMITE: 10%, as above
535.00 to 540.00m Interval: 5.00m	LIMESTONE: 90%, medium gray cryptocrystalline mudstone, argillaceous, dolomitic in part, no stain, no fluorescence, no porosity
	SHALE: 10%, dark gray calcareous, platy
540.00 to 545.00m Interval: 5.00m	LIMESTONE: 100%, as above
545.00 to 550.00m Interval: 5.00m	DOLOMITE: 100%, light brown, cryptocrystalline to microcrystalline, finely crystalline in part, predominantly mudstone, trace wackestone to packstone, scattered oil stain, faint dry fluorescence, strong blooming wet cut fluorescence, amber cut, pin point, microvug and fracture porosity 12-14%, probable fractures at 547.8 and 548.2m
550.00 to 557.00m Interval: 7.00m	LIMESTONE: 70%, light to medium gray, cryptocrystalline, mudstone, argillaceous, dolomitic in part, tight, trace of sparry calcite
	DOLOMITE: 20%, as above
	SHALE: 10%, dark gray calcareous, platy
557.00 to 560.00m Interval: 3.00m	DOLOMITE: 10%, as above
	LIMESTONE: 90%, light to medium brown, light gray white, cryptocrystalline mudstone, dolomitic in part, no stain, tight
560.00 to 565.00m Interval: 5.00m	LIMESTONE: 100%, as above
565.00 to 570.00m Interval: 5.00m	LIMESTONE: 100%, light gray white, light brown cryptocrystalline mudstone, dolomitic in part, no stain, tight
570.00 to 575.00m Interval: 5.00m	LIMESTONE: 100%, light brown, cryptocrystalline, mudstone, no stain, tight, trace of sparry calcite
575.00 to 580.00m Interval: 5.00m	LIMESTONE: 90%, as above, medium gray cryptocrystalline argillaceous mudstone
	SHALE: 10%, medium to dark gray, calcareous, fissile, platy

580.00 to 585.00m **Interval: 5.00m**	LIMESTONE: 100%, light brown, cryptocrystalline, mudstone, no stain, tight, trace of sparry calcite
585.00 to 590.00m **Interval: 5.00m**	LIMESTONE: 100%, as above
590.00 to 595.00m **Interval: 5.00m**	LIMESTONE: 100%, as above, trace light gray, microcrystalline in part, dolomitic
595.00 to 600.00m **Interval: 5.00m**	LIMESTONE: 100%, as above
600.00 to 605.00m **Interval: 5.00m**	LIMESTONE: 60%, as above, light gray cryptocrystalline mudstone, argillaceous, trace of sparry calcite SHALE: 40%, medium to dark gray, platy, calcareous
605.00 to 610.00m **Interval: 5.00m**	LIMESTONE: 70%, light gray, light brown cryptocrystalline, mudstone, medium to dark gray argillaceous, cryptocrystalline, mudstone SHALE: 30%, medium gray, dark gray, calcareous, blocky to platy
610.00 to 615.00m **Interval: 5.00m**	LIMESTONE: 70%, as above SHALE: 30%, as above, trace dark gray to black slickensided
615.00 to 620.00m **Interval: 5.00m**	LIMESTONE: 50%, as above, medium to dark gray argillaceous, cryptocrystalline mudstone, tight SHALE: 50%, medium to dark gray, dark gray, calcareous, blocky to platy
620.00 to 625.00m **Interval: 5.00m**	LIMESTONE: 60%, light to medium gray, cryptocrystalline mudstone, tight, medium to dark gray argillaceous cryptocrystalline mudstone, tight SHALE: 40%, medium gray, dark gray, calcareous, blocky to platy
625.00 to 630.00m **Interval: 5.00m**	LIMESTONE: 70%, light brown, light brown mottled gray, light to medium gray, cryptocrystalline mudstone, tight SHALE: 30%, medium to dark gray, calcareous
630.00 to 635.00m **Interval: 5.00m**	SHALE: 50%, as above LIMESTONE: 50%, as above
635.00 to 640.00m **Interval: 5.00m**	LIMESTONE: 60%, light to medium gray, light to medium brown, cryptocrystalline, mudstone, argillaceous in part, tight SHALE: 40%, medium to dark gray, dark gray calcareous, trace slickensided
640.00 to 645.00m **Interval: 5.00m**	LIMESTONE: 70%, light brown, light gray, light to medium brown mottled gray, light to medium gray argillaceous, cryptocrystalline mudstone, tight SHALE: 30%, as above
645.00 to 651.00m **Interval: 6.00m**	LIMESTONE: 60%, as above SHALE: 40%, as above

651.00 to 655.00m **Interval: 4.00m**	**SHALE:** 40%, dark gray to black, calcareous, blocky to platy
	LIMESTONE: 60%, light gray, medium gray, dark gray argillaceous, cryptocrystalline, mudstone, tight
655.00 to 660.00m **Interval: 5.00m**	**SHALE:** 90%, dark gray, medium gray, calcareous, platy to blocky, trace slickensided
	LIMESTONE: 10%, as above
660.00 to 665.00m **Interval: 5.00m**	**SHALE:** 70%, as above
	LIMESTONE: 30%, light gray white, light to gray mottled, medium gray argillaceous, cryptocrystalline, mudstone, tight
665.00 to 670.00m **Interval: 5.00m**	**LIMESTONE:** 40%, as above
	SHALE: 60%, as above, probable fracture @667, 668.2, 668.8 and 671.8m
670.00 to 675.00m **Interval: 5.00m**	**LIMESTONE:** 80%, light gray white, light brown, medium brown mottled gray, cryptocrystalline, mudstone, tight, trace of sparry calcite
	SHALE: 20%, medium to dark gray, calcareous
675.00 to 680.00m **Interval: 5.00m**	**LIMESTONE:** 70%, light brown, light gray white, medium brown mottled, light gray, medium gray argillaceous, cryptocrystalline, mudstone, tight
	SHALE: 30%, dark gray, medium gray calcareous, platy to blocky
680.00 to 685.00m **Interval: 5.00m**	**LIMESTONE:** 90%, light to medium gray, light to medium brown, cryptocrystalline, mudstone, argillaceous in part, tight
	SHALE: 10%, as above
685.00 to 690.00m **Interval: 5.00m**	**LIMESTONE:** 90%, as above, medium to dark gray argillaceous
	SHALE: 10%, as above
690.00 to 695.00m **Interval: 5.00m**	**LIMESTONE:** 20%, as above
	DOLOMITE: 50%, light to medium brown, medium brown, cryptocrystalline to microcrystalline, predominantly mudstone, no stain, no visible porosity
	CHERT: 30%, medium brown, white, dark brown, light blue gray, variegated
695.00 to 700.00m **Interval: 5.00m**	**LIMESTONE:** 60%, light gray, light to medium gray slightly argillaceous, medium gray brown argillaceous, cryptocrystalline, mudstone, trace of crinoid and bryozoa fragments
	SHALE: 10%, dark gray to black, calcareous, platy to blocky
	CHERT: 30%, as above
700.00 to 705.00m **Interval: 5.00m**	**LIMESTONE:** 60%, light gray, light gray brown, cryptocrystalline to microcrystalline, predominantly mudstone, argillaceous in part, tight, trace of crinoid and bryozoa fragments, trace of disseminated and nodular pyrite

	SHALE: 30%, medium gray, calcareous, blocky to platy
	CHERT: 10%, as above
705.00 to 710.00m **Interval: 5.00m**	**LIMESTONE:** 80%, light gray, light gray mottled brown, medium gray argillaceous, cryptocrystalline, mudstone, tight, trace of crinoid fragments, trace of CHERT as above
	SHALE: 20%, medium gray, dark gray calcareous, probable fractures at 704, 705 and 706m
710.00 to 715.00m **Interval: 5.00m**	**LIMESTONE:** 90%, light gray, light brown mottled gray, medium brown, medium gray argillaceous, cryptocrystalline, mudstone, tight
	SHALE: 10%, as above, probable fractures at 710.6, 711.2 and 711.6m
715.00 to 720.00m **Interval: 5.00m**	**LIMESTONE:** 80%, light gray brown, medium gray argillaceous, medium brown slightly argillaceous, cryptocrystalline, mudstone, tight, trace of crinoid fragments
	SHALE: 20%, medium gray calcareous, platy to blocky
720.00 to 725.00m **Interval: 5.00m**	**LIMESTONE:** 70%, light gray brown, medium gray brown argillaceous, cryptocrystalline, mudstone, trace of crinoid fragments
	SHALE: 30%, medium gray, dark gray, calcareous, blocky to platy, probable fractures at 720.2 and 720.8m
725.00 to 730.00m **Interval: 5.00m**	**LIMESTONE:** 60%, light to medium brown, medium gray brown slightly argillaceous, medium gray argillaceous, cryptocrystalline, mudstone, trace of crinoid fragments
	SHALE: 30%, dark gray, medium gray calcareous
	CHERT: 10%, variegated, dark brown, light blue gray
730.00 to 735.00m **Interval: 5.00m**	**LIMESTONE:** 70%, as above
	SHALE: 30%, as above
735.00 to 740.00m **Interval: 5.00m**	**LIMESTONE:** 80%, light gray brown, medium gray argillaceous, medium to dark brown ally argillaceous, cryptocrystalline, mudstone, tight, trace of CHERT
	SHALE: 20%, medium to dark gray calcareous, probable fracture at 734.2, 739.4 and 739.8m
740.00 to 745.00m **Interval: 5.00m**	**LIMESTONE:** 90%, light gray, light gray brown, medium gray brown argillaceous, cryptocrystalline, mudstone, cherty in part, tight, trace of crinoid fragments
	SHALE: 10%, medium gray calcareous, minor CHERT variegated, dark brown, light blue gray
745.00 to 750.00m **Interval: 5.00m**	**LIMESTONE:** 90%, as above, probable fracture at 749.8m
	CHERT: 10%, as above
750.00 to 755.00m **Interval: 5.00m**	**LIMESTONE:** 70%, light gray, light gray brown, medium brown, argillaceous in part, cryptocrystalline, mudstone, tight
	SHALE: 30%, medium to dark gray calcareous

755.00 to 760.00m **Interval: 5.00m**	LIMESTONE: 90%, medium brown, light brown, medium gray brown, argillaceous in part, cryptocrystalline, mudstone, tight, trace of CHERT
	SHALE: 10%, dark gray, medium gray calcareous, blocky to platy
760.00 to 765.00m **Interval: 5.00m**	LIMESTONE: 80%, as above
	SHALE: 20%, as above
765.00 to 770.00m **Interval: 5.00m**	LIMESTONE: 90%, light gray brown, light brown, medium gray brown, argillaceous, cryptocrystalline, mudstone, tight
	SHALE: 10%, as above
770.00 to 775.00m **Interval: 5.00m**	LIMESTONE: 90%, light gray brown, medium brown, medium gray brown, slightly argillaceous, predominantly cryptocrystalline mudstone, microcrystalline in part, tight, trace of CHERT
	SHALE: 10%, dark gray, medium gray calcareous, blocky to platy
775.00 to 780.00m **Interval: 5.00m**	LIMESTONE: 80%, as above
	SHALE: 20%, as above
780.00 to 785.00m **Interval: 5.00m**	LIMESTONE: 80%, light brown mottled gray, light gray brown slightly argillaceous, medium gray brown argillaceous, cryptocrystalline, mudstone, tight, trace of crinoid fragments, trace of sparry calcite
	SHALE: 20%, medium gray, fissile, predominantly platy
785.00 to 790.00m **Interval: 5.00m**	LIMESTONE: 80%, light gray, light brown, medium gray brown, argillaceous, cryptocrystalline mudstone, cherty in part, slightly dolomitic in part
	SHALE: 20%, medium gray, fissile, blocky to platy
790.00 to 795.00m **Interval: 5.00m**	LIMESTONE: 80%, medium gray, medium gray brown argillaceous, light gray brown, cryptocrystalline, mudstone, tight, trace of crinoid fragments
	SHALE: 20%, medium gray, dark gray slightly calcareous, fissile, predominantly platy
795.00 to 800.00m **Interval: 5.00m**	LIMESTONE: 90%, medium gray, light gray, argillaceous, light to medium brown mottled gray, cryptocrystalline, mudstone, tight
	SHALE: 10%, as above
800.00 to 805.00m **Interval: 5.00m**	LIMESTONE: 70%, as above
	SHALE: 30%, medium gray, slightly calcareous, platy
805.00 to 810.00m **Interval: 5.00m**	LIMESTONE: 90%, medium gray, light gray, medium gray brown, argillaceous, cryptocrystalline, mudstone, tight, common sparry calcite
	SHALE: 10%, as above
810.00 to 815.00m **Interval: 5.00m**	LIMESTONE: 80%, medium gray, medium gray brown, light gray, argillaceous, cryptocrystalline, mudstone, tight
	SHALE: 20%, medium gray, slightly calcareous, fissile, predominantly platy

815.00 to 820.00m **Interval: 5.00m**	LIMESTONE: 80%, as above, minor CHERT variegated, dark brown, light blue gray
	SHALE: 20%, as above
820.00 to 825.00m **Interval: 5.00m**	LIMESTONE: 60%, medium gray, medium gray brown, dark gray, argillaceous, light gray, light brown, cryptocrystalline, mudstone, tight, trace of sparry calcite
	SHALE: 10%, dark gray, medium gray, slightly calcareous
	CHERT: 30%, variegated, dark brown, dark gray, light blue gray, white
825.00 to 830.00m **Interval: 5.00m**	LIMESTONE: 80%, as above
	SHALE: 10%, as above
	CHERT: 10%, as above
830.00 to 835.00m **Interval: 5.00m**	LIMESTONE: 90%, dark gray, dark gray brown very argillaceous, medium gray brown cryptocrystalline, mudstone, trace of sparry calcite, trace of CHERT
	SHALE: 10%, dark gray, slightly calcareous, black, slickensided in part
835.00 to 840.00m **Interval: 5.00m**	LIMESTONE: 60%, medium gray brown, medium brown, light gray brown, dark gray, argillaceous, cryptocrystalline to microcrystalline, mudstone, tight, trace of CHERT
	SHALE: 40%, dark gray calcareous, medium gray slightly calcareous, blocky to platy
840.00 to 845.00m **Interval: 5.00m**	SHALE: 60%, Tripoli Sample, medium gray, dark gray, slightly calcareous, predominantly platy, dark gray calcareous, blocky
	LIMESTONE: 40%, dark gray argillaceous, light to medium gray, medium brown, cryptocrystalline to microcrystalline, mudstone, tight
845.00 to 850.00m **Interval: 5.00m**	LIMESTONE: 80%, dark gray brown, medium gray brown argillaceous, light gray white, cryptocrystalline to microcrystalline, mudstone, tight, trace of crinoid fragments
	SHALE: 20%, dark gray calcareous blocky, medium gray fissile platy
850.00 to 855.00m **Interval: 5.00m**	LIMESTONE: 90%, medium gray argillaceous, light brown mottled gray, medium brown argillaceous, cryptocrystalline, mudstone, tight, minor sparry calcite, trace of sparry calcite
	SHALE: 10%, as above
855.00 to 860.00m **Interval: 5.00m**	LIMESTONE: 90%, medium gray, dark brown, dark gray argillaceous, light gray, cryptocrystalline, mudstone, tight
	SHALE: 10%, as above
860.00 to 865.00m **Interval: 5.00m**	LIMESTONE: 90%, medium to dark gray brown mottled, light to medium brown mottled gray, light gray brown, argillaceous, cryptocrystalline, mudstone, tight, cherty in part, trace of crinoid fragments, trace of sparry calcite
	SHALE: 10%, dark gray calcareous, blocky, medium to dark gray platy

865.00 to 870.00m **Interval: 5.00m**	LIMESTONE: 70%, as above, probable fracture at 868m
	CHERT: 30%, variegated, dark brown, medium brown, light blue gray, white
870.00 to 875.00m **Interval: 5.00m**	LIMESTONE: 90%, medium gray, medium gray brown, light gray brown, argillaceous, cryptocrystalline, mudstone, tight, trace of sparry calcite
	CHERT: 10%, as above
875.00 to 880.00m **Interval: 5.00m**	LIMESTONE: 60%, as above
	CHERT: 10%, as above
	SHALE: 30%, dark gray to black, calcareous in part, fissile, predominantly platy, slickensided in part
880.00 to 885.00m **Interval: 5.00m**	LIMESTONE: 70%, medium gray brown, dark gray brown, light gray, light gray brown, argillaceous, cryptocrystalline, mudstone, tight, trace of sparry calcite
	CHERT: 20%, variegated, dark gray, dark brown, medium brown, light blue gray
	SHALE: 10%, as above
885.00 to 890.00m **Interval: 5.00m**	LIMESTONE: 80%, medium gray, dark gray brown, light gray white, argillaceous, cryptocrystalline, mudstone, tight, trace of CHERT
	SHALE: 20%, dark gray, black, slightly calcareous, blocky to platy
890.00 to 895.00m **Interval: 5.00m**	LIMESTONE: 90%, light gray white, light gray brown, cryptocrystalline, mudstone, medium gray, dark gray brown argillaceous, cryptocrystalline, mudstone, tight, trace of nodular pyrite, probable fracture at 892.4m
	SHALE: 10%, as above
895.00 to 900.00m **Interval: 5.00m**	LIMESTONE: 80%, as above, trace of crinoid fragments
	SHALE: 20%, as above
900.00 to 905.00m **Interval: 5.00m**	LIMESTONE: 80%, medium gray, medium gray brown mottled, argillaceous, light gray brown, cryptocrystalline to microcrystalline, mudstone, tight, trace of sparry calcite
	SHALE: 20%, medium gray, dark gray, slightly calcareous
905.00 to 910.00m **Interval: 5.00m**	LIMESTONE: 90%, dark gray, dark gray brown very argillaceous, light to medium gray brown argillaceous, light gray white, cryptocrystalline, mudstone, tight
	SHALE: 10%, as above
910.00 to 915.00m **Interval: 5.00m**	LIMESTONE: 80%, as above
	SHALE: 20%, dark gray, medium gray, slightly calcareous, predominantly blocky

915.00 to 920.00m **Interval: 5.00m**	**LIMESTONE:** 90%, light to medium gray brown, light to medium gray, medium gray argillaceous, medium to dark gray very argillaceous, cryptocrystalline, mudstone, tight
	SHALE: 10%, as above
920.00 to 927.00m **Interval: 7.00m**	**LIMESTONE:** 90%, as above
	SHALE: 10%, as above
927.00 to 930.00m **Interval: 3.00m**	**SHALE:** 20%, dark gray, medium gray, fissile, predominantly platy
	LIMESTONE: 80%, medium gray, light gray, dark gray argillaceous, cryptocrystalline, mudstone, tight, trace of crinoid fragments, trace of sparry calcite
930.00 to 935.00m **Interval: 5.00m**	**LIMESTONE:** 70%, as above, trace of crinoid and bryozoa fragments, trace of sparry calcite
	SHALE: 30%, as above, probable fracture at 932.8 and 935.2m
935.00 to 940.00m **Interval: 5.00m**	**LIMESTONE:** 80%, medium gray, light gray, dark gray argillaceous, predominantly cryptocrystalline, trace microcrystalline, mudstone, tight, minor sparry calcite, trace of crinoid fragments
	SHALE: 20%, dark gray, medium gray, fissile, platy
940.00 to 945.00m **Interval: 5.00m**	**LIMESTONE:** 60%, as above
	SHALE: 40%, as above, probable fracture at 944m
945.00 to 950.00m **Interval: 5.00m**	**LIMESTONE:** 90%, light gray, medium gray argillaceous, predominantly cryptocrystalline, microcrystalline in part, mudstone, tight
	SHALE: 10%, as above
950.00 to 955.00m **Interval: 5.00m**	**LIMESTONE:** 80%, medium gray, dark gray brown, very argillaceous, light to medium gray, light gray white argillaceous, predominantly cryptocrystalline, microcrystalline in part, mudstone, tight, trace of sparry calcite, trace of nodular pyrite
	SHALE: 20%, medium gray, dark gray, fissile, platy, probable fracture at 959.6m
955.00 to 960.00m **Interval: 5.00m**	**LIMESTONE:** 90%, as above, minor LIMESTONE light gray white, light bn, cryptocrystalline to microcrystalline, mudstone, tight, trace of crinoid, bryozoa and brachiopod fragments
	SHALE: 10%, as above
960.00 to 965.00m **Interval: 5.00m**	**LIMESTONE:** 90%, light gray white, light brown, cryptocrystalline, mudstone, medium gray brown, dark gray brown argillaceous, cryptocrystalline to microcrystalline, mudstone, tight, common sparry calcite, probable fracture at 964.2m
	SHALE: 10%, medium gray, fissile, blocky to platy
965.00 to 970.00m **Interval: 5.00m**	**LIMESTONE:** 50%, as above
	SHALE: 50%, medium gray, dark gray , fissile, slightly calcareous, platy to blocky

970.00 to 975.00m Interval: 5.00m	LIMESTONE: 70%, light to medium gray argillaceous, medium gray, dark gray very argillaceous, cryptocrystalline to microcrystalline, mudstone, tight
	SHALE: 30%, as above
975.00 to 980.00m Interval: 5.00m	SHALE: 60%, medium gray, very calcareous, blocky
	LIMESTONE: 40%, light gray, medium gray, argillaceous, cryptocrystalline, mudstone, tight, trace of crinoid fragments, trace of sparry calcite
983.00m	SHUNDA
980.00 to 985.00m Interval: 5.00m	SHALE: 90%, medium gray, calcareous, fissile, platy to blocky, probable fracture at 985.2m
	LIMESTONE: 10%, as above
985.00 to 990.00m Interval: 5.00m	SHALE: 80%, as above, medium gray very calcareous
	LIMESTONE: 20%, medium gray very argillaceous, cryptocrystalline mudstone, tight
990.00 to 995.00m Interval: 5.00m	SHALE: 90%, medium gray, fissile, calcareous, blocky to platy
	LIMESTONE: 10%, as above
995.00 to 1000.00m Interval: 5.00m	SHALE: 70%, as above
	LIMESTONE: 30%, medium gray very argillaceous, cryptocrystalline, mudstone, tight
1000.00 to 1005.00m Interval: 5.00m	SHALE: 90%, as above
	LIMESTONE: 10%, as above
1005.00 to 1010.00m Interval: 5.00m	SHALE: 80%, medium gray, very calcareous
	LIMESTONE: 20%, medium gray, very argillaceous, cryptocrystalline, mudstone, tight
1010.00 to 1015.00m Interval: 5.00m	SHALE: 90%, medium gray, calcareous, fissile, platy to blocky
	LIMESTONE: 10%, as above
1015.00 to 1020.00m Interval: 5.00m	SHALE: 90%, as above
	LIMESTONE: 10%, as above
1020.00 to 1025.00m Interval: 5.00m	SHALE: 100%, medium gray, calcareous, fissile, blocky
1025.00 to 1030.00m Interval: 5.00m	SHALE: 100%, as above
1030.00 to 1035.00m Interval: 5.00m	SHALE: 100%, medium gray, calcareous, fissile, blocky

1035.00 to 1040.00m Interval: 5.00m	SHALE: 100%, as above, trace of sparry calcite
1040.00 to 1045.00m Interval: 5.00m	SHALE: 100%, as above probable fracture at 1044.4m
1045.00 to 1050.00m Interval: 5.00m	SHALE: 100%, medium gray, fissile, calcareous, blocky to platy
1050.00 to 1055.00m Interval: 5.00m	SHALE: 80%, as above, probable fractures at 1051.2 and 1054.6m LIMESTONE: 20%, dark gray brown, medium gray, argillaceous, cryptocrystalline, mudstone, tight
1055.00 to 1060.00m Interval: 5.00m	SHALE: 90%, as above, probable fractures at 1055.4, 1056, 1056.8 and 1059m LIMESTONE: 10%, as above
1060.00 to 1065.00m Interval: 5.00m	SHALE: 60%, as above, probable fractures at 1060 and 1060.8m LIMESTONE: 40%, light brown white, light gray brown mottled, cryptocrystalline, mudstone, microcrystalline in part, tight, medium to dark gray argillaceous, cryptocrystalline, mudstone, tight
1065.00 to 1070.00m Interval: 5.00m	SHALE: 30%, as above, trace slickensided LIMESTONE: 70%, light brown white, light brown, mottled in part, cryptocrystalline to microcrystalline, trace finely crystalline, mudstone, tight, trace of crinoid fragments, minor sparry calcite
1070.00 to 1075.00m Interval: 5.00m	LIMESTONE: 70%, light brown white mottled, light gray white mottled, predominantly clean, argillaceous in part, cryptocrystalline to microcrystalline, mudstone, tight, common crinoid and minor brachiopod fragments SHALE: 30%, medium gray calcareous, fissile, platy to blocky
1075.00 to 1080.00m Interval: 5.00m	LIMESTONE: 90%, as above SHALE: 10%, as above
1080.00 to 1085.00m Interval: 5.00m	LIMESTONE: 80%, light brown white, light gray white, light to medium brown mottled, cryptocrystalline to finely crystalline, mudstone, tight, trace of crinoid and bryozoa fragments, trace of sparry calcite SHALE: 20%, as above
1085.00 to 1090.00m Interval: 5.00m	LIMESTONE: 80%, as above, light to medium gray ally argillaceous, common sparry calcite, trace veined, healed fractures SHALE: 20%, medium gray calcareous, fissile, blocky to platy
1090.00 to 1095.00m Interval: 5.00m	LIMESTONE: 90%, light brown, light brown mottled gray brown, cryptocrystalline to finely crystalline, mudstone, tight, minor sparry calcite, minor crinoid and brachiopod fragments, trace of disseminated and nodular pyrite SHALE: 10%, medium gray, dark gray calcareous, fissile, blocky to platy

1095.00 to 1100.00m Interval: 5.00m	**LIMESTONE:** 50%, as above, medium gray argillaceous
	SHALE: 50%, medium gray, dark gray, calcareous, fissile, blocky to platy
1100.00 to 1105.00m Interval: 5.00m	**LIMESTONE:** 40%, as above
	SHALE: 60%, as above, probable fracture at 1102.6m
1105.00 to 1110.00m Interval: 5.00m	**SHALE:** 80%, medium gray calcareous, fissile, blocky to platy, probable fractures at 1107.6 and 1111.4m
	LIMESTONE: 20%, as above
1110.00 to 1115.00m Interval: 5.00m	**SHALE:** 100%, medium to dark gray, slightly calcareous, fissile, platy, trace of LIMESTONE as above
1116.00m	**PEKISKO**
1115.00 to 1120.00m Interval: 5.00m	**SHALE:** 40%, as above
	LIMESTONE: 30%, light brown white, cryptocrystalline mudstone, tight, trace of crinoid fragments, trace of sparry calcite
	DOLOMITE: 30%, light to medium brown, calcareous, silty to sandy in part, cryptocrystalline to microcrystalline, predominantly wackestone, trace glauconitic, no stain, no fluorescence, trace of pin point porosity 1-2%, no permeability
1120.00 to 1125.00m Interval: 5.00m	**SHALE:** 60%, medium gray, slightly calcareous, fissile, platy to blocky
	LIMESTONE: 20%, as above
	DOLOMITE: 20%, as above
1125.00 to 1130.00m Interval: 5.00m	**SHALE:** 80%, as above, probable fracture at 1126m
	LIMESTONE: 10%, medium gray, medium gray silty, cryptocrystalline, mudstone, tight
	DOLOMITE: 10%, light brown, medium brown, silty to sandy, cryptocrystalline to microcrystalline, mudstone to wackestone, tight
1130.00 to 1135.00m Interval: 5.00m	**SHALE:** 60%, as above
	LIMESTONE: 20%, light gray white, medium gray, argillaceous, cryptocrystalline mudstone, tight, silty to sandy in part
	SILTSTONE: 20%, medium gray, very calcareous, sandy in part, tight
1135.00 to 1140.00m Interval: 5.00m	**SHALE:** 80%, medium gray, fissile, calcareous in part, platy to blocky
	LIMESTONE: 10%, as above
	DOLOMITE: 10%, as above
1140.00 to 1145.00m Interval: 5.00m	**SHALE:** 90%, medium gray, calcareous, fissile, platy to blocky
	LIMESTONE: 10%, as above

1145.00 to 1150.00m **Interval: 5.00m**	**SHALE:** 70%, as above
	LIMESTONE: 30%, light to medium brown white, cryptocrystalline to finely crystalline, mudstone, tight, trace of crinoid fragments, trace of sparry calcite, minor medium gray very argillaceous
1150.00 to 1155.00m **Interval: 5.00m**	**SHALE:** 90%, medium gray, calcareous, fissile, platy to blocky, light to medium gray, platy
	LIMESTONE: 0%, as above
1155.00 to 1160.00m **Interval: 5.00m**	**LIMESTONE:** 50%, light brown, light brown white, cryptocrystalline to microcrystalline, mudstone, tight, silty in part, common crinoid fragments
	SHALE: 50%, medium gray, dark gray, slightly calcareous, fissile, predominantly platy
1164.00m	**BANFF**
1160.00 to 1165.00m **Interval: 5.00m**	**LIMESTONE:** 30%, light brown white, medium brown, cryptocrystalline to microcrystalline, light gray, medium gray argillaceous, silty, mudstone, tight, trace of crinoid fragments
	SHALE: 70%, light to medium gray, slightly calcareous, fissile, predominantly platy
1165.00 to 1170.00m **Interval: 5.00m**	**SHALE:** 90%, light to medium gray, medium gray, slightly calcareous, fissile, predominantly platy
	LIMESTONE: 10%, as above
1170.00 to 1175.00m **Interval: 5.00m**	**SHALE:** 100%, as above, trace of LIMESTONE as above
1175.00 to 1180.00m **Interval: 5.00m**	**SHALE:** 100%, light to medium gray, slightly calcareous, fissile, platy
1180.00 to 1185.00m **Interval: 5.00m**	**SHALE:** 100%, light to medium gray, fissile, platy, trace of siderite, medium brown argillaceous
1185.00 to 1190.00m **Interval: 5.00m**	**SHALE:** 100%, as above, trace of siderite
1190.00 to 1195.00m **Interval: 5.00m**	**SHALE:** 100%, as above
1195.00 to 1200.00m **Interval: 5.00m**	**SHALE:** 100%, medium gray, dark gray, fissile, platy, trace sideritic
1200.00 to 1205.00m **Interval: 5.00m**	**SHALE:** 100%, medium gray, light to medium gray, fissile, platy to blocky, trace sideritic
1205.00 to 1210.00m **Interval: 5.00m**	**SHALE:** 100%, medium gray, medium to dark gray, fissile, platy to blocky, trace of SILTSTONE, medium gray brown, calcareous, tight
1210.00 to 1215.00m **Interval: 5.00m**	**SHALE:** 100%, medium gray, light to medium gray, fissile, platy to blocky, trace medium to dark gray brown, calcareous, silty
1215.00 to 1220.00m **Interval: 5.00m**	**SHALE:** 90%, as above
	LIMESTONE: 10%, medium gray, dark gray argillaceous, cryptocrystalline, mudstone, tight

1220.00 to 1225.00m Interval: 5.00m	SHALE: 100%, medium gray, light to medium gray slightly calcareous, fissile, platy to blocky, trace of LIMESTONE as above
1225.00 to 1230.00m Interval: 5.00m	SHALE: 100%, medium gray, slightly calcareous, fissile, platy to blocky, trace of LIMESTONE as above
1230.00 to 1235.00m Interval: 5.00m	SHALE: 90%, as above LIMESTONE: 10%, light gray white, light brown, medium brown, cryptocrystalline, mudstone, tight, trace of crinoid fragments
1235.00 to 1240.00m Interval: 5.00m	SHALE: 90%, light to medium gray, slightly calcareous, fissile, platy to blocky LIMESTONE: 10%, medium gray, very argillaceous, tight
1240.00 to 1245.00m Interval: 5.00m	SHALE: 100%, medium gray, slightly calcareous, fissile, platy to blocky, trace of LIMESTONE as above
1245.00 to 1250.00m Interval: 5.00m	SHALE: 100%, medium gray, medium gray calcareous, fissile, platy to blocky, trace of limestone as above
1250.00 to 1255.00m Interval: 5.00m	SHALE: 80%, as above LIMESTONE: 20%, medium gray, medium to dark gray, argillaceous, light gray slightly argillaceous, cryptocrystalline to microcrystalline, mudstone, tight
1255.00 to 1260.00m Interval: 5.00m	SHALE: 90%, as above LIMESTONE: 10%, medium gray, light gray, argillaceous, cryptocrystalline, mudstone, tight, common crinoid and brachiopod fragments
1260.00 to 1265.00m Interval: 5.00m	SHALE: 100%, as above, trace of LIMESTONE medium gray, argillaceous, medium gray brown silty, trace of crinoid fragments
1265.00 to 1270.00m Interval: 5.00m	SHALE: 100%, as above, dark brown calcareous, blocky
1270.00 to 1275.00m Interval: 5.00m	SHALE: 100%, medium gray, calcareous, fissile, platy to blocky
1275.00 to 1280.00m Interval: 5.00m	SHALE: 90%, medium gray, calcareous, fissile, blocky to platy, abundant cavings LIMESTONE: 10%, light gray, light brown, cavings, trace of chert cavings
1280.00 to 1285.00m Interval: 5.00m	SHALE: 100%, medium gray, calcareous, fissile, blocky to platy, abundant cavings
1285.00 to 1290.00m Interval: 5.00m	SHALE: 100%, as above
1290.00 to 1295.00m Interval: 5.00m	SHALE: 100%, medium gray, calcareous, fissile, predominantly platy
1295.00 to 1300.00m Interval: 5.00m	SHALE: 100%, medium gray, calcareous, fissile, platy to blocky
1300.00 to 1305.00m Interval: 5.00m	SHALE: 100%, as above

1305.00 to 1310.00m Interval: 5.00m	**SHALE: 100%**, as above, trace of LIMESTONE light to medium gray, argillaceous, cryptocrystalline, mudstone, tight
1310.00 to 1315.00m Interval: 5.00m	**SHALE: 100%**, medium gray, calcareous, fissile, blocky to platy
1315.00 to 1320.00m Interval: 5.00m	**SHALE: 100%**, as above
1320.00 to 1325.00m Interval: 5.00m	**SHALE: 100%**, medium gray, calcareous, fissile, blocky to platy
1325.00 to 1330.00m Interval: 5.00m	**SHALE: 100%**, as above
1330.00 to 1335.00m Interval: 5.00m	**SHALE: 100%**, medium gray, calcareous, fissile, platy to blocky
1335.00 to 1340.00m Interval: 5.00m	**SHALE: 100%**, as above
1340.00 to 1345.00m Interval: 5.00m	**SHALE: 100%**, medium gray, calcareous, fissile, platy to blocky
1345.00 to 1350.00m Interval: 5.00m	**SHALE: 100%**, as above
1350.00 to 1355.00m Interval: 5.00m	**SHALE: 100%**, medium gray, calcareous, fissile, predominantly blocky
1355.00 to 1360.00m Interval: 5.00m	**SHALE: 100%**, medium gray, calcareous, fissile, blocky to platy
1360.00 to 1365.00m Interval: 5.00m	**SHALE: 100%**, medium gray, calcareous, fissile, platy to blocky
1365.00 to 1370.00m Interval: 5.00m	**SHALE: 100%**, as above, trace of LIMESTONE light to medium gray, argillaceous, cryptocrystalline, mudstone, tight
1370.00 to 1375.00m Interval: 5.00m	**SHALE: 100%**, medium gray, dark gray, fissile, calcareous, blocky to platy, trace of LIMESTONE as above
1375.00 to 1380.00m Interval: 5.00m	**SHALE: 100%**, medium gray, fissile, calcareous, blocky to platy
1380.00 to 1385.00m Interval: 5.00m	**SHALE: 100%**, medium gray, fissile, calcareous, platy to blocky
1385.00 to 1390.00m Interval: 5.00m	**SHALE: 100%**, as above
1390.00 to 1395.00m Interval: 5.00m	**SHALE: 100%**, medium gray, calcareous, fissile, blocky to platy
1395.00 to 1400.00m Interval: 5.00m	**SHALE: 100%**, as above, trace of LIMESTONE light gray, medium gray argillaceous, cryptocrystalline, mudstone, tight
1400.00 to 1405.00m Interval: 5.00m	**SHALE: 100%**, as above
1405.00 to 1410.00m Interval: 5.00m	**SHALE: 100%**, medium gray, fissile, calcareous, blocky to platy

1410.00 to 1415.00m Interval: 5.00m	SHALE: 100%, as above, trace of LIMESTONE light gray white, light brown, dark brown argillaceous, cryptocrystalline to microcrystalline, mudstone, trace of pin point porosity, trace of sparry calcite, probable fracture at 1412.8m, mud gassy
1415.00 to 1420.00m Interval: 5.00m	SHALE: 100%, medium gray, calcareous, fissile, blocky to platy
1420.00 to 1425.00m Interval: 5.00m	SHALE: 100%, as above
1425.00 to 1430.00m Interval: 5.00m	SHALE: 100%, medium gray, calcareous, fissile, blocky to platy
1430.00 to 1435.00m Interval: 5.00m	SHALE: 100%, as above
1435.00 to 1440.00m Interval: 5.00m	SHALE: 100%, medium gray, calcareous, fissile, blocky to platy
1440.00 to 1445.00m Interval: 5.00m	SHALE: 100%, as above, prob frac @ 1443m
1445.00 to 1450.00m Interval: 5.00m	SHALE: 100%, medium gray, calcareous, fissile, platy to blocky
1450.00 to 1455.00m Interval: 5.00m	SHALE: 100%, as above
1455.00 to 1460.00m Interval: 5.00m	SHALE: 100%, medium gray, calcareous, fissile, platy to blocky
1460.00 to 1465.00m Interval: 5.00m	SHALE: 100%, as above
1465.00 to 1470.00m Interval: 5.00m	SHALE: 100%, medium gray, calcareous, fissile, platy to blocky, probable fracture at 1468.8m
1470.00 to 1475.00m Interval: 5.00m	SHALE: 100%, as above
1475.00 to 1480.00m Interval: 5.00m	SHALE: 100%, medium gray, calcareous, fissile, platy to blocky
1480.00 to 1485.00m Interval: 5.00m	SHALE: 100%, as above
1485.00 to 1490.00m Interval: 5.00m	SHALE: 100%, medium gray, calcareous, fissile, platy to blocky
1490.00 to 1495.00m Interval: 5.00m	SHALE: 100%, as above, probable fracture at 1498m
1495.00 to 1500.00m Interval: 5.00m	SHALE: 100%, medium gray, calcareous, fissile, blocky to platy
1500.00 to 1505.00m Interval: 5.00m	SHALE: 100%, as above
1505.00 to 1510.00m Interval: 5.00m	SHALE: 100%, medium gray, calcareous, fissile, blocky to platy
1510.00 to 1515.00m Interval: 5.00m	SHALE: 100%, medium gray, calcareous, fissile, platy to blocky, trace veined, sparry calcite infilling, probable healed fractures at 1513m

1515.00 to 1520.00m Interval: 5.00m	**SHALE: 100%**, medium gray, calcareous, fissile, blocky to platy
1520.00 to 1525.00m Interval: 5.00m	**SHALE: 100%**, as above, trace of sparry calcite
1525.00 to 1530.00m Interval: 5.00m	**SHALE: 100%**, medium to dark gray, calcareous, fissile, blocky to platy, trace slickensided
1530.00 to 1535.00m Interval: 5.00m	**SHALE: 100%**, medium to dark gray, calcareous, fissile, blocky to platy
1535.00 to 1540.00m Interval: 5.00m	**SHALE: 100%**, as above
1540.00 to 1545.00m Interval: 5.00m	**SHALE: 100%**, medium to dark gray, calcareous, fissile, platy to blocky, trace slickensided
1545.00 to 1548.00m Interval: 3.00m	**SHALE: 100%**, as above, probable fractures at 1546.4 and 1546.8m, mud very gassy
1548.00 to 1550.00m Interval: 2.00m	**SHALE: 100%**, cavings, medium gray, calcareous, fissile, platy to blocky
1550.00 to 1555.00m Interval: 5.00m	**SHALE: 100%**, as above, predominantly cavings
1555.00 to 1560.00m Interval: 5.00m	**SHALE: 100%**, medium gray, fissile, calcareous, platy to blocky, predominantly cavings
1560.00 to 1565.00m Interval: 5.00m	**SHALE: 100%**, medium gray calcareous, fissile, blocky, predominantly cavings
1565.00 to 1570.00m Interval: 5.00m	**SHALE: 100%**, as above
1570.00 to 1575.00m Interval: 5.00m	**SHALE: 100%**, medium gray, calcareous, medium to dark gray, fissile, platy to blocky, abundant cavings
1575.00 to 1580.00m Interval: 5.00m	**SHALE: 100%**, as above
1580.00 to 1585.00m Interval: 5.00m	**SHALE: 100%**, medium gray calcareous, medium gray brown very calcareous, fissile, blocky to platy, trace of LIMESTONE medium gray br very argillaceous, cryptocrystalline, mudstone, tight
1585.00 to 1590.00m Interval: 5.00m	**SHALE: 100%**, medium gray, slightly calcareous, medium to dark gray, fissile, platy to blocky, trace slickensided, probable fracture at 1589.8m
1590.00 to 1595.00m Interval: 5.00m	**SHALE: 100%**, medium gray, medium to dark gray, slightly calcareous, fissile, platy to blocky
1595.00 to 1600.00m Interval: 5.00m	**SHALE: 100%**, medium gray, dark gray, fissile, platy to blocky
1600.00 to 1605.00m Interval: 5.00m	**SHALE: 100%**, as above
1605.00 to 1610.00m Interval: 5.00m	**SHALE: 100%**, medium gray, dark gray, slightly calcareous in part, fissile, platy to blocky
1610.00 to 1615.00m Interval: 5.00m	**SHALE: 100%**, as above

1615.00 to 1620.00m Interval: 5.00m	SHALE: 100%, dark gray, medium gray, fissile, blocky to platy, trace of sparry calcite
1620.00 to 1625.00m Interval: 5.00m	SHALE: 100%, dark gray, medium gray, fissile, predominantly blocky
1625.00 to 1630.00m Interval: 5.00m	SHALE: 100%, medium to dark gray, fissile, predominantly blocky
1630.00 to 1635.00m Interval: 5.00m	SHALE: 100%, as above
1635.00 to 1640.00m Interval: 5.00m	SHALE: 100%, dark gray, medium to dark gray, fissile, predominantly blocky, trace slickensided
1640.00 to 1645.00m Interval: 5.00m	SHALE: 100%, dark gray brown, fissile, blocky
1647.00m	**EXSHAW**
1645.00 to 1650.00m Interval: 5.00m	SHALE: 100%, dark brown, earthy, fissile, blocky to platy, faint petroliferous odor, no fluorescence, trace slickensided
1650.00 to 1655.00m Interval: 5.00m	SHALE: 100%, dark brown to black, fissile, slightly waxy, predominantly blocky, petroliferous odor, common slickensided, no fluorescence, probable fractures at 1650.8, 1651.2, 1652.8, 1653 and 1654 to 1655m, mud very gassy
1655.00 to 1660.00m Interval: 5.00m	SHALE: 100%, as above, trace of nodular and disseminated pyrite, probable fractures at 1655.2, 1656.2, 1657 to 1658, 1658.4 and 1660.6m, mud very gassy
1662.00m	**KOTCHO**
1660.00 to 1665.00m Interval: 5.00m	SHALE: 100%, as above, medium brown white speckled calcareous, light gray, medium gray, calcareous, trace of nodular pyrite
1665.00 to 1670.00m Interval: 5.00m	SHALE: 100%, medium gray calcareous, light gray calcareous, medium gray brown as above, fissile, predominantly blocky, trace of LIMESTONE light gray argillaceous, cryptocrystalline, mudstone, tight, trace of crinoid fragments, trace of nodular pyrite
1670.00 to 1675.00m Interval: 5.00m	SHALE: 100%, light gray, medium gray calcareous, dark gray brown, fissile, blocky, trace of LIMESTONE light to medium gray, very argillaceous, cryptocrystalline, mudstone, tight
1675.00 to 1680.00m Interval: 5.00m	SHALE: 100%, light gray calcareous, medium to dark gray, fissile, predominantly blocky, trace of LIMESTONE light gray, very argillaceous, cryptocrystalline, mudstone, tight
1680.00 to 1685.00m Interval: 5.00m	SHALE: 100%, light gray, calcareous, medium to dark gray, fissile, predominantly blocky, trace of LIMESTONE as above
1685.00 to 1690.00m Interval: 5.00m	SHALE: 100%, light gray, medium gray, calcareous, dark gray, fissile, predominantly blocky, trace of LIMESTONE as above
1690.00 to 1695.00m Interval: 5.00m	SHALE: 100%, as above
1695.00 to 1700.00m Interval: 5.00m	SHALE: 100%, light gray, medium gray, calcareous, dark gray, fissile, predominantly blocky
1700.00 to 1705.00m Interval: 5.00m	SHALE: 100%, light gray, medium gray, calcareous, dark gray, fissile, predominantly blocky

1705.00 to 1710.00m Interval: 5.00m	SHALE: 100%, as above
1710.00 to 1715.00m Interval: 5.00m	SHALE: 100%, light to medium gray, slightly calcareous, predominantly blocky, AIR HAMMER CHIPS AND DUST
1715.00 to 1720.00m Interval: 5.00m	SHALE: 100%, as above
1720.00 to 1725.00m Interval: 5.00m	SHALE: 100%, light to medium gray, slightly calcareous, blocky to platy
1725.00 to 1730.00m Interval: 5.00m	SHALE: 100%, as above
1730.00 to 1735.00m Interval: 5.00m	SHALE: 100%, medium gray, slightly calcareous, blocky to platy
1735.00 to 1740.00m Interval: 5.00m	SHALE: 100%, as above
1740.00 to 1745.00m Interval: 5.00m	SHALE: 100%, as above
1745.00 to 1750.00m Interval: 5.00m	SHALE: 100%, medium gray, slightly calcareous, blocky to platy
1750.00 to 1755.00m Interval: 5.00m	SHALE: 50%, medium gray, very calcareous, predominantly blocky LIMESTONE: 50%, light to medium gray, slightly argillaceous, medium gray argillaceous, cryptocrystalline, mudstone, tight
1755.00 to 1760.00m Interval: 5.00m	SHALE: 60%, medium gray, very calcareous, blocky
1760.00 to 1765.00m Interval: 5.00m	LIMESTONE: 40%, light to medium gray slightly argillaceous, medium gray argillaceous, cryptocrystalline, mudstone, tight
1765.00 to 1770.00m Interval: 5.00m	SHALE: 40%, medium to dark gray, slightly calcareous, blocky LIMESTONE: 60%, as above
1770.00 to 1775.00m Interval: 5.00m	SHALE: 90%, medium gray, very calcareous, predominantly blocky LIMESTONE: 10%, as above, light gray argillaceous, cryptocrystalline, mudstone, tight
1775.00 to 1780.00m Interval: 5.00m	SHALE: 100%, medium to dark gray, very calcareous, blocky
1780.00 to 1785.00m Interval: 5.00m	SHALE: 100%, medium gray, dark gray, very calcareous, blocky
1785.00 to 1790.00m Interval: 5.00m	SHALE: 90%, as above LIMESTONE: 10%, light gray brown, light to medium gray argillaceous, cryptocrystalline, mudstone, tight, trace of sparry calcite
1790.00 to 1795.00m Interval: 5.00m	SHALE: 100%, medium gray, calcareous, blocky

1795.00 to 1800.00m Interval: 5.00m	SHALE: 100%, medium to dark gray, calcareous, blocky
1800.00 to 1805.00m Interval: 5.00m	SHALE: 100%, medium gray calcareous, blocky
1805.00 to 1810.00m Interval: 5.00m	SHALE: 100%, as above
1810.00 to 1815.00m Interval: 5.00m	SHALE: 100%, medium to dark gray calcareous, blocky
1815.00 to 1820.00m Interval: 5.00m	SHALE: 100%, as above
1820.00 to 1825.00m Interval: 5.00m	SHALE: 30%, medium gray, calcareous, blocky LIMESTONE: 70%, medium gray very argillaceous, cryptocrystalline, mudstone, tight
1825.00 to 1830.00m Interval: 5.00m	SHALE: 50%, as above LIMESTONE: 50%, as above
1830.00 to 1835.00m Interval: 5.00m	SHALE: 100%, as above LIMESTONE: 50%, as above
1835.00 to 1840.00m Interval: 5.00m	SHALE: 70%, medium to dark gray, very calcareous, blocky LIMESTONE: 30%, medium gray, very argillaceous, cryptocrystalline, mudstone, tight
1840.00 to 1845.00m Interval: 5.00m	SHALE: 50%, as above LIMESTONE: 50%, as above
1845.00 to 1850.00m Interval: 5.00m	SHALE: 60%, medium to dark gray, very calcareous, blocky LIMESTONE: 40%, medium to dark gray, very argillaceous, cryptocrystalline, mudstone, tight
1850.00 to 1855.00m Interval: 5.00m	SHALE: 100%, medium gray, calcareous, blocky
1855.00 to 1860.00m Interval: 5.00m	SHALE: 100%, as above
1860.00 to 1865.00m Interval: 5.00m	SHALE: 100%, medium to dark gray, calcareous, blocky
1865.00 to 1870.00m Interval: 5.00m	SHALE: 100%, as above
1870.00 to 1875.00m Interval: 5.00m	SHALE: 100%, as above
1875.00 to 1880.00m Interval: 5.00m	SHALE: 100%, medium to dark gray calcareous, blocky

1880.00 to 1885.00m Interval: 5.00m	SHALE: 100%, medium to dark gray, slightly calcareous, blocky
1885.00 to 1890.00m Interval: 5.00m	SHALE: 100%, as above
1890.00 to 1895.00m Interval: 5.00m	SHALE: 100%, as above
1895.00 to 1900.00m Interval: 5.00m	SHALE: 100%, medium to dark gray, slightly calcareous, blocky
1900.00 to 1905.00m Interval: 5.00m	SHALE: 100%, as above
1905.00 to 1910.00m Interval: 5.00m	SHALE: 100%, medium to dark gray, calcareous, blocky
1910.00 to 1915.00m Interval: 5.00m	SHALE: 100%, as above
1915.00 to 1920.00m Interval: 5.00m	SHALE: 100%, medium to dark gray, calcareous, blocky
1920.00 to 1925.00m Interval: 5.00m	SHALE: 100%, as above
1925.00 to 1930.00m Interval: 5.00m	SHALE: 100%, medium gray calcareous, blocky
1930.00 to 1935.00m Interval: 5.00m	SHALE: 100%, as above
1935.00 to 1940.00m Interval: 5.00m	SHALE: 100%, medium gray calcareous, blocky
1940.00 to 1945.00m Interval: 5.00m	SHALE: 100%, as above
1945.00 to 1950.00m Interval: 5.00m	SHALE: 100%, medium gray, calcareous, blocky
1950.00 to 1955.00m Interval: 5.00m	SHALE: 100%, as above
1955.00 to 1960.00m Interval: 5.00m	SHALE: 100%, as above
1960.00 to 1965.00m Interval: 5.00m	SHALE: 100%, medium gray, calcareous, blocky
1965.00 to 1970.00m Interval: 5.00m	SHALE: 100%, as above
1970.00 to 1975.00m Interval: 5.00m	SHALE: 100%, medium gray, calcareous, blocky
1975.00 to 1980.00m Interval: 5.00m	SHALE: 100%, as above
1980.00 to 1985.00m Interval: 5.00m	SHALE: 100%, medium gray calcareous, blocky
1985.00 to 1990.00m Interval: 5.00m	SHALE: 100%, as above

1990.00 to 1995.00m Interval: 5.00m	SHALE: 100%, medium gray calcareous, blocky
1995.00 to 2000.00m Interval: 5.00m	SHALE: 100%, as above
2000.00 to 2005.00m Interval: 5.00m	SHALE: 100%, medium to dark gray, very calcareous, blocky
2005.00 to 2010.00m Interval: 5.00m	SHALE: 100%, medium to dark gray, calcareous, blocky to platy
2010.00 to 2015.00m Interval: 5.00m	SHALE: 100%, dark gray, calcareous, blocky to platy, slight sulfur odor
2015.00 to 2020.00m Interval: 5.00m	SHALE: 100%, as above
2020.00 to 2025.00m Interval: 5.00m	SHALE: 100%, as above
2025.00 to 2030.00m Interval: 5.00m	SHALE: 100%, as above, dark gray brown, platy to blocky, slight petroliferous odor, puff of Gas while drilling at 2029m
2030.00m	TETCHO
2030.00 to 2035.00m Interval: 5.00m	SHALE: 50%, as above LIMESTONE: 50%, light to medium gray, medium gray, medium brown, argillaceous in part, cryptocrystalline to microcrystalline, predominantly mudstone, no visible porosity
2035.00 to 2040.00m Interval: 5.00m	SHALE: 50%, medium gray, dark gray, calcareous, blocky LIMESTONE: 50%, medium gray argillaceous, cryptocrystalline, mudstone, tight
2040.00 to 2045.00m Interval: 5.00m	SHALE: 80%, medium gray, calcareous, blocky LIMESTONE: 20%, as above
2045.00 to 2050.00m Interval: 5.00m	SHALE: 80%, as above LIMESTONE: 20%, medium gray, medium gray brown argillaceous, cryptocrystalline to microcrystalline, mudstone, tight
2050.00 to 2055.00m Interval: 5.00m	SHALE: 60%, as above LIMESTONE: 40%, as above, minor light gray, light brown, cryptocrystalline, mudstone
2055.00 to 2060.00m Interval: 5.00m	SHALE: 70%, medium gray, medium to dark gray, very calcareous, blocky LIMESTONE: 30%, medium gray very argillaceous, cryptocrystalline to microcrystalline, mudstone, tight
2060.00 to 2065.00m Interval: 5.00m	SHALE: 90%, as above LIMESTONE: 10%, as above

2065.00 to 2070.00m Interval: 5.00m	SHALE: 90%, as above
	LIMESTONE: 10%, as above
2070.00 to 2075.00m Interval: 5.00m	SHALE: 80%, medium gray, dark gray calcareous, blocky
	LIMESTONE: 20%, medium gray very argillaceous, cryptocrystalline to microcrystalline, mudstone, tight
2075.00 to 2080.00m Interval: 5.00m	SHALE: 70%, medium gray very calcareous, blocky
	LIMESTONE: 30%, medium gray, argillaceous, cryptocrystalline, mudstone, light brown, cryptocrystalline, mudstone, tight
2080.00 to 2085.00m Interval: 5.00m	SHALE: 90%, medium to dark gray, calcareous, blocky
	LIMESTONE: 10%, as above
2085.00 to 2090.00m Interval: 5.00m	SHALE: 100%, medium to dark gray, slightly calcareous, blocky
2090.00 to 2095.00m Interval: 5.00m	SHALE: 100%, medium gray, slightly calcareous, blocky
2095.00 to 2100.00m Interval: 5.00m	SHALE: 100%, medium to dark gray, platy to blocky
2100.00 to 2105.00m Interval: 5.00m	SHALE: 70%, as above
	LIMESTONE: 30%, light to medium gray, argillaceous in part, cryptocrystalline, mudstone, tight
2105.00 to 2110.00m Interval: 5.00m	SHALE: 100%, medium to dark gray, slightly calcareous, predominantly blocky
2110.00 to 2115.00m Interval: 5.00m	SHALE: 100%, as above
2115.00 to 2120.00m Interval: 5.00m	SHALE: 100%, medium to dark gray, calcareous, blocky, trace of LIMESTONE light gray brown, cryptocrystalline, mudstone, tight
2120.00 to 2125.00m Interval: 5.00m	SHALE: 40%, as above
	LIMESTONE: 60%, light to medium gray, medium gray, very argillaceous in part, cryptocrystalline, mudstone, tight
2125.00 to 2130.00m Interval: 5.00m	SHALE: 30%, as above
	LIMESTONE: 70%, light gray, light to medium gray, medium gray, slightly to very argillaceous, cryptocrystalline, mudstone, tight
2130.00 to 2135.00m Interval: 5.00m	SHALE: 40%, dark gray, very calcareous, blocky
	LIMESTONE: 60%, as above
2139.00m	KAKISA
2135.00 to 2140.00m Interval: 5.00m	SHALE: 30%, as above

	LIMESTONE: 70%, dark gray, medium gray, dark gray brown, argillaceous, cryptocrystalline, mudstone, tight
2140.00 to 2145.00m Interval: 5.00m	SHALE: 10%, as above
	LIMESTONE: 90%, dark gray brown, medium gray brown, argillaceous, cryptocrystalline, mudstone, tight
2145.00 to 2150.00m Interval: 5.00m	LIMESTONE: 100%, light to medium brown clean, light gray, medium gray, dark gray, very argillaceous in part, cryptocrystalline, mudstone, tight, trace of sparry calcite, probable healed fractures
2150.00 to 2155.00m Interval: 5.00m	LIMESTONE: 100%, dark gray to black, dark gray brown, argillaceous in part, cryptocrystalline, mudstone, tight
2155.00 to 2160.00m Interval: 5.00m	LIMESTONE: 100%, as above, trace of SHALE dark gray, calcareous, blocky
2161.50m	FORT SIMPSON
2160.00 to 2165.00m Interval: 5.00m	LIMESTONE: 30%, as above
	SHALE: 70%, medium gray, dark gray, calcareous, blocky
2165.00 to 2170.00m Interval: 5.00m	SHALE: 100%, dark gray, dark gray brown, slightly calcareous, blocky
2170.00 to 2175.00m Interval: 5.00m	SHALE: 100%, as above
2175.00 to 2180.00m Interval: 5.00m	SHALE: 100%, as above
2180.00 to 2185.00m Interval: 5.00m	SHALE: 100%, dark gray, medium gray, slightly calcareous, blocky to platy
2185.00 to 2190.00m Interval: 5.00m	SHALE: 100%, as above
2190.00 to 2195.00m Interval: 5.00m	SHALE: 100%, medium gray, medium gray calcareous, platy to blocky
2195.00 to 2210.00m Interval: 15.00m	SHALE: 100%, medium gray, medium gray calcareous, blocky to platy
2210.00 to 2215.00m Interval: 5.00m	SHALE: 100%, medium gray, medium gray calcareous, blocky to platy
2215.00 to 2225.00m Interval: 10.00m	SHALE: 100%, medium gray, medium gray calcareous, platy to blocky
2225.00 to 2290.00m Interval: 65.00m	SHALE: 100%, medium gray, slightly calcareous, platy to blocky
2290.00 to 2295.00m Interval: 5.00m	SHALE: 100%, medium gray calcareous, blocky to platy
2295.00 to 2335.00m Interval: 40.00m	SHALE: 100%, medium gray, slightly calcareous, blocky to platy
2335.00 to 2370.00m Interval: 35.00m	SHALE: 100%, medium gray, blocky to platy

2370.00 to 2410.00m Interval: 40.00m	SHALE: 100%, medium gray, slightly calcareous, platy to blocky
2410.00 to 2435.00m Interval: 25.00m	SHALE: 100%, medium gray, slightly calcareous, blocky to platy
2435.00 to 2440.00m Interval: 5.00m	SHALE: 100%, medium to dark gray, slightly calcareous, blocky to platy
2440.00 to 2445.00m Interval: 5.00m	SHALE: 100%, medium gray, slightly calcareous, blocky to platy
2445.00 to 2455.00m Interval: 10.00m	SHALE: 100%, medium to dark gray, slightly calcareous, blocky to platy
2455.00 to 2475.00m Interval: 20.00m	SHALE: 100%, medium gray, slightly calcareous, blocky to platy
2475.00 to 2490.00m Interval: 15.00m	SHALE: 100%, medium to dark gray, slightly calcareous, blocky to platy
2490.00 to 2500.00m Interval: 10.00m	SHALE: 100%, medium gray, slightly calcareous, blocky to platy
2500.00 to 2510.00m Interval: 10.00m	SHALE: 100%, medium to dark gray, slightly calcareous, blocky to platy
2510.00 to 2515.00m Interval: 5.00m	SHALE: 100%, medium to dark gray, slightly calcareous, blocky to platy
2515.00 to 2580.00m Interval: 65.00m	SHALE: 100%, medium to dark gray, blocky to platy
2580.00 to 2595.00m Interval: 15.00m	SHALE: 100%, medium gray, medium to dark gray, slightly calcareous, platy to blocky
2595.00 to 2600.00m Interval: 5.00m	SHALE: 100%, medium to dark gray, medium gray slightly calcareous, blocky to platy
2600.00 to 2605.00m Interval: 5.00m	SHALE: 100%, medium gray, medium to dark gray, slightly calcareous, platy to blocky
2605.00 to 2610.00m Interval: 5.00m	SHALE: 100%, medium gray, slightly calcareous, blocky to platy
2610.00 to 2620.00m Interval: 10.00m	SHALE: 100%, medium to dark gray, blocky to platy
2620.00 to 2665.00m Interval: 45.00m	SHALE: 100%, medium gray, blocky to platy
2665.00 to 2675.00m Interval: 10.00m	SHALE: 100%, medium to dark gray, platy to blocky
2675.00 to 2695.00m Interval: 20.00m	SHALE: 100%, medium gray, blocky to platy
2695.00 to 2700.00m Interval: 5.00m	SHALE: 100%, medium to dark gray, blocky to platy
2700.00 to 2705.00m Interval: 5.00m	SHALE: 100%, medium gray, medium to dark gray, blocky to platy
2705.00 to 2720.00m Interval: 15.00m	SHALE: 100%, medium gray, blocky to platy

2720.00 to 2730.00m Interval: 10.00m	SHALE: 100%, medium to dark gray, blocky to platy
2730.00 to 2735.00m Interval: 5.00m	SHALE: 100%, medium to dark gray, medium gray slightly calcareous, blocky to platy
2735.00 to 2740.00m Interval: 5.00m	SHALE: 100%, medium to dark gray slightly calcareous, platy to blocky
2740.00 to 2745.00m Interval: 5.00m	SHALE: 100%, medium to dark gray, dark gray, slightly calcareous, blocky to platy
2745.00 to 2765.00m Interval: 20.00m	SHALE: 100%, medium to dark gray, blocky to platy
2765.00 to 2770.00m Interval: 5.00m	SHALE: 100%, medium gray, blocky to platy
2770.00 to 2775.00m Interval: 5.00m	SHALE: 100%, medium to dark gray, blocky to platy
2775.00 to 2780.00m Interval: 5.00m	SHALE: 100%, medium gray, blocky to platy
2780.00 to 2785.00m Interval: 5.00m	SHALE: 100%, medium to dark gray, blocky to platy
2785.00 to 2805.00m Interval: 20.00m	SHALE: 100%, medium to dark gray, blocky to platy
2805.00 to 2810.00m Interval: 5.00m	SHALE: 100%, medium to dark gray, dark gray, platy to blocky
2812.50m	MUSKWA
2810.00 to 2820.00m Interval: 10.00m	SHALE: 100%, medium to dark gray, platy to blocky
2820.00 to 2825.00m Interval: 5.00m	SHALE: 100%, dark gray, platy to blocky, trace of disseminated pyrite
2825.00 to 2830.00m Interval: 5.00m	SHALE: 100%, dark gray to black, calcareous, platy to blocky, trace of nodular and disseminated pyrite
2830.00 to 2835.00m Interval: 5.00m	SHALE: 100%, dark gray, calcareous, blocky to platy, trace of disseminated pyrite
2835.00 to 2840.00m Interval: 5.00m	SHALE: 100%, as above
2840.00 to 2845.00m Interval: 5.00m	SHALE: 100%, medium to dark gray, blocky to platy, trace of nodular pyrite, abundant cavings
2845.00 to 2850.00m Interval: 5.00m	SHALE: 100%, medium to dark gray, dark gray, platy to blocky, minor nodular and disseminated pyrite, common cavings
2850.00 to 2855.00m Interval: 5.00m	SHALE: 100%, dark gray, slightly calcareous, blocky to platy, common disseminated and nodular pyrite
2855.00 to 2870.00m Interval: 15.00m	SHALE: 100%, dark gray, blocky to platy, nodular and disseminated pyrite
2870.00 to 2875.00m Interval: 5.00m	SHALE: 100%, dark gray to black, brittle, siliceous in part, common disseminated pyrite, trace of black CHERT, trace of sparry calcite, trace slickensided, probable fractures at 2870.4, 2871.2, 2873, 2875.2 and 2875.8m

2875.00 to 2880.00m **Interval: 5.00m**	**SHALE:** 100%, dark gray, blocky, trace of sparry calcite, disseminated and nodular pyrite
2880.00 to 2885.00m **Interval: 5.00m**	**SHALE:** 100%, dark gray to black, dark gray calcareous, blocky, trace of disseminated pyrite, slight petroliferous odor
2886.50m	NAHANNI
2885.00 to 2890.00m **Interval: 5.00m**	**LIMESTONE:** 30%, medium gray white, medium brown, dolomitic, predominantly cryptocrystalline, mudstone, minor sparry calcite
	DOLOMITE: 70%, medium gray white, calcareous, slightly argillaceous, predominantly cryptocrystalline to finely crystalline, coarsely crystalline in part, mudstone to wackestone, no stain, no fluorescence, trace of pin point and vuggy porosity, no apparent permeability, DOLOMITE sparry, calcareous, white to translucent, probable fracture infilling
2890.00 to 2897.00m **Interval: 7.00m**	**DOLOMITE:** 100%, medium gray white, salt and pepper, calcareous, argillaceous, microcrystalline to finely crystalline, wackestone, no stain, no fluorescence, no visible porosity, DOLOMITE sparry, white to translucent, probably veined infilling
2897.00 to 2900.00m **Interval: 3.00m**	**DOLOMITE:** 100%, medium gray. dark gray speckled white, predominantly finely crystalline, packstone to wackestone, argillaceous matrix, no stain, no fluorescence, no visible porosity, DOLOMITE sparry, clean, white to translucent, pearly, lithographic to cryptocrystalline, tight, probable veined infilling, trace of SHALE dark gray to black, dolomitic, fissile, blocky, slightly siliceous in part
2900.00 to 2905.00m **Interval: 5.00m**	**DOLOMITE:** 100%, as above
2905.00 to 2907.00m **Interval: 2.00m**	**DOLOMITE:** 80%, medium gray, dark gray, predominantly microcrystalline, wackestone to mudstone, very argillaceous, DOLOMITE sparry, finely crystalline as above
	SHALE: 20%, dark gray, dolomitic, brittle, siliceous
2907.00 to 2910.00m **Interval: 3.00m**	**DOLOMITE:** 80%, dark gray, medium gray, microcrystalline, very argillaceous, wackestone, DOLOMITE light gray white, speckled, finely crystalline, wackestone to packstone, argillaceous matrix, tight, DOLOMITE sparry, white to translucent, lithographic to cryptocrystalline, tight
	SHALE: 20%, dark gray to black, slightly dolomitic, brittle, siliceous, trace of disseminated pyrite, trace slickensided
2910.00 to 2915.00m **Interval: 5.00m**	**DOLOMITE:** 90%, light gray white speckled, microcrystalline to finely crystalline, wackestone to packstone, argillaceous matrix, trace with intercrystalline bitumen, DOLOMITE medium gray, dark gray argillaceous, cryptocrystalline to microcrystalline, mudstone to wackestone, tight, DOLOMITE sparry, white to translucent, pearly, probable veined infilling
	SHALE: 10%, dark gray to black, brittle, disseminated pyrite
2915.00 to 2920.00m **Interval: 5.00m**	**DOLOMITE:** 60%, as above, probable vuggy porosity at 2916.5 to 2917 and 2919m
	LIMESTONE: 40%, light to brown, cryptocrystalline to microcrystalline, mudstone, argillaceous, tight

2920.00 to 2925.00m **Interval: 5.00m**	**LIMESTONE:** 60%, as above
	DOLOMITE: 40%, as above
2925.00 to 2930.00m **Interval: 5.00m**	**LIMESTONE:** 90%, buff to light brown, light gray brown, medium brown, cryptocrystalline to microcrystalline, predominantly mudstone, argillaceous in part, tight
	DOLOMITE: 10%, as above, trace of SHALE dark gray to black
2930.00 to 2935.00m **Interval: 5.00m**	**LIMESTONE:** 100%, as above
2935.00 to 2940.00m **Interval: 5.00m**	**LIMESTONE:** 100%, mottled light gray brown, light brown, medium brown, dark brown, cryptocrystalline, mudstone, argillaceous in part, tight
2940.00 to 2941.00m **Interval: 1.00m**	**SHALE:** 30%, dark gray to black, very calcareous
	LIMESTONE: 70%, as above, mottled dark gray to black, very argillaceous, cryptocrystalline, mudstone, tight
2941.00 to 2945.00m **Interval: 4.00m**	**LIMESTONE:** 90%, mottled dark gray, dark brown, medium gray brown, light gray, argillaceous, predominantly cryptocrystalline, mudstone, tight
	SHALE: 10%, dark gray to black, very calcareous
2945.00 to 2950.00m **Interval: 5.00m**	**SHALE:** 10%, as above
	LIMESTONE: 90%, as above
2950.00 to 2955.00m **Interval: 5.00m**	**LIMESTONE:** 90%, dark gray to black, medium gray brown, light gray brown, mottled in part, very argillaceous in part, cryptocrystalline to microcrystalline, mudstone, tight
	SHALE: 10%, dark gray to black, very calcareous
2955.00 to 2960.00m **Interval: 5.00m**	**LIMESTONE:** 70%, as above
	SHALE: 30%, dark gray to black, very calcareous
2960.00 to 2965.00m **Interval: 5.00m**	**LIMESTONE:** 80%, as above, mottled light to medium gray brown, cryptocrystalline, tight
	SHALE: 20%, as above
2965.00 to 2970.00m **Interval: 5.00m**	**LIMESTONE:** 90%, mottled light to medium gray brown, medium brown, dark brown, cryptocrystalline to microcrystalline, predominantly mudstone, argillaceous in part, tight
	SHALE: 10%, dark gray to black, very calcareous
2970.00 to 2975.00m **Interval: 5.00m**	**LIMESTONE:** 100%, mottled light to medium gray brown, dark brown, medium gray brown, argillaceous in part, cryptocrystalline, mudstone, tight
2975.00 to 2980.00m **Interval: 5.00m**	**LIMESTONE:** 100%, light gray, mottled light to medium gray brown, dark gray brown, dark brown argillaceous, cryptocrystalline, mudstone, tight

2980.00 to 2985.00m Interval: 5.00m	**LIMESTONE:** 100%, mottled light gray brown, medium gray brown, dark brown, argillaceous in part, cryptocrystalline, mudstone, tight
2985.00 to 2990.00m Interval: 5.00m	**LIMESTONE:** 70%, light to medium gray brown, mottled medium gray brown, dark brown, cryptocrystalline to microcrystalline, mudstone
	DOLOMITE: 30%, sparry, white to translucent, pearly, tight, veined infilling, minor finely crystalline, trace with intercrystalline bitumen, trace of scalenohedral transparent dolomite crystals, no stain, no fluorescence, trace slickensided, probable vuggy and intercrystalline porosity, probable fractures at 2988.2 to 2988.8m
2990.00 to 2995.00m Interval: 5.00m	**LIMESTONE:** 90%, mottled light gray brown, medium brown, dark brown, predominantly cryptocrystalline, mudstone, argillaceous in part, tight
	DOLOMITE: 10%, as above, probable healed fractures at 2992.8 to 2993.4m
2995.00 to 3000.00m Interval: 5.00m	**LIMESTONE:** 100%, mottled medium brown, dark brown, light gray brown, cryptocrystalline, mudstone, tight
3000.00 to 3005.00m Interval: 5.00m	**LIMESTONE:** 100%, mottled dark brown, medium brown, light brown, cryptocrystalline to microcrystalline, predominantly mudstone, slightly argillaceous, tight
3005.00 to 3010.00m Interval: 5.00m	**DOLOMITE:** 100%, mottled medium to dark gray brown, slightly argillaceous, microcrystalline to cryptocrystalline, mudstone to wackestone, tight, DOLOMITE sparry, white to translucent, pearly, tight, probable veined infilling
3010.00 to 3015.00m Interval: 5.00m	**DOLOMITE:** 100%, as above, trace of disseminated pyrite, no visible porosity
3015.00 to 3020.00m Interval: 5.00m	**DOLOMITE:** 100%, mottled dark gray brown, medium brown, argillaceous, microcrystalline to cryptocrystalline, mudstone, calcareous, in part, tight, minor sparry dolomite as above, no visible porosity
3020.00 to 3025.00m Interval: 5.00m	**DOLOMITE:** 100%, mottled light to medium to dark brown, cryptocrystalline to microcrystalline, argillaceous, trace finely crystalline, mudstone to wackestone, trace slickensided, DOLOMITE sparry, white to translucent, pearly, tight, minor clear, very fine to coarse scalenohedral and rhombohedral dolomite crystals, Fracture at 3027.8m
3025.00 to 3030.00m Interval: 5.00m	**DOLOMITE:** 100%, mottled medium to dark gray brown, microcrystalline to cryptocrystalline, mudstone to wackestone, slightly argillaceous, tight, DOLOMITE sparry, white to translucent, pearly. tight
3030.00 to 3035.00m Interval: 5.00m	**LIMESTONE:** 100%, dark gray brown, medium gray brown, light gray brown, cryptocrystalline, mudstone, tight
3035.00 to 3040.00m Interval: 5.00m	**DOLOMITE:** 90%, dark gray brown, argillaceous, microcrystalline to cryptocrystalline, predominantly mudstone, tight, DOLOMITE sparry, white to translucent, pearly, tight, veined infilling
	LIMESTONE: 10%, as above
3040.00 to 3045.00m Interval: 5.00m	**DOLOMITE:** 100%, medium to dark gray brown, argillaceous, cryptocrystalline to microcrystalline, mudstone, tight, DOLOMITE sparry, white to translucent, tight, veined infilling

3045.00 to 3050.00m Interval: 5.00m	**DOLOMITE:** 100%, as above, trace light gray white, finely crystalline, packstone, trace of intercrystalline bitumen, no fluorescence, no visible porosity
3050.00 to 3055.00m Interval: 5.00m	**DOLOMITE:** 100%, mottled medium to dark gray, dark gray black argillaceous, microcrystalline, mudstone to wackestone, DOLOMITE sparry, white to translucent, tight, veined infilling
3055.00 to 3060.00m Interval: 5.00m	**DOLOMITE:** 100%, mottled medium to dark gray brown, slightly argillaceous, microcrystalline to cryptocrystalline, predominantly mudstone, veined with DOLOMITE sparry, white to translucent, pearly, tight
3060.00 to 3065.00m Interval: 5.00m	**DOLOMITE:** 100%, as above, very argillaceous in part
3065.00 to 3070.00m Interval: 5.00m	**DOLOMITE:** 100%, mottled light to medium gray brown, microcrystalline to cryptocrystalline, mudstone to wackestone, slightly argillaceous in part, abundant DOLOMITE sparry, white to translucent, pearly, tight, minor finely crystalline with trace of intercrystalline bitumen, no visible porosity
3070.00 to 3075.00m Interval: 5.00m	**LIMESTONE:** 90%, light to medium brown, cryptocrystalline, mudstone, tight **DOLOMITE:** 10%, as above
3075.00 to 3080.00m Interval: 5.00m	**LIMESTONE:** 60%, as above, veined with sparry dolomite infilling **DOLOMITE:** 40%, as above, sparry, white to translucent, pearly, infilling, probable healed fractures 3077 to 3081m
3080.00 to 3085.00m Interval: 5.00m	**LIMESTONE:** 100%, light to medium brown, cryptocrystalline, mudstone, tight
3085.00 to 3090.00m Interval: 5.00m	**LIMESTONE:** 100%, as above
3090.00 to 3095.00m Interval: 5.00m	**LIMESTONE:** 90%, mottled light to medium to dark brown, cryptocrystalline, mudstone, tight **DOLOMITE:** 10%, dark gray brown, microcrystalline, mudstone, tight, trace of sparry dolomite
3095.00 to 3100.00m Interval: 5.00m	**LIMESTONE:** 100%, medium brown, light brown, cryptocrystalline, mudstone, tight, trace of SHALE light gray green, glauconitic, trace of disseminated pyrite
3100.00 to 3105.00m Interval: 5.00m	**LIMESTONE:** 100%, light gray brown, medium brown, cryptocrystalline, mudstone, tight, trace of SHALE as above
3105.00 to 3110.00m Interval: 5.00m	**LIMESTONE:** 80%, as above **DOLOMITE:** 10%, dark gray brown, microcrystalline, mudstone, trace of sparry dolomite **SHALE:** 10%, light gray, light gray calcareous, fissile, platy
3110.00 to 3115.00m Interval: 5.00m	**LIMESTONE:** 30%, as above

	DOLOMITE: 60%, mottled light to medium to dark gray brown, cryptocrystalline to microcrystalline, mudstone to wackestone, trace finely crystalline, sparry, tight, DOLOMITE sparry, white to translucent, pearly, tight
	SHALE: 10%, light gray, light gray calcareous
3115.00 to 3120.00m Interval: 5.00m	**DOLOMITE:** 80%, medium gray brown, light gray brown, mudstone, light gray brown sparry, pearly, finely crystalline, trace of intercrystalline bitumen, no visible porosity
	LIMESTONE: 10%, as above
	SHALE: 10%, light to medium gray green, dolomitic, trace of disseminated pyrite
3120.00 to 3125.00m Interval: 5.00m	**DOLOMITE:** 90%, as above, dark brown to black, microcrystalline, argillaceous, packstone to wackestone, tight, DOLOMITE sparry, white to translucent, pearly, probable healed fractures
	SHALE: 5%, light to medium gray green, dolomitic
	LIMESTONE: 5%, as above
3129.00m	**MANATOE**
3125.00 to 3130.00m Interval: 5.00m	**DOLOMITE:** 100%, sparry, white to translucent, pearly, tight, minor DOLOMITE mottled light to medium gray brown, cryptocrystalline to microcrystalline, wackestone, tight
3130.00 to 3135.00m Interval: 5.00m	**DOLOMITE:** 100%, sparry, white to translucent, pearly, tight, DOLOMITE medium gray brown mottled, cryptocrystalline to finely crystalline, predominantly mudstone to wackestone, trace sucrosic, trace of intercrystalline bitumen, trace of intercrystalline porosity, probable minor vuggy porosity
3135.00 to 3140.00m Interval: 5.00m	**DOLOMITE:** 100%, as above, trace black argillaceous, trace slickensided, probable healed fractures at 3137.8 and 3139.8m
3140.00 to 3145.00m Interval: 5.00m	**DOLOMITE:** 100%, as above, trace of coarse scalenohedral dolomite crystals, vuggy and pin point porosity, probable fractures at 3140.6 and 3143.6m
3145.00 to 3150.00m Interval: 5.00m	**DOLOMITE:** 100%, sparry, white to translucent, pearly, trace finely crystalline drusy, trace with intercrystalline bitumen, vuggy and pin point porosity, fractures at 3145.6 and 3149.5m, DOLOMITE light to medium brown, cryptocrystalline to microcrystalline, predominantly mudstone, tight
3150.00 to 3155.00m Interval: 5.00m	**DOLOMITE:** 100%, as above
3155.00 to 3160.00m Interval: 5.00m	**DOLOMITE:** 100%, sparry, white to translucent, pearly, predominantly tight, trace drusy, DOLOMITE light to medium brown, cryptocrystalline to microcrystalline, mudstone to wackestone, dark gray black argillaceous, microcrystalline, wackestone, trace of pin point porosity
3160.00 to 3165.00m Interval: 5.00m	**DOLOMITE:** 100%, as above
3165.00 to 3170.00m Interval: 5.00m	**DOLOMITE:** 100%, light gray brown, microcrystalline to finely crystalline, wackestone to packstone, minor mudstone, sucrosic in part, slightly calcareous in part, trace of pin point and intercrystalline porosity, DOLOMITE sparry as above

3170.00 to 3175.00m **Interval: 5.00m**	**DOLOMITE:** 100%, as above, dark gray to black, microcrystalline, argillaceous, wackestone, no visible porosity
3175.00 to 3180.00m **Interval: 5.00m**	**DOLOMITE:** 100%, as above
3184.00m	**ARNICA**
3180.00 to 3185.00m **Interval: 5.00m**	**DOLOMITE:** 90%, as above **SHALE:** 10%, light gray, calcareous, trace of LIMESTONE medium brown, cryptocrystalline, mudstone
3185.00 to 3190.00m **Interval: 5.00m**	**DOLOMITE:** 100%, light brown, medium gray, dark gray, slightly argillaceous, cryptocrystalline to finely crystalline, mudstone to wackestone, argillaceous in part, tight, minor DOLOMITE sparry, white to translucent, pearly, veined infilling, trace of SHALE light gray, medium gray calcareous, trace of LIMESTONE medium brown, cryptocrystalline, mudstone
3190.00 to 3195.00m **Interval: 5.00m**	**DOLOMITE:** 100%, light to medium gray brown, slightly argillaceous, cryptocrystalline to finely crystalline, mudstone to wackestone, tight, minor sparry dolomite as above, trace of SHALE light to medium gray, dolomitic
3195.00 to 3200.00m **Interval: 5.00m**	**DOLOMITE:** 100%, light gray to medium gray brown, slightly argillaceous in part, cryptocrystalline to microcrystalline, finely crystalline in part, predominantly mudstone to wackestone, sucrosic packstone in part, no stain, no fluorescence, no visible porosity, minor sparry dolomite as above
3200.00 to 3205.00m **Interval: 5.00m**	**DOLOMITE:** 100%, as above
3205.00 to 3210.00m **Interval: 5.00m**	**DOLOMITE:** 100%, as above, medium gray brown, dark gray brown argillaceous, slightly calcareous, predominantly cryptocrystalline mudstone, tight
3210.00 to 3215.00m **Interval: 5.00m**	**DOLOMITE:** 100%, medium gray, dark gray, light gray brown, cryptocrystalline to microcrystalline, mudstone to wackestone, argillaceous in part, slightly calcareous in part, tight
3215.00 to 3220.00m **Interval: 5.00m**	**DOLOMITE:** 100%, as above
3220.00m	**TOTAL DEPTH**

SECTION 5

WELL EVALUATION

5. WELL EVALUATION

Downhole Logs (Were submitted with initial report in 1997)

TABLE 3 DOWNHOLE LOG SUMMARY OPEN HOLE LOGS

Depth	Suite	Interval
		Metres
Surface Casing	None	
Interm Casing 1	AITH(Phasor) / BHCS-GR	1698 - 454
	* Sonic logged up to 20m	
	PX CNL-LDT-GR / Microlog	1700 - 454
Interm Casing 2	Waived	
Total Depth	AITH-TLD-CNL-ML-GR	3220 - 2894
	DSI-GR	3214 - 2894
	FMS-GR	3222 - 2894
	ARI-LDT-CNL-ML-GR	3222 - 2894
	DLT-LDT-CNL-ML-GR	3218 - 2894
	* CNL-GR logged up to 1700m	

Other Logs: N/A

Synthetic Seismograms: N/A

Formation Stimulation: N/A

Formation & Production Tests: N/A

Prognosis: Following in this Section

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FORMATION TOPS (m)

GL: 426.8 M
K.B.: 433.32 M

FORMATION	PROGNOSIS (m)	SAMPLE (m)	LOGS (m)	SUBSEA (m)
Fantasque	459	144	N/A	289.32
Flett	494	179	N/A	254.32
Shunda	N/A	983	975	-541.68
Pekisko	N/A	1116	1064	-630.68
Banff	1113	1164	1098	-664.68
Exshaw	1659	1647	1646.5	-1213.18
Kotcho	1669	1662	1665	-1231.68
Tetcho	2024	2030	2030	-1596.68
Kakisa	N/A	2139	2138	-1704.68
Ft. Simpson	2114	2161.5	2162	-1728.68
Muskwa	2754	2812.5	2822	-2388.68
Nahanni	2829	2886.5	2889	-2455.68
Manatoe	N/A	3129	N/A	-2695.68
Arnica	N/A	3184	N/A	-2750.68
TOTAL DEPTH	3219	3220	3222	-2788.68

SECTION 6

ENVIRONMENTAL WELL REPORT

6. ENVIRONMENTAL WELL REPORT

Was submitted with drilling application

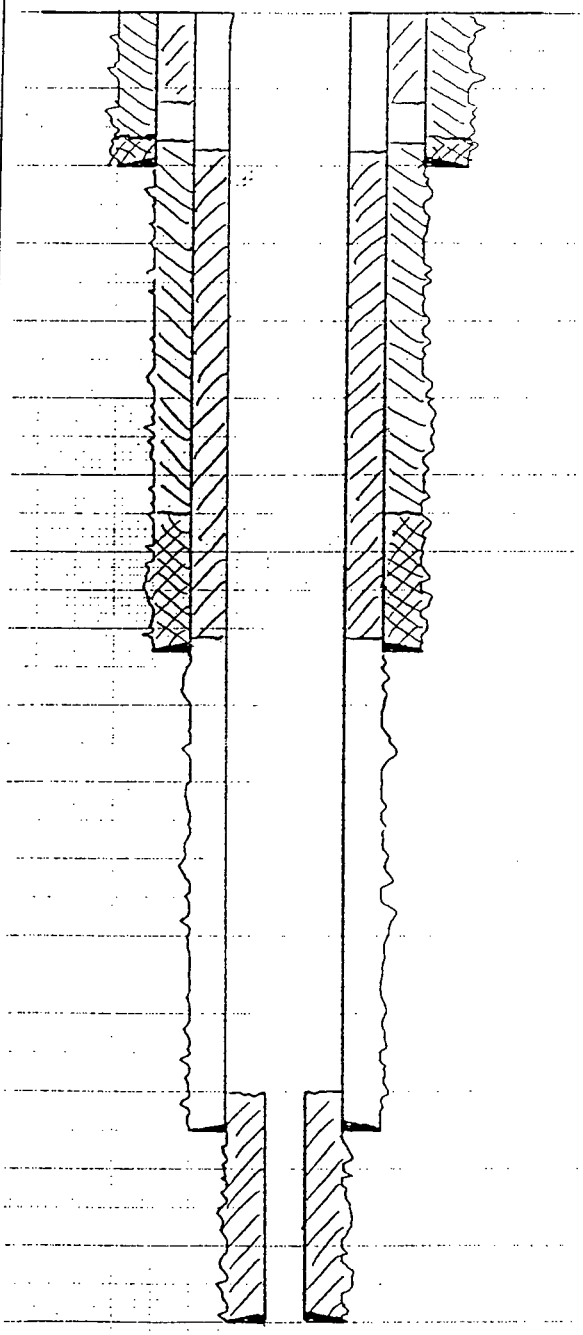
SECTION 7

APPENDICES TO WELL HISTORY REPORT

7. APPENDICES TO WELL HISTORY REPORT

Wellbore Diagram: (see attached)

Figure 1 - Wellbore and Casing Profile



0 - 453m	444.5 mm hole
0 - 453m	339.7 mm, 81.1 kg/m, K-55, ST&C casing
432 - 440m	External casing packer
0 - 415m	53 m3 0:1:0 Class G + 1% $CaCl_2$
415 - 453m	4 m3 0:1:0 Class G + 1% $CaCl_2$ + 0.5% T-10 + 0.5% D-24
453 - 1713m	311.2 mm hole
0 - 1713m	244.5mm, 69.9 kg/m, L-80, LT&C casing
1307m	Stage cementing tool
1688 - 1699m	External casing packer
0 - 30m	Thermax
300 - 1307m	55 m3 1:1:2 Class G + 0.5% T-10
1307 - 1713m	25 m3 0:1:0 Class G + 1.1% NFL-3
1713 - 2897m	215.9 mm hole
0 - 2897m	177.8 mm, 43.2 kg/m, L-80, LT&C casing
1692m	Stage cementing tool
1695 - 1698m	External casing packer
350 - 1692m	18 m3 1:1:2 Class G + 0.5% T-10 + 0.2% R-6
1692 - 2897m	The annulus packs-off at flow rates above 0.2 m3/min. Unable to cement this stage.
2897 - 3222m	152.4 mm hole
2742 - 2925m	114.3 mm, 17.3 kg/m, K-55, ST-L casing
2925 - 3221m	114.3 mm, 17.3 kg/m, L-80, LT&C casing
2735 - 2742m	Liner hanger
2635 - 3221m	7 m3 Thermal 40F + 0.4% D-24 + 0.5% T-10 + 0.3% R-6 + 0.5% Gel