

PARAMOUNT RESOURCES LTD.

DAILY DRILLING REPORT

UNIQUE I.D. 300C766020122420LOCATION: PARAMOUNT ROUTE C76A
WELL LICENCE LS10 1811SUPERVISOR: G. SANDERS
CELLULAR #: 760705443
SPUD DATE: 98-12-14
R.R. DATE: 99-01-11
CONTRACTOR: PRECISION 507
A.F.E. #: 1718P EST. T.D. 3464DAILY COST: 26646
CUM. COST: 2033132
DAILY MUD: _____
CUM MUD: _____DAY: 18 REP DATE: 99-01-12 STATUS 08:00 TEAR OUT RIG
DEPTH: _____ PROG. _____ KB: _____ GL: _____ MACP: _____
SURVEYS: _____MUD TYPE: _____ WT: _____ VISC: _____ WL: _____ FC: _____ PH: _____
ADDITIVES: _____

BIT	SERIAL #	SIZE	MFG	TYPE	JETS	OUT	RUN	HRS	TBG	WEIGHT	RPM
1A											

PUMP	DESCR.	LINER	STK	SPM	RATE	PRESS	AV DC	AV DP	NOZZEL VEL

DRILLING ASSEMBLY

TOOL	OD	ID	LENGTH
BIT			
B/S			
228MM DC			
X/O			
X/O			
6DC			
KELLY			
TOTAL			

CASING SUMMARY

RAN _____ JTS OF _____ MM,
 LANDED AT _____ MKB. TOTAL LENGTH _____
 CEMENTED WITH _____
 PLUG DOWN AT _____ HRS. ON _____ WITH _____

TIME DISTRIBUTION

MOVE/RIG-UP _____ RIG REP: _____
 DRILL MH & RH: _____ LOGGING: _____
 RIG SERVICE: _____ CEMENT: _____
 SURVEY: _____ WOC: _____
 PRESSURE TEST: _____ RUN CSG: _____
 DRILL: _____ DST: _____
 DRILL OUT: _____ TRIP: _____
 CIRCULATE: _____ L.D.D.S.: _____
 NIPPLE UP BOP: _____ REAM: _____
 TEAR OUT 24
 TOTAL HOURS: 24
 KG/M, _____ CASING.
 METERS. _____

CLEAN MWD TANKS.
 TEAR OUT RIG.
 RIG RELEASED 99-01-10 - 2400 hrs

DRILLING REPORT DAY 1

PARAMOUNT RESOURCES LTD.

RUNNING AND CEMENTING

PRODUCTION CASING

O.D.: 114.3 MMWELL NAME: PARA FIAL BOVIELOC: C76ADATE: 99-01-09K.B. ELEVATION 433.15CSG. FLG 43406TOTAL DEPTH (DRILLER) 3464

HOLE SIZE	<u>152</u>	#REF!	
DEPTH M	<u>3464</u>	#REF!	

CSG IN HOLE		#REF!	
DEPTH SET		#REF!	

MUD TYPE: INVERTWT: 1080 KG/M3VISC: 69

WL: _____

BOP'S 11" 5000' - 279mm x 35mm

RUNNING

POWER TONGS 212 TORQUE: MAX: 3860 NM NOM 3690 NM MIN 2320
 TIME PIPE START: 2315 TIME ON BOTTOM 1415 TIME CIRCULATED 144
 FILL UP POINTS: EVERY 140m BOTTOM BY CSG UP FROM KB:

REMARKS: RAN 25 STS 800 NR 1143mm CSG. OVERALL LENGTH 353.14m
LANDED 8m OF ACP @ 2906m KB. IN LINE HANGAR
DROPPED BALL PUMPED BALL. SURFACE PACKED W/ RIG PUMP. OPENED STAGE
TOOL W/ NOWSCO (BARREL) FLUSHED W/ 2nd DIESEL 3rd NOWSCO RUN

CEMENTING

CEMENT CO: NOWSCO OPERATOR: CARL PRESCOT AR. TIME: 10:00
 TYPES & QUANTITY OF CEMENT: 5.4 TONNE THERMAL 40F + 32.26 + 42.24 + 52.11
+ 1% SEPULCHRE HEIGHT TO BE CEMENTED 355.14m
 FLUSH: 3m³ DIESEL 3m³ NAWSCO MIX TIME: START: 2008 FIN: 2008 WT: 1876
 CALCULATED DISP 11.58 MEASURED DISP. 11.58 START: 2053 FIN: 2108
 DISPLACING FLUID WATER MAX. PRESS 8000 BUMP W/ 13000
 CEMENT RETURNS TRACE FLOAT _____ WORKED CSG WHILE CMT

REMARKS: DISPLACED plug w/ 11.58m³ WATER. CLOSED STAGE TOOL PRESSURED TO
21000 kPa. BLEED OFF PRESSURE CHECKED FOR FLOW. STAGE TOOL CLOSED
AND HOLDING. PRESSURE UP TO 3500 kPa. ROTATE PIPE OF HANGAR. HOLD IN
2m CIRC AND DISPLACE CSG ANNULUS TO WATER.

LANDING

TIME LANDED: _____ DATE: _____ WT. STRING (LESS BLOCKS) daN _____
 WT. LANDED IN SLIPS: _____ daN BOWL: _____ SIZE: _____
 SERIES _____ SLIP & SEAL ASS: _____

REMARK: WELL IS FILLED W/ WATER TO 10m FROM TOP

AGENT OF OPERATOR: J.P. Landers

RUN & CMT PROD

PARAMOUNT RESOURCES

PIPE TALLY

DATE: 99-01-07

WELL NAME PARA ETAL BOVIE C76A

LOCATION C76A

CONTRACTOR PRECISION 507

PIPE DESCRIPTION 114 mm. 17.26 KG/M

GRADE N80 RANGE 1

CPLG LTC THREAD 890 L2 MFG.

NEW OR USED NEW

TYPE OF STRING TALLIED

THREADS OFF

LENGTH		LENGTH		LENGTH		LENGTH		LENGTH		LENGTH	
1	14	25	21	1423	41	61	81	101			
2	14	23	22	1409	42	62	82	102			
3	14	01	23	1413	43	63	83	103			
4	14	12	24	1408	44	64	84	104			
5	14	30	25	1428	45	65	85	105			
6	14	12	26	1423	46	66	86	106			
7	14	10	27	1416	47	67	87	107			
8	14	31	28	1410	48	68	88	108			
9	13	89	29	1431	49	69	89	109			
10	14	23	30	1423	50	70	90	110			
TTL	141.56	TTL	141.84	TTL		TTL		TTL		TTL	
1-10		21-30		41-50		61-70		81-90		101-110	
11	14.04	31	1292	51	71	91	111				
12	1414	32	1410	52	72	92	112				
13	1412	33	1428	53	73	93	113				
14	1384	34	1399	54	74	94	114				
15	1407	35	1422	55	75	95	115				
16	1413	36	1423	56	76	96	116				
17	1430	37		57	77	97	117				
18	1426	38		58	78	98	118				
19	1419	39		59	79	99	119				
20	1368	40		60	80	100	120				
TTL	140.77	TTL	83.74	TTL		TTL		TTL		TTL	
11-20		31-40		51-60		71-80		81-100		111-120	
TTL		TTL		TTL		TTL		TTL		TTL	
01-20		21-40		41-60		61-80		81-100		101-120	
TOTAL 1-20	282.33	PAGE 1 TOTAL	507	91							
TOTAL 21-40	226.58	LEFT OUT: 11 JTS	154.77m								
TOTAL 41-60		FLOAT & SHOE									
TOTAL 61-80		GRAND TOTAL:									
TOTAL 81-100											
TOTAL 100-120											
TOTAL 1-120											
				REMARKS:							
				AGENT OF OPERATOR:							

SFC TALLY

PARAMOUNT RESOURCES LTD.

DAILY DRILLING REPORT

UNIQUE I.D. 300C 766020122450LOCATION: PARAMOUNT BOVIE C-76WELL LICENCE WLD 1817SUPERVISOR: ED REYVENDAILY COST: 45082CELLULAR #: 1-600-700-5443CUM. COST: 417007SPUD DATE: 98-12-14

DAILY MUD:

R.R. DATE:

CUM MUD:

CONTRACTOR: PRECISION 507A.F.E. #: 17198 EST. T.D. 3600DAY: 17REP DATE: 98-12-31 STATUS 08:00DEPTH: 3131PROG. 0KB: 6.35GL: 4.26MACP: 20419

SURVEYS:

MUD TYPE: INVERT WT: 1055 VISC: 60 WL: FC: PH:

ADDITIVES:

BIT	SERIAL #	SIZE	MFG	TYPE	JETS	OUT	RUN	HRS	TBG	WEIGHT	RPM
1A											
4	DQ 8327	152	REED	EXP 53	2813.2	3131					
5	LP 9256	152	SMITH	F-3	1815						

PUMP	DESCR.	LINER	STK	SPM	RATE	PRESS	AV DC	AV DP	NOZZEL VEL
OIL WELL	PT 600	114	203	110	-66	11000		43.0A	33.05
OIL WELL	PT 600	114	203						

DRILLING ASSEMBLY

TOOL	OD	ID	LENGTH
1- BIT	152		.25
1- MOTOR	125		5.42
1- C FLOATSUB	112		.59
1- N/m DC	125		9.49
1- PULSER SUB			1.35
2- N/m D/C			18.69
1- JARS			4.92
40 KELLY		367.91	367.91
1- X0		TOTAL	.50

CASING SUMMARY

RAN	JTS OF	MM.
LANDED AT	MKB.	TOTAL LENGTH
CEMENTED WITH		
PLUG DOWN AT	HRS. ON	WITH

TIME DISTRIBUTION

MOVE/RIG-UP	RIG REP:
DRILL MH & RH:	LOGGING:
RIG SERVICE:	CEMENT:
SURVEY:	WOC:
PRESSURE TEST:	RUN CSG:
DRILL:	DST:
DRILL OUT:	TRIP:
CIRCULATE:	L.O.D.S.:
NIPPLE UP BOP:	REAM:
SLIP LINE	ALPINE
WAIT ON TDS	MP TDS
TOTAL HOURS:	

CIRCULATE & WAIT ON BHA. RIGGING IN ENTENT UNIT. POOH & PICK UP BHA. DOPE & RETORQUE ALL BHA CONNECTIONS TWICE. R/H, PULSE TEST, FILL PIPE. SLIP & CUT LINE. REAM TO BOTTOM.

RAN BOP DRILL & MASKED UP. ENTENT EQUIPMENT SHOULD BE READY BY AFTER NOON.

DRILLING REPORT DAY 1

WAYNE Tamm

MUD PRODUCTS USED DEC 24 - 29

PARAMOUNT BOVIE C-76A

DEC 29

MILBAR	15 X 40 KG	SX
BARITE	15 X 40 KG	SX
LIME	15 X 20 KG	SX

DEC 28

CALCIUM CHLORIDE FLAKE	3 X 40 KG	SX
CARBOMUL SEA	5 X 55 GALLONS	
HSO - 600K	5 X 19 LITRES	PAIS
LIME	15 X 20 KG	SX
MILBAR	37 X 40 KG	SX
OILGEL 3000	15 X 22 KG	SX

DEC 28 CONTINUED

CARBOMUL SEA	1 X 55 GALLONS	
MILBAR	26 X 40 KG	SX
OILGEL 3000	26 X 22 KG	SX
LIME	20 X 20 KG	SX
HSO 600K	5 X 19 LITRES	PAIS.

DEC 27

CARBOMUL SEA	1 X 55 GALLONS	
MILBAR	26 X 40 KG	SX
OILGEL 3000	26 X 22 KG	SX

DEC 26

LIME	20 X 20 KG	SX
MILBAR	15 X 40 KG	SX

DEC 25

	10 X m ³	BASE OIL
CALCIUM CHLORIDE FLAKE	2 X 40 KG	

ED REYVEN

Geological Morning Report**Dec 31, 1998**

Report To: Paul Collens
Report from: Colin Bredin
1-250-774-0521
Satellite Phone: 1-600-790-3443
Satellite Fax: 1-403-543-9147

Well Name: Para et al Bovie C-76A
Surface Location: 60° 20' 122° 45'
Target Location: D-76

Spud Date: Re-entry
Days from Entry: 17

Date: Dec 31, 1998
Time: 06:00 hrs
Hours Drilling: 0

Depth: 3131m
Progress: 0.0m
Average ROP: 0.0m / hr

Formation: Sulphur Point

Operational Status: Tripping

Operational Summary: Trip, Circulate and WO Tools, Trip for Tools

Remarks: Tops are: Muskwa 2862m MD (2858.6 TVD), Slave Point 2897m MD (2892.3 TVD), Watt Mtn. No idea. Sulfur Point ? 3105m MD (3017.3 TVD). Bit, motor, Pulsar sub and monels were badly stressed and pitted by H₂S / CO₂ / Heat etc. Had to wait on replacements from South of 60. Currently running in with new BHA. Should be drilling ahead this morning

Paramount Resources Ltd.
301C766020122450

Para et al Bovie C-76A
60° 20' 122° 45'

PARAMOUNT RESOURCES LTD.

DAILY DRILLING REPORT

UNIQUE I.D. 300C 7660 201 22450LOCATION: PARAMOUNT ETAL BOVIE
WELL LICENCE C-76A
WID 1817SUPERVISOR: ED REYVEN
CELLULAR #: 1-600-700-5443
SPUD DATE: 98-12-10
R.R. DATE: _____
CONTRACTOR: PRECISION 507
A.F.E. #: 17198 EST. T.D. 3600 MDDAILY COST: 62418
CUM. COST: 1371925
DAILY MUD: _____
CUM MUD: _____DAY: 16 REP DATE: 98-12-30 STATUS: WAIT ON PIPE BHA
DEPTH: 3131 PROG. 14 KB: 6.35 GL: 4.26 MACP: 20419
SURVEYS: AS PER ATTACHEDMUD TYPE: INVERT WT: 1050 KG/M VISC: _____ WL: _____ FC: _____ PH: _____
ADDITIVES: _____

BIT	SERIAL #	SIZE	MFG	TYPE	JETS	OUT	RUN	HRS	TBG	WEIGHT	RPM
1A					28127						
4	LT5367	152	SMITH	A-3	1X9.5	3131	58	11.0	4-2-0	6-12	90

PUMP	DESCR.	LINER	STK	SPM	RATE	PRESS	AV DC	AV DP	NOZZEL VEL
OILWELL	PT-600	114	200	110	.66	11000		43m/h	33.05
OILWELL	PT-600	114							

DRILLING ASSEMBLY

TOOL	OD	ID	LENGTH
1-BIT	152		.23
1-MOTOR			5.62
1-FLOAT SUB			.40
1-N/M			9.29
1-PULSER SUB			1.35
1-XO			.45
2-NM O/C			17.05
1-TARS			4.95
40-HUDP			362.91

CASING SUMMARY

RAN _____ JTS OF _____ TOTAL 467.25
 LANDED AT _____ MKB. TOTAL LENGTH _____
 CEMENTED WITH _____
 PLUG DOWN AT _____ HRS. ON _____ WITH _____ M3 CEMENT RETURNS.

TIME DISTRIBUTION

MOVE/RIG-UP _____ RIG REP: _____
 DRILL MH & RH: _____ LOGGING: _____
 RIG SERVICE: .50 CEMENT: _____
 SURVEY: 1.50 WOC: _____
 PRESSURE TEST: _____ RUN CSG: _____
 DRILL: 11.0 DST: _____
 DRILL OUT: _____ TRIP: 8.50
 CIRCULATE: 2.0 L.D.D.S.: _____
 NIPPLE UP BOP: _____ REAM: _____
 ALPINE .50

TOTAL HOURS: 24.0KG/M, _____ CASING.
METERS. _____

FINISH IN. CIRC BOTTOMS UP. DRILL SURVEY AHEAD TO 3131. TRIP OUT, LOW PENETRATION RATE. LAYED DOWN TARS, 3 NONEL O/C, XO, PULSER SUB, FLOAT SUB, MOTOR & BIT. POWER SECTION DRIVE HAD A HOLE THROUGH IT. BIT WAS HEAT CHECKED & BLUE ON PIN END. MOTOR HAD BROKEN DRIVE SHAFT. ALL N/M O/C BELLED BOXES. OD'S ON MOST DRILL STRING MEMBERS HAD LARGE REDUCTIONS. IN WD SHOULDERS CALLED. TOOLS EXPERIENCED DOWN HOLE MAKE UP. PICKUP RRI, BREAK, CLEAN, INSPECT, DOPE & RETORQUE ALL HUDP. RAN IN HOLE TO 2300m AND WAIT ON TOOLS.

E. REYVEN
DRILLING REPORT DAY 1

December 30, 1998

3:

Onscreen for Windows
Survey Calculation Program
UNITED GEODOM DRILLING SERVICES

Page 1 of 1

Customer: PARAMOUNT RESOURCES LIMITED
WellName: PARAMOUNT ETAL BOVIE LAKE C76
Location: UNIT C SEC 76 GRID AREA 60°20', 122°45'

Vertical Section Calculated on: 246.7301

Survey Calculation Method: Minimum Curvature

FileName: C:\WELLS\PARAMO-1\8689REV8689-P1.SR3

#	Depth Meters	Inc Degree	Azimuth Degree	TVD Meters	North Meters	East Meters	Section Meters	Dogleg /30m
55	3025.66	57.45	222.14	2992.01	-87.71	-136.81	160.33	10.54
56	3035.35	60.53	221.45	2997.01	-93.90	-142.34	167.86	9.71
57	3045.04	63.46	222.94	3001.58	100.23	-148.09	175.64	9.94
58	3054.56	67.49	222.40	3005.51	-106.60	-153.96	183.55	12.79
59	3064.47	72.34	222.94	3008.91	-113.44	-160.27	192.05	14.76
60	3074.16	75.47	223.41	3011.61	-120.23	-166.64	200.58	9.79
61	3083.83	76.30	222.90	3013.91	-127.07	-173.05	209.18	3.00
62	3093.53	81.05	222.52	3015.84	-134.06	-179.50	217.86	14.74
63	3103.23	83.94	220.81	3017.14	-141.24	-185.89	226.57	10.36
64	3113.91	84.19	220.97	3018.25	-149.27	-192.85	236.13	0.83

Closure is 243.8685 Meters on an azimuth of 232.2580

Geological Morning Report**Dec 30, 1998**

Report To: Paul Collens
Report from: Colin Bredin
1-250-774-0521
Satellite Phone: 1-600-706-5443
Satellite Fax: 1-403-543-9147

Well Name: Para et al Bovie C-76A
Surface Location: 60° 20' 122° 45'
Target Location: D-76

Spud Date: Re-entry
Days from Entry: 16

Date: Dec 30, 1998
Time: 06:00 hrs
Hours Drilling: 6

Depth: 3131m
Progress: 15m
Average ROP: 2.6m / hr

Formation: Sulphur Point

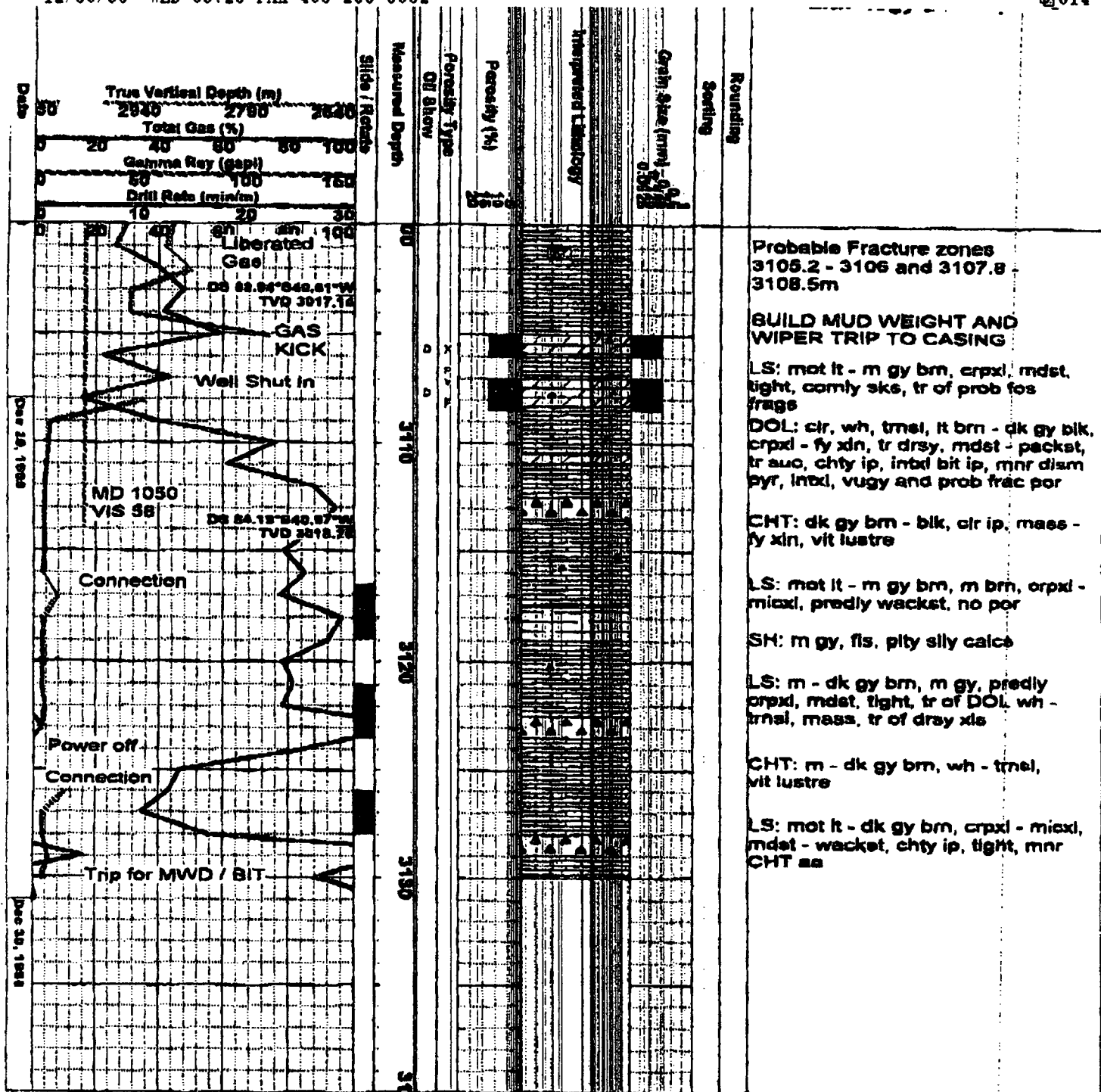
Operational Status: Tripping

Operational Summary: Drill directional hole, trip for BHA

Remarks: My best guess is fracture zones from 3105.2 - 3106 and 3107.8 - 3108.5m. Probable healed fracture at 3111m. The zones appear to be lined with dolomite and chert. The vitreous lustre, disseminated pyrite and some of the crystallinity is associated with the chert. We are currently drilling in Limestone with chert stringers. Still building angle at last survey. No gas shows to this point. MWD died so had to trip.

Paramount Resources Ltd.
301C766020122450

Para et al Bovie C-76A
60° 20' 122° 45'



Dr. 12/30, 1998
3:2

Onscreen for Windows
Survey Calculation Program
UNITED GEOCOM DRILLING SERVICES

Page 1 of 1

Customer: PARAMOUNT RESOURCES LIMITED
WellName: PARAMOUNT ETAL BOVIE LAKE C76
Location: UNIT C SEC 76 GRID AREA 60°20' , 122°45'

Vertical Section Calculated on: 246.7301
Survey Calculation Method: Minimum Curvature
FileName: C:\WELLS\PARAMO-1\8689RE\8689.P3.SR3

#	Depth Meters	Incl Degree	Azimuth Degree	TVD Meters	North Meters	East Meters	Section Meters	Dogleg /30m
55	3025.66	57.45	222.14	2992.03	-87.71	-136.81	160.33	10.54
56	3035.35	60.53	221.45	2987.03	-93.90	-142.34	167.86	9.71
57	3045.04	63.46	222.94	3000.58	-100.23	-148.09	175.64	9.94
58	3054.56	67.49	222.40	3005.53	-106.60	-153.96	183.55	12.79
59	3064.47	72.34	222.94	3008.93	-113.44	-160.27	192.05	14.76
60	3074.16	75.47	223.41	3011.61	-120.23	-166.64	200.58	9.79
61	3083.83	76.30	222.90	3015.97	-127.07	-173.05	209.18	3.00
62	3093.53	81.05	222.52	3019.88	-134.06	-179.50	217.86	14.74
63	3103.23	83.94	220.81	3017.14	-141.24	-185.89	226.57	10.36
64	3113.91	84.19	220.97	3018.25	-149.27	-192.85	236.13	0.83

Closure is 243.8685 Meters on an azimuth of 232.2580

PARAMOUNT RESOURCES LTD.

DAILY DRILLING REPORT

300C 7660 20122450

UNIQUE I.D.

LOCATION: PARAMOUNT ETAL BOVIE C 76A
WELL LICENCE WID 1817SUPERVISOR: ED REYVENCELLULAR #: 1-600-700-5443SPUD DATE: 98-12-14

R.R. DATE:

CONTRACTOR: PRECISION 507A.F.E. #: 17198 EST. T.D. 3600DAILY COST: 92461 *CUM. COST: 1,309,507

DAILY MUD:

CUM MUD:

DAY: 15 REP DATE: 98-12-29 STATUS 0600 3117
DEPTH: 3117 PROG. 11 KB: 6.35 GL: 4.26 MACP: 20419
SURVEYS: AS PER ATTACHEDMUD TYPE: INVERT WT: 1050 VISC: 56 WL: FC: PH:
ADDITIVES:

BIT	SERIAL #	SIZE	MFG	TYPE	JETS	OUT	RUN	HRS	TBG	WEIGHT	RPM
1A					2x12.7						
4	LT5367	152	SMITH	F-3	1x9.5	OB		11.50		6-12	40

PUMP	DESCR.	LINER	STK	SPM	RATE	PRESS	AV DC	AV DP	NOZZEL VEL
OILWELL	PT600	114	203	110	.66m ³ /m	11000		43m/m	33.05 m/s
OILWELL	PT600	114							

DRILLING ASSEMBLY

TOOL	OD	ID	LENGTH
1- BIT	152		.23
1- B/S MOTOR			5.62
1- 220MM FLOAT SUB			.40
1- 20 NM D/C			9.29
1- XO PULSAR SUB			1.35
1- 20 X6			.45
2- NM D/C			17.05
1- 20 JARS			4.95
40- HWDP			367.91
TOTAL			407.25

CASING SUMMARY

RAN JTS OF
LANDED AT MKB. TOTAL LENGTHCEMENTED WITH
PLUG DOWN AT

HRS. ON

WITH

M3 CEMENT RETURNS.

TIME DISTRIBUTION

MOVE/RIG-UP	ENTEST
DRILL MH & RH:	REP: 1.25
RIG SERVICE:	LOGGING:
SURVEY:	CEMENT:
PRESSURE TEST:	WOC:
DRILL:	RUN CSG:
DRILL OUT:	DST:
CIRCULATE:	TRIP: 2.0
NIPPLE UP BOP:	L.D.D.S.:
SURVEY	REAM:
SAFETY/m	W/C .75
TOTAL HOURS: 24	FLOW .50
KG/M,	
METERS.	CASING.

CIRCULATE & WAITON COMMUNICATIONS. SAFETY MEETING WITH ALL CREWS AND SERVICES. WAITON ENTST, TRANSFER PROBLEMS. SURVEY. DRILL 3106-3107 SHUTWELL IN AND CIRCULATE OUT GAS. WEIGHT UP SYSTEM TO 1050 KG/M³. PUMP SLUG & PULL ID STAND WIPER TRIP 15 DRAG. FLOW 25-10 STANDS. RUN IN HOLE, & CIRC BOTTOMS UP. NO TRIP OR FEED IN GAS. DRILLED FROM 3107-3117 & SURVEY. FORMATION HARDER. OBM SYSTEM IN GOOD SHAPE. REPORT ATTACHED. HELD CAMP FIRE DRILL. REPAIRED CAMP FIRE ALARM SYSTEM. ENTST (NEW CREW) WORKING ON EQUIPMENT, PROCEDURES AND OPTIONAL FLOW ROUTES.

* DAILY COST REFLECTS TRUCKING AND MUD PRODUCTS CONSOLIDATION
DRILLING REPORT DAY 1

December 29, 1998
5:39 am

Onscreen for Windows
Survey Calculation Program
UNITED GEOCOM DRILLING SERVICES

Page 1 of 1

Customer: PARAMOUNT RESOURCES LIMITED
WellName: PARAMOUNT ETAL BOVIE LAKE C76
Location: UNIT C SEC 76 GRID AREA 60°20', 122°45'

Vertical Section Calculated on: 246.7301
Survey Calculation Method: Minimum Curvature
FileName: C:\WELLS\PARAMO-1\8689RE\8689-P3.SR3

#	Depth Meters	Inc Degree	Azimuth Degree	TVD Meters	North Meters	East Meters	Section Meters	Dogleg /30m
54	3015.93	54.09	222.90	2986.56	-81.78	-131.38	153.00	8.99
55	3025.66	57.45	222.14	2992.03	-87.71	-136.81	160.33	10.54
56	3035.35	60.53	221.45	2997.03	-93.90	-142.34	167.86	9.71
57	3045.04	63.46	222.94	3001.58	-100.23	-148.09	175.64	9.94
58	3054.56	67.49	222.40	3005.53	-106.60	-153.96	183.55	12.79
59	3064.47	72.34	222.94	3008.93	-113.44	-160.27	192.05	14.76
60	3074.16	75.47	223.41	3011.61	-120.23	-166.64	200.58	9.79
61	3083.83	76.30	222.90	3013.97	-127.07	-173.05	209.18	3.00
62	3093.53	81.05	222.52	3015.88	-134.06	-179.50	217.86	14.74
63	3103.23	83.94	220.81	3017.14	-141.24	-185.89	226.57	10.36

Closure is 233.4637 Meters on an azimuth of 232.7719

Geological Morning Report**Dec 29, 1998**

Report To: Paul Collens
Report from: Colin Bredin
1-250-774-0521
Satellite Phone: 1-600-700-5443
Satellite Fax: 1-403-543-9147

Well Name: Para et al Bovie C-76A
Surface Location: 60° 20' 122° 45'
Target Location: D-76

Spud Date: Re-entry
Days from Entry: 15

Date: Dec 29, 1998
Time: 06:00 hrs
Hours Drilling: 3.75

Depth: 3116m
Progress: 10m
Average ROP: 2.6m / hr

Formation: Sulphur Point

Operational Status: Drilling

Operational Summary: Control Kick, Mix weight material. Drill ahead.

Remarks: Mixed Barite to weight up system to 1050. Still have connection gas but peak was down around 7%. Haven't seen enough sample yet to quantify what we are into. Probably a fracture lining. The dolomite has an intercrystalline and disseminated pyrite component and a vitreous lustre in part. There are common slickensides in the limestone. Whatever it is built angle. Once we get it kicked down and drill a ways I'll give you an update.

Lithology Description

Drilling Progress				Lithology Description								
Date	True Vertical Depth (m)	Total Gas (%)	Gamma Ray (gapi)	Drill Rate (min/m)	Slide / Rotate	Measured Depth	Porosity Type	Oil Show	Interpreted Lithology	Grain Size (mm)	Sorting	Rounding
Dec 26, 1998	2890	0	0	0		3080				0.063		
	2920	20	100	10		3090				0.063		
	2950	40	100	20		3100				0.063		
	2980	60	100	30		3110				0.063		
	3010	80	100	30		3120				0.063		
	3040	100	100	30		3130				0.063		
	3070	100	100	30		3140				0.063		
	3100	100	100	30		3150				0.063		
	3130	100	100	30		3160				0.063		
	3160	100	100	30		3170				0.063		
	3190	100	100	30		3200				0.063		
	3220	100	100	30		3230				0.063		
	3250	100	100	30		3260				0.063		
	3280	100	100	30		3290				0.063		
	3310	100	100	30		3320				0.063		
	3340	100	100	30		3350				0.063		
	3370	100	100	30		3380				0.063		
	3400	100	100	30		3410				0.063		
	3430	100	100	30		3440				0.063		
	3460	100	100	30		3470				0.063		
	3490	100	100	30		3500				0.063		
	3520	100	100	30		3530				0.063		
	3550	100	100	30		3560				0.063		
	3580	100	100	30		3590				0.063		
	3610	100	100	30		3620				0.063		
	3640	100	100	30		3650				0.063		
	3670	100	100	30		3680				0.063		
	3700	100	100	30		3710				0.063		
	3730	100	100	30		3740				0.063		
	3760	100	100	30		3770				0.063		
	3790	100	100	30		3800				0.063		
	3820	100	100	30		3830				0.063		
	3850	100	100	30		3860				0.063		
	3880	100	100	30		3890				0.063		
	3910	100	100	30		3920				0.063		
	3940	100	100	30		3950				0.063		
	3970	100	100	30		3980				0.063		
	4000	100	100	30		4010				0.063		
	4030	100	100	30		4040				0.063		
	4060	100	100	30		4070						

December 29, 1998
5:40 am

Onscreen for Windows
Survey Calculation Program
UNITED GEOCOM DRILLING SERVICES

Page 1 of 1

Customer: PARAMOUNT RESOURCES LIMITED
WellName: PARAMOUNT ETAL BOVIE LAKE C76
Location: UNIT C SEC 76 GRID AREA 60°20', 122°45'

Vertical Section Calculated on: 246.7301
Survey Calculation Method: Minimum Curvature
FileName: C:\WELLS\PARAMO-1\8689RE\8689-P3.SR3

#	Depth Meters	Inc Degree	Azimuth Degree	TVD Meters	North Meters	East Meters	Section Meters	Dogleg /30m
54	3015.93	54.09	222.90	2986.56	-81.78	-131.38	153.00	8.99
55	3025.66	57.45	222.14	2992.03	-87.71	-136.81	160.33	10.54
56	3035.35	60.53	221.45	2997.03	-93.90	-142.34	167.86	9.71
57	3045.04	63.46	222.94	3001.58	-100.23	-148.09	175.64	9.94
58	3054.56	67.49	222.40	3005.53	-106.60	-153.96	183.55	12.79
59	3064.47	72.34	222.94	3008.93	-113.44	-160.27	192.05	14.76
60	3074.16	75.47	223.41	3011.61	-120.23	-166.64	200.58	9.79
61	3083.83	76.30	222.90	3013.97	-127.07	-173.05	209.18	3.00
62	3093.53	81.05	222.52	3015.88	-134.06	-179.50	217.86	14.74
63	3103.23	83.94	220.81	3017.14	-141.24	-185.89	226.57	10.36

Closure is 233.4637 Meters on an azimuth of 232.7719



FIELD SERVICE REPORT "OIL MUD"

DATE	12/25/98	CHECK NUMBER	8
SPUD DATE	12/15/98	DAYS FROM SPUD	10
PRESENT ACTIVITY	directional drill		
HOLE SECTION	Production		

OPERATOR	PARAMOUNT RESOURCES	CONTRACTOR	PRECISION DRILLING	RIG NO.	507
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REPORT FOR:	MR. GERRY SANDERS	REPORT FOR:	MR. PETER HUSTON
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WELL NAME AND LOCATION	PARAMOUNT BOVIE LAKE	80 - 20 - 122 - 45 W	M	PROVINCE	NWT
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BIT RECORD		DRILLING ASSEMBLY ID/OD(mm)-Len.(m)			HOLE or CASING ID(mm)-W/O%-Len.(m)		CASING PROGRAM ID/OD(mm)-Len.(m)		ANNULAR VELOCITY m/min-Flow-Dep.(m)			PUMP PERFORMANCE		
BIT NO.	3	PIPE	70.0	89.0	2828		Cond		49.3	TR	2853	PUMPS 1+2	MODEL	MODEL
SIZE mm	152	PIPE				157.1	Surf.	0	43.4	LA	2898	LINER / STRK. mm	114 / 203	114 / 203
TYPE	ETDS37G	HWT	88.0	89.0	368		Interm	157.1 177.8 2855	67.1	TU	3035	DISPLACENT PER STR. m³	0.0059	0.0059
NOZZLE SIZE mm	1	DC	57.0	121.0	39		Liner					STROKES PER MIN.	110	
	2	DC					Prod					OUTPUT m³/min	0.849	
	3	DC				152.0 8.0%	380					PRESSURE kPa	9980	
	4													
	5													
	6													
		MUD SYSTEM	OPEN HOLE	ANN	CSG. CAP.	PIPE CAP.	TANK	TOTAL	VOL. DUMPED	DIL. RATE L/min				
		VOLUMES m³	8.0	40.4	51.5	11.5	65.4	117.3						

DEPTH IN m	2862	DRILLING AND SOLIDS CONTROL EQUIPMENT						VG READING Temp	50	CIRCULATION TIME min	181
HRS. ON BIT	38.50	SHAKER 1	SHAKER 2	DESANDER	DEBITER	CENTRIFUGE	CENTRIFUGE	800	14	BOTTOMS UP min	62
DRILL RT. m/min	7	TYPE	TYPE	TYPE	TYPE	TYPE	TYPE	300	7		
RPM	m/min	SWACO	SWACO			COYOTE		200		DEVIATION RECORD	
FORCE ON BIT kN	5000	SCREEN SIZE	SCREEN SIZE	UF DENS kg/m³	UF DENS kg/m³	UF DENS kg/m³	UF DENS kg/m³	100		DEPTH m	ANGLE DIRECTION
NOZZLE VEL m/min	33.87	110	110			1840	0	80		2945	34.500
BIT PRESS LOSS kPa	665.21	SCREEN SIZE	SCREEN SIZE	OF DENS kg/m³	OF DENS kg/m³	OF DENS kg/m³	OF DENS kg/m³	60		2967	40.200
H.M.P. W/cm²	0.03	110	110	UF RATE L/min	UF RATE L/min	UF RATE L/min	UF RATE L/min	30		2986	48.600
SPREA. @ BIT	5.66	SCREEN SIZE	SCREEN SIZE	HOURS RUN	HOURS RUN	HOURS RUN	HOURS RUN	6		3015	54.100
								3	1		

TIME 24 HR	1:00	HTHP FLT cm²	20.000	FAC. MUD	0.822	OIL LOSS ON CUT.		TRUE VERT. DEPTH	2985
MEASURED DEPTH m	3035	Pressure/Temp	3400/50	FAC. CUTTINGS	0.781	DIL LOSS ON CENT.		HORIZONTAL REACH m	223
FLOWLINE TEMP °C	34	FLT CAKE mm		REMARKS: (TIME BREAKDOWN, PROBLEMS, HOLE CONDITIONS, BUDGET, FILL, MAKE-UP WATER, MIDNIGHT DEPTH DATE)				DRAW UP DnN	3000-10000
DENSITY kg/m³	900	SULFIDES mg/L	0.000					DRAW DOWN DnN	3-10000

12/24/98: drill and survey 152mm hole from 2952m to 3035 m.

no sulfides reported on garret gas train.

GRADIENT kPa/m	8.829	Ca mg/L (Wp)	114285.7	FOR TODAY PLEASE ADD 20 SACKS OF LIME, THROUGH THE HOPPER, OVER 1 CIRCULATION. IF YOU REQUIRE MORE VOLUME PLEASE ADD INVERT FROM TANK FARM.
HYDROSTATIC kPa @ DEPTH	28355	Ca(NO3)2 mg/L (Wp)	0.0	
E.C.D. kg/m³	815	Ca(NO3)2% (Wp)	0.0%	
ANN PRESS LOSS kPa	435	NO3 mg/L (Wp)	0.0	
		Cl mg/L (Wp)	228571.4	
		CaCl2% (Wp)	28.3%	
INVERT VOLUME CONTROL				
PREVIOUS ACTIVE S.		(1) 118.5	IF H2S IS ENCOUNTERED MIX 10 SACKS OF LIME AND 5 PAILS OF HSO600. REPEAT AND/OR INCREASE AS NEEDED. (2LITERS/M3 OF HSO600 TREATS 200PPM/M3)	
INVERT ADD.		(2) 0.0		
DIESEL ADD.		(3) 0.0		
BRINE ADD.		(4) 0.0		
PRODUCT ADD.		(5) 0.0		
INVERT REC.		(6) 0.0		
TOTAL ACTIVE (1+2+3+4+5+6)		(7) 118.5		
ACTUAL PRESENT VOL		(8) 117.3		
24 HOUR LOSS (7-8)		(9) 1.2		
PREV LOSS - INVERT REC.		7.5		
TOTAL LOSS - INVERT REC.		8.7	MATERIALS ADDED SINCE LAST CHECK	
INVERT DEL		185.0		
INVERT STORED		49.0		
DIESEL DEL		32.0		
DIESEL STORED		22.0	MATERIALS ADDED SINCE LAST CHECK	
BRINE STORED		0.0		

WHIMIS:	PROTECTIVE CLOTHING REQ WHEN MIXING CHEMICALS. REFER TO MSDS'S/LABELS FOR FURTHER INFORMATION
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RECOMMENDATIONS:	FOR TODAY PLEASE ADD 20 SACKS OF LIME, THROUGH THE HOPPER, OVER 1 CIRCULATION. IF YOU REQUIRE MORE VOLUME PLEASE ADD INVERT FROM TANK FARM.
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WHILE DRILLING NEW HOLE PLEASE MONITOR ANY LOSSES. IF SEEPAGE LOSSES ARE ENCOUNTERED PLEASE ADD MICA, CELLOPHANE, CALCIUM CARBONATE, AND WALNUT SHELLS AS REQUIRED.

FOR TOTAL LOSSES MIX A PILL WITH EQUAL AMOUNTS OF THE ABOVE MIX IT AS THICK AS CAN BE PUMPED AND SPOT ABOVE THE THIEF ZONE. REPEAT AS NECESSARY.
--

IF H2S IS ENCOUNTERED MIX 10 SACKS OF LIME AND 5 PAILS OF HSO600. REPEAT AND/OR INCREASE AS NEEDED. (2LITERS/M3 OF HSO600 TREATS 200PPM/M3)

PLEASE MAINTAIN WEIGHT AS LOW AS POSSIBLE WITH ALL SOLIDS CONTROL EQUIPMENT. PLEASE MONITOR HOURS, UNDERFLOW AND OVER FLOW AND MARK IT IN TOUR BOOK.
--

PLEASE MARK ALL ADDITIONS OF INVERT AND/OR BASE OIL IN THE TOUR BOOK.

KEEP ALL WATER OUT OF THE MUD.

CALL YAL	MIKE SOUKEROFF	PHONE	(403) 552-8880	MOBILE	(403) 518-8422
BILL TRUCKER	H.L. Powell Ltd.	WAREHOUSE	Fort Nelson	PHONE	(804) 774-7883
PRODUCT COST SINCE LAST CHECK		PRODUCT COST TO DATE		\$3,188.20	
TOTAL SERVICES COST TO DATE		\$0.00		TOTAL COST TO DATE	
				\$3,188.20	

IN CONSIDERATION OF THE FURNISHING OF THIS REPORT AND ORAL SUGGESTIONS (IF ANY), IT IS AGREED THAT NO RECOMMENDATIONS MADE HEREIN SHALL BE CONSTRUED AS AUTHORIZING THE INFRINGEMENT OF ANY VALID PATENT, AND IT IS AGREED THAT BAKER HUGHES INTEQ SHALL NOT BE LIABLE FOR ANY DAMAGES RESULTING FROM THE FURNISHING OF THIS REPORT AND ORAL SUGGESTIONS AND IS TO BE HELD HARMLESS.

NOTE: Wp = WATER PHASE, MUD = WHOLE MUD, LA = LAMINAR FLOW, TR = TRANSITIONAL FLOW, TU = TURBULENT FLOW

PARAMOUNT RESOURCES LTD.

DAILY DRILLING REPORT

300C766020122450
UNIQUE I.D.

LOCATION: PARAMOUNT ET AL BOVE
WELL LICENCE WLD 1817 C76A

SUPERVISOR: E. REYVEN
CELLULAR #: 1-600 700 5443
SPUD DATE: 98 12 14
R.R. DATE:
CONTRACTOR: PRECISION 507
A.F.E. #: 17198 EST. T.D. 3600 MD

DAILY COST: 49699
CUM. COST: 1,217,046
DAILY MUD:
CUM MUD:

DAY: 14 REP DATE: 98-12-28 STATUS 98:00
DEPTH: 3106 PROG. 0 KB: 6.35 GL: 4.26 MACP: 21000
SURVEYS: AS ATTACHED

MUD TYPE: INVERT WT: 970 VISC: 61 WL: FC: PH:
ADDITIVES:

BIT	SERIAL #	SIZE	MFG	TYPE	JETS	OUT	RUN	HRS	TBG	WEIGHT	RPM
4A	LT5367	152	SMITH	F-3	2x 12.7 1x 7.5	OB		11.50		6-12	45/70

PUMP	DESCR.	LINER	STK	SPM	RATE	PRESS	AV DC	AV DP	NOZZEL VEL
OILWELL	PT600	114	203	110	.66m ³ /h	1000		43.4m/s	33.05

DRILLING ASSEMBLY

TIME DISTRIBUTION

Flow ✓ .25

MOVE/RIG-UP RIG REP:
DRILL MH & RH: LOGGING:
RIG SERVICE: 25.50 CEMENT:
SURVEY: WOC:
PRESSURE TEST: RUN CSG:
DRILL: 3.25 DST:
DRILL OUT: TRIP:
CIRCULATE: 7.0 L.D.D.S.:
NIPPLE UP BOP: REAM:
WELL CONTROL 10.75 R-Bop .50

THAW ENTST 2.0
TOTAL HOURS: 24

KG/M, CASING.
METERS.

M3 CEMENT RETURNS.

TOOL	OD	ID	LENGTH
1- BIT	152	.23	.23
1- ENG MOTOR			5.62
1- 22000 PSI DC FLOAT SUB			.40
1- 220 N/M D/C			9.29
1- 220 PULSAR SUB			1.35
1- 220 XO			.45
2- N/M D/C			17.05
1- 220 JARS			4.95
40- HWDP			367.91
TOTAL			407.25

CASING SUMMARY

RAN JTS OF MM,
LANDED AT MKB. TOTAL LENGTH
CEMENTED WITH
PLUG DOWN AT HRS. ON WITH M3 CEMENT RETURNS.

CIRCULATE & RIG TO DRILL W/CLOSED SYSTEM. WEIGH UP SYSTEM. THAW ENTST FLOW LINE. WAIT ON SAFETY BOSS & RENTALS. CHANGE BEARING ASSEMBLY IN ALPINE HEAD. WAIT ON COMMUNICATIONS PACKAGE. WAITING ON PROPANE. TWO TRUCKS BROKE DOWN! MOVE 400 BBL TANKS. REWIRE RENTAL PUMPS. ENTST VAPORIZER FAILED, HOT SHOT SAME. SAFETY MEETING WITH ALL CREWS AND SERVICES, ATTACHED. PUMP TO ENTST, TRANSFER PUMP FAILED. RELEASED ENTIRE ENTST CREW!

WILL DRILL CONVENTIONALLY UNTIL REPLACEMENTS ARRIVE. ED. REYVEN.
DRILLING REPORT DAY 1

Geological Morning Report**Dec 28, 1998**

Report To: Paul Collens
Report from: Colin Bredin
1-250-774-0521
Satellite Phone: 1-600-700-5443
Satellite Fax: 1-403-543-9147

Well Name: Para et al Bovie C-76A
Surface Location: 60° 20' 122° 45'
Target Location: D-76

Spud Date: Re-entry
Days from Entry: 14

Date: Dec 28, 1998
Time: 06:00 hrs
Hours Drilling: 0

Depth: 3106.4m
Progress: 0.0m
Average ROP: 0m / hr

Formation: Sulphur Point?

Operational Status: Wait on Entest.

Operational Summary: Control Kick, Mix weight material, Rig through Entest vessel.

Remarks: Mixed Barite to weight up system. Will have to drill in a balanced state from this point on or bring in equipment. Hope to be drilling ahead this morning but nothing seems to be functioning all that well as far as the gemini system is concerned. Rigged the gas sniffer into the meter run of the p-tank. Should pick up any gas seperating from the system.

PARAMOUNT RESOURCES LTD.

DAILY DRILLING REPORT

300 C-76 60 20122450
UNIQUE I.D.LOCATION: PARAMOUNT ET AL BOULE
WELL LICENCE WID 1817 C-76ASUPERVISOR: E. REYVEN
CELLULAR #: 1-600-700-5443
SPUD DATE: 98-12-14
R.R. DATE:
CONTRACTOR: PRECISION 507
A.F.E. #: 17198 EST. T.D. 3600DAILY COST: 35743
CUM. COST: 1167347
DAILY MUD:
CUM MUD:DAY: 13 REP DATE: 98-12-27 STATUS 08:00 WEIGHT UP SYSTEM
DEPTH: 3106 PROG. 33 KB: 6.35 GL: 4-26.8 MACP: 21460
SURVEYS: AS PER ATTACHEDMUD TYPE: INVERT WT: 910 VISC: 58 WL: FC: PH:
ADDITIVES:

BIT	SERIAL #	SIZE	MFG	TYPE	JETS	OUT	RUN	HRS	TBG	WEIGHT	RPM
1A											
4	LT 5367	152	SMITH	F-3	2x12.7 1x9.5		33	8 1/4	1N	6-12	45/90

PUMP	DESCR.	LINER	STK	SPM	RATE	PRESS	AV DC	AV DP	NOZZEL VEL
OILWELL	PT 600	114	203	110	.66	10000		43.4	23.67
OILWELL	PT 600	114	203						

DRILLING ASSEMBLY

TOOL	OD	ID	LENGTH
1- BIT	152		.23
1- BIT MOTOR			5.62
1- 22MM BG FLOAT SUB			.40
1- XO N/m D/C			9.29
1- XO PULSAR SUB			1.35
1- 6DC XO			.45
2- N/m D/C			17.05
1 KELLY JARS			4.95
40- HWDP			
TOTAL			367.91

CASING SUMMARY

RAN _____ JTS OF _____ MM,
 LANDED AT _____ MKB. TOTAL LENGTH _____
 CEMENTED WITH _____
 PLUG DOWN AT _____ HRS. ON _____ WITH _____ M3 CEMENT RETURNS.

TIME DISTRIBUTION

MOVE/RIG-UP	RIG REP:
DRILL MH & RH:	LOGGING:
RIG SERVICE:	.50 CEMENT:
SURVEY:	4.00 WOC:
PRESSURE TEST:	RUN CSG:
DRILL:	8.25 DST:
DRILL OUT:	TRIP: 7.0
CIRCULATE:	L.D.D.S.:
NIPPLE UP BOP:	REAM: 2.05
SLIP LINE	.50 WELL CONT 1.0
SAFETY MEETING	.50 BOP DRILL .50
TOTAL HOURS:	24

KG/M, _____ CASING.
 METERS.

R/H & PULSE TEST ON WAY IN. ~~REMOVED~~ REAMED FROM 3015-3035. SHUT
 WELL IN & CIRC BOTTOMS UP. REAMED TO BTM. DRILLED & SURVEYED TO
 3096. WELL PATH ON TARGET. HELD BOP DRILLS W/BOTH CREWS. SAFETY MEETING.
 DRILLED TO 3106 TOOK KICK SHUT IN WELL AND KILL SAME. CIRCULATE
 WELL AND RIG UP TO DRILL W/ENTEST SYSTEM

E. REYVEN

DRILLING REPORT DAY 1

13.

December 27, 1998
5:01 am

Onscreen for Windows
Survey Calculation Program
UNITED GEOCOM DRILLING SERVICES

Page 1 of 1

Customer: PARAMOUNT RESOURCES LIMITED
WellName: PARAMOUNT ETAL BOVIE LAKE C76
Location: UNIT C SEC 76 GRID AREA 60°20', 122°45'

Vertical Section Calculated on: 246.7301
Survey Calculation Method: Minimum Curvature
FileName: C:\WELLS\PARAMO~1\8689RE\8689-P3.SR3

#	Depth Meters	Ino Degree	Azimuth Degree	TVD Meters	North Meters	East Meters	Section Meters	Dogleg /30m
53	3006.22	51.48	221.28	2980.69	-76.04	-126.19	145.97	8.75
54	3015.93	54.09	222.90	2986.56	-81.78	-131.38	153.00	8.99
55	3025.66	57.45	222.14	2992.03	-87.71	-136.81	160.33	10.54
56	3035.35	60.53	221.45	2997.03	-93.90	-142.34	167.86	9.71
57	3045.04	63.46	222.94	3001.58	-100.23	-148.09	175.64	9.95
58	3054.56	67.49	222.40	3005.53	-106.60	-153.96	183.55	12.79
59	3064.47	72.34	222.94	3008.93	-113.44	-160.27	192.05	14.76
60	3074.16	75.47	223.41	3011.61	-120.23	-166.64	200.58	9.79
61	3083.83	76.30	222.90	3013.97	-127.07	-173.05	209.18	3.00
62	3093.53	81.05	222.52	3015.88	-134.06	-179.50	217.86	14.74

Closure is 224.0361 Meters on an azimuth of 233.2458

Geological Morning Report**Dec 27, 1998**

Report To: Paul Collens
Report from: Colin Bredin
1-250-774-0521
Satellite Phone: 1-600-700-5443
Satellite Fax: 1-403-543-9147

Well Name: Para et al Bovie C-76A
Surface Location: 60° 20' 122° 45'
Target Location: D-76

Spud Date: Re-entry
Days from Entry: 13

Date: Dec 27, 1998
Time: 06:00 hrs
Hours Drilling: 8

Depth: 3106.4m
Progress: 33.4m
Average ROP: 4.1m / hr

Formation: Sulphur Point?

Operational Status: Control Kick

Operational Summary: Trip for Bit / BHA, Drill directional hole, Control Kick

Remarks: Had a drilling break at 3105.2 - 3106m. (3017m TVD)
Took a gas kick and shut in well 60 minutes later. SICP
800 kpa. No sample. Washed away by excess volume. Will
take a few hours to rig through P-tank for drilling.

December 27, 1998
5:06 am

Onscreen for Windows
Survey Calculation Program
UNITED GEOCOM DRILLING SERVICES

Page 1 of 1

Customer: PARAMOUNT RESOURCES LIMITED
WellName: PARAMOUNT ETAL BOVIE LAKE C76
Location: UNIT C SEC 76 GRID AREA 60°20', 122°45'

Vertical Section Calculated on: 246.7301
Survey Calculation Method: Minimum Curvature
FileName: C:\WELLS\PARAMO-1\8689RE\8689-P3.SR3

#	Depth Meters	Inc Degree	Azimuth Degree	TVD Meters	North Meters	East Meters	Section Meters	Dogleg /30m
53	3006.22	51.48	221.28	2980.69	-76.04	-126.19	145.97	8.75
54	3015.93	54.09	222.90	2986.56	-81.78	-131.38	153.00	8.99
55	3025.66	57.45	222.14	2992.03	-87.71	-136.81	160.33	10.54
56	3035.35	60.53	221.45	2997.03	-93.90	-142.34	167.86	9.71
57	3045.04	63.46	222.94	3001.58	-100.23	-148.09	175.64	9.95
58	3054.56	67.49	222.40	3005.53	-106.60	-153.96	183.55	12.79
59	3064.47	72.34	222.94	3008.93	-113.44	-160.27	192.05	14.76
60	3074.16	75.47	223.41	3011.61	-120.23	-166.64	200.58	9.79
61	3083.83	76.30	222.90	3013.97	-127.07	-173.05	209.18	3.00
62	3093.53	81.05	222.52	3015.88	-134.06	-179.50	217.86	14.74

Closure is 224.0361 Meters on an azimuth of 233.2458

* Azimuth was probably ~~affected~~ by torque
on these two surveys. affected.

Trevor.

PARAMOUNT RESOURCES LTD.

DAILY DRILLING REPORT

300C 766020122450
UNIQUE I.D.LOCATION: PARA ET AL BOVIE
WELL LICENCE WID 1817SUPERVISOR: E. REYVEN
CELLULAR #: 1-600-700-5443
SPUD DATE: 98-12-14
R.R. DATE:
CONTRACTOR: PRECISION 507
A.F.E. #: 17198 EST. T.D. 3600 MDDAILY COST: 39960
CUM. COST: 1131604
DAILY MUD:
CUM MUD:

TEMP -9°C

DAY: 212 REP DATE: 98-12-26 STATUS 08:00
DEPTH: 3073 PROG. 21 KB: 6.35 GL: 426.8 MACP: 22000
SURVEYS: AS PER ATTACHEDMUD TYPE: INVERT WT: 910 VISC: 51 WL: FC: PH:
ADDITIVES:

BIT	SERIAL #	SIZE	MFG	TYPE	JETS	OUT	RUN	HRS	TBG	WEIGHT	RPM
3	137846	152	VAREL	ETD5376	2412.7	3073	211		5-50 ^{3rd}	6/12	45/90
4	LT5367	152	SMITH	F-3	289.5						
2x12.7											

PUMP	DESCR.	LINER	STK	SPM	RATE	PRESS	AV DC	AV DP	NOZZEL VEL
OILWELL	PT600	114	203	110	-66 m/s	10000		54 m/s	34 m/s
OILWELL	PT600	114	203						

DRILLING ASSEMBLY

TOOL	OD	ID	LENGTH
1-BIT	152		.23
1-MOTOR			5.62
1-FLOAT SUB			.40
1-NM D/C			9.29
1-PULSAR SUB			1.35
1-XO			.45
2-NM D/C			17.05
1-JARS			4.95
40 HWDP			367.91
TOTAL			407.25

CASING SUMMARY

RAN _____ JTS OF _____ MM,
 LANDED AT _____ MKB. TOTAL LENGTH _____
 CEMENTED WITH _____
 PLUG DOWN AT _____

TIME DISTRIBUTION

MOVE/RIG-UP _____ RIG REP: _____
 DRILL MH & RH: _____ LOGGING: _____
 RIG SERVICE: .50 CEMENT: _____
 SURVEY: 4.75 WOC: _____
 PRESSURE TEST: _____ RUN CSG: _____
 DRILL: 10.50 DST: _____
 DRILL OUT: _____ TRIP: 7.0
 CIRCULATE: .75 L.D.D.S.: _____
 NIPPLE UP BOP: _____ REAM: _____
 ALPINE HEAD -50

TOTAL HOURS: 24
 KG/M, _____ CASING.
 METERS.

DRILL & SURVEY AHEAD TO 3073. CIRCULATE, SAMPLE, WORK STRING, PUMP SLUG, PULL BEARING ASSEMBLY, FLOWCHECK, POOH. SLM BOARD 3065.47 TALLY 3064.29. DIFFERENCE 1.18. PICKED UP PDM & RAN IN HOLE. PULSE TEST @ 230m OK. RIH TO 766m PULSE TEST/MWD FAILURE. PUMP SLUG & POOH. CHANGED OUT MWD & RIH. BIT DEPTH @ 06:00 1872m. PULSE TEST ON TRIP IN. BIT # 3 IN POOR CONDITION 5-5-0 3mm. INSERTS & GAUGE BUTTONS MISSING. WILL REAM 5 SINGLES TO BOTTOM.

December 26, 1998
4:29 am

Onscreen for Windows
Survey Calculation Program
UNITED GEOCOM DRILLING SERVICES

Page 1 of 1

Customer: PARAMOUNT RESOURCES LIMITED
WellName: PARAMOUNT ETAL BOVIE LAKE C76
Location: UNIT C SEC 76 GRID AREA 60°20' , 122°45'

Vertical Section Calculated on: 225.0000
Survey Calculation Method: Minimum Curvature
FileName: C:\WELLS\PARAMO-1\8689RE\8689-P3.SR3

#	Depth Meters	Inc Degree	Azimuth Degree	TVD Meters	North Meters	East Meters	Section Meters	Dogleg /30m
49	2967.32	40.67	224.90	2953.64	-55.31	-107.57	115.17	6.70
50	2977.04	43.11	222.42	2960.88	-60.01	-112.04	121.66	9.10
51	2986.95	45.66	221.21	2967.96	-65.17	-116.66	128.58	8.13
52	2996.48	48.64	221.23	2974.44	-70.43	-121.27	135.55	9.38
53	3006.22	51.48	221.28	2980.69	-76.04	-126.19	143.00	8.75
54	3015.93	54.09	222.90	2986.56	-81.78	-131.38	150.72	8.99
55	3025.66	57.45	222.14	2992.03	-87.71	-136.81	158.76	10.54
56	3035.35	60.53	221.45	2997.03	-93.90	-142.34	167.05	9.71
57	3045.04	63.46	218.02	3001.58	-100.48	-147.81	175.57	13.04
58	3054.56	67.49	219.40	3005.53	-107.23	-153.23	184.17	13.30

Closure is 187.0217 Meters on an azimuth of 235.0143

Geological Morning Report**Dec 26, 1998**

Report To: Paul Collens
Report from: Colin Bredin
1-250-774-0521
Satellite Phone: 1-600-700-5443
Satellite Fax: 1-403-543-9147

Well Name: Para et al Bovie C-76A
Surface Location: 60° 20' 122° 45'
Target Location: D-76

Spud Date: Re-entry
Days from Entry: 12

Date: Dec 26, 1998
Time: 06:00 hrs
Hours Drilling: 5.5

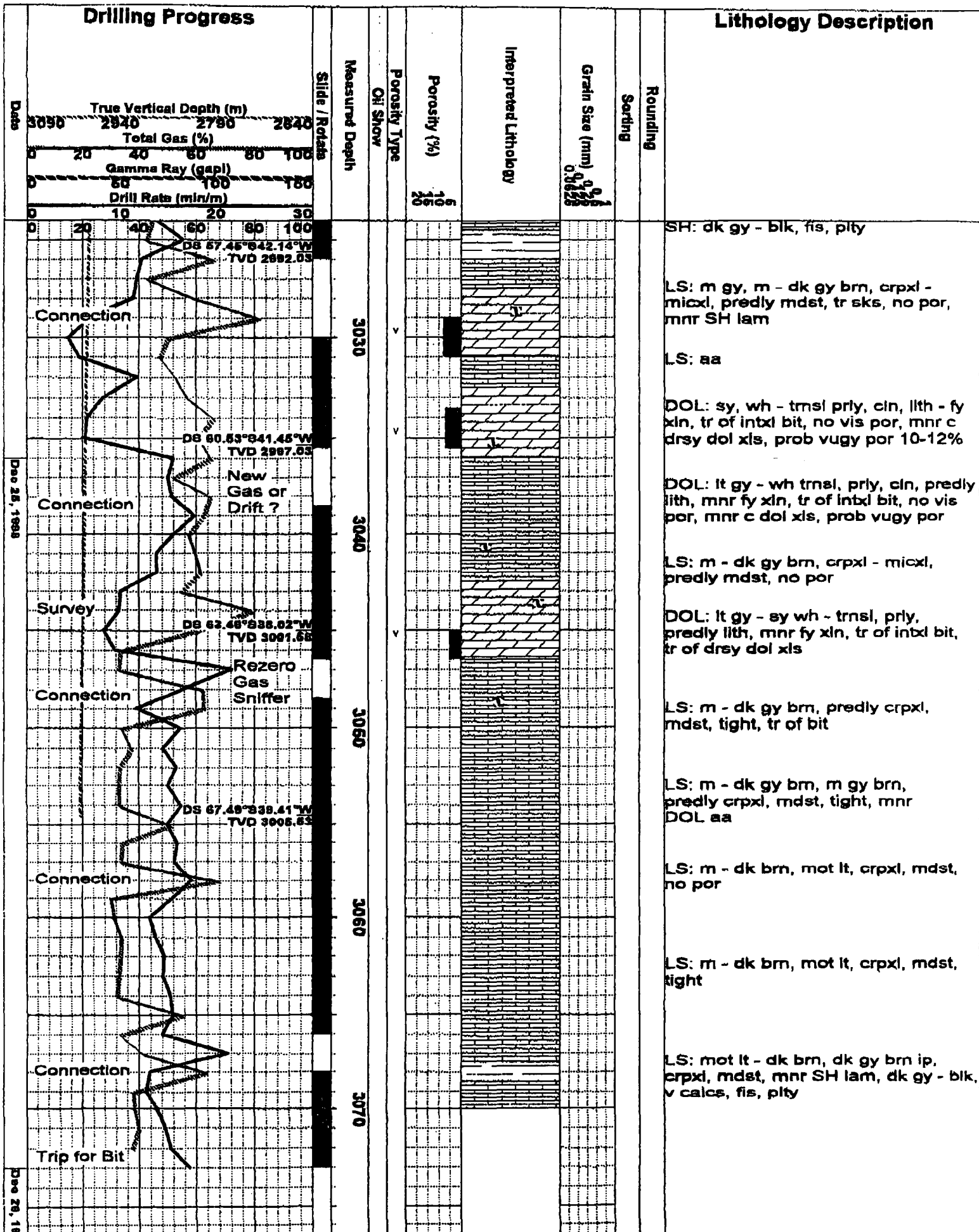
Depth: 3073m
Progress: 21m
Average ROP: 3.8m / hr

Formation: Slave Point

Operational Status: Tripping

Operational Summary: Drill directional hole, Trip for Bit / BHA

Remarks: Drilling predominantly dark Limestone. Had a little vuggy porosity in dolomites between 3028 and 3047m MD. Possible liberated gas. No apparent permeability. Should be at the top of the Watt Mtn by projected TVD but I haven't seen it in samples yet. Slow trip; MWD failed while running in. Hope to be drilling again by mid morning.



December 26, 1998
4:29 am

Onscreen for Windows
Survey Calculation Program
UNITED GEOCOM DRILLING SERVICES

Page 1 of 1

Customer: PARAMOUNT RESOURCES LIMITED
WellName: PARAMOUNT ETAL BOVIE LAKE C76
Location: UNIT C SEC 76 GRID AREA 60°20' , 122°45'

Vertical Section Calculated on: 225.0000
Survey Calculation Method: Minimum Curvature
FileName: C:\WELLS\PARAMO-1\8689RE\8689-P3.SR3

#	Depth Meters	Inc Degree	Azimuth Degree	TVD Meters	North Meters	East Meters	Section Meters	Dogleg /30m
49	2967.32	40.67	224.90	2953.64	-55.31	-107.57	115.17	6.70
50	2977.04	43.11	222.42	2960.88	-60.01	-112.04	121.66	9.10
51	2986.95	45.66	221.21	2967.96	-65.17	-116.66	128.58	8.13
52	2996.48	48.64	221.23	2974.44	-70.43	-121.27	135.55	9.38
53	3006.22	51.48	221.28	2980.69	-76.04	-126.19	143.00	8.75
54	3015.93	54.09	222.90	2986.56	-81.78	-131.38	150.72	8.99
55	3025.66	57.45	222.14	2992.03	-87.71	-136.81	158.76	10.54
56	3035.35	60.53	221.45	2997.03	-93.90	-142.34	167.05	9.71
57	3045.04	63.46	218.02	3001.58	-100.48	-147.81	175.57	13.04
58	3054.56	67.49	219.40	3005.53	-107.23	-153.23	184.17	13.30

Closure is 187.0217 Meters on an azimuth of 235.0143

PARAMOUNT RESOURCES LTD.

DAILY DRILLING REPORT

UNIQUE I.D. 300C766020122450LOCATION: PARA ETAL BOULE C76A
WELL LICENCE WID 1817SUPERVISOR: G. SANDERS
CELLULAR #: 1-600-700-5443
SPUD DATE: 98-12-17
R.R. DATE: _____
CONTRACTOR: PRECISION 507
A.F.E. #: 17198 EST. T.D. 3600mDAILY COST: 44890
CUM. COST: 1091644
DAILY MUD: _____
CUM MUD: _____TEMP -16DAY: 111 REP DATE: 98-12-25 STATUS 05:00 DRILLING AHEAD
DEPTH: 3052 PROG. 74 KB: 6.35 GL: 426.8 MACP: 22000
SURVEYS: AS PER ATTACHMENTMUD TYPE: INVERT WT: 900 VISC: 53 WL: _____ FC: _____ PH: _____
ADDITIVES: LIME 15 SX

BIT	SERIAL #	SIZE	MFG	TYPE	JETS	OUT	RUN	HRS	TBG	WEIGHT	RPM
3	137846	152	VAREL	ET0537G	2-12.1		190m	432	08	6/12	45/90

PUMP	DESCR.	LINER	STK	SPM	RATE	PRESS	AV DC	AV DP	NOZZEL VEL
OILWELL	PT600	114	203	110	66m ³	10000		54	34
OILWELL	PT600	114	203						

DRILLING ASSEMBLY

TOOL	OD	ID	LENGTH
BIT	152		.20
MOTOR	126		5.55
FLOAT SUB	118	57	.40
1 NM DC	118	68	9.29
1 POLAR SUB	132		1.35
1 TOP XO	120	70	.45
2 NM DC	115/103	57	17.05
KELLY 1-JMS		58	4.85
40 HWOP		TOTAL	367.91

CASING SUMMARY

RAN	JTS OF	MM,
LANDED AT	MKB.	TOTAL LENGTH
CEMENTED WITH		
PLUG DOWN AT	HRS. ON	WITH

TIME DISTRIBUTION

MOVE/RIG-UP	RIG REP:
DRILL MH & RH:	LOGGING:
RIG SERVICE:	CEMENT:
SURVEY:	WOC:
PRESSURE TEST:	RUN CSG:
DRILL:	DST:
DRILL OUT:	TRIP:
CIRCULATE:	L.D.D.S.:
NIPPLE UP BOP:	REAM:

TOTAL HOURS: 24
KG/M, _____ CASING.
METERS.

DRILL & SURVEY AHEAD.

Rig SERVICE - FUNCTION TEST TOP PIPE RAN

CHECKED LOCATION 015 - CS9 BOWL AND CS9 HANGER FOR
177mm CS9 ON CS9 BOWL. TOP OF CS9 HANGER 24 INCHES ABOVE
GROUND LEVEL. Sump ON LOCATION NEEDS TO BE FILLED IN TO
ACOMODATE CENTRIFUGAL STAND & SHALE BIN. Sump is Full to within
3m.
MERRY XMAS.

ED RAVEN RS RELIEVING ME @ 6800 HRS 98-12-25

DRILLING REPORT DAY 1

December 25, 1998
5:12 am

Onscreen for Windows
Survey Calculation Program
UNITED GEOCOM DRILLING SERVICES

Page 1 of 1

Customer: PARAMOUNT RESOURCES LIMITED
WellName: PARAMOUNT ETAL BOVIE LAKE C76
Location: UNIT C SEC 76 GRID AREA 60°20', 122°45'

Vertical Section Calculated on: 225.0000
Survey Calculation Method: Minimum Curvature
FileName: C:\WELLS\PARAMO~1\8689RE\8689-P3.SR3

#	Depth Meters	Inc Degree	Azimuth Degree	TVD Meters	North Meters	East Meters	Section Meters	Dogleg /30m
40	2880.58	15.78	236.19	2876.69	-29.69	-79.40	77.14	8.68
41	2890.30	18.66	238.35	2885.97	-31.24	-81.82	79.95	9.10
42	2900.02	18.32	232.90	2895.19	-32.98	-84.36	82.98	5.43
43	2909.74	19.84	232.84	2904.37	-34.90	-86.90	86.12	4.69
44	2919.11	23.34	230.44	2913.09	-37.04	-89.60	89.55	11.55
45	2928.84	26.33	226.04	2921.92	-39.77	-92.64	93.62	10.83
46	2938.53	29.83	225.86	2930.46	-42.94	-95.91	98.18	10.84
47	2948.21	34.52	221.93	2938.66	-46.66	-99.48	103.33	15.91
48	2957.93	39.12	222.70	2946.43	-50.97	-103.40	109.15	14.27
49	2967.32	40.67	224.90	2953.64	-55.31	-107.57	115.17	6.70
50	2977.04	43.11	222.42	2960.88	-60.01	-112.04	121.66	9.10
51	2986.95	45.66	221.21	2967.96	-65.17	-116.66	128.58	8.13
52	2996.48	48.64	221.23	2974.44	-70.43	-121.27	135.55	9.38
53	3006.22	51.48	221.28	2980.69	-76.04	-126.19	143.00	8.75
54	3015.93	54.09	222.90	2986.56	-81.78	-131.38	150.72	8.99
55	3025.66	57.45	222.14	2992.03	-87.71	-136.81	158.76	10.54
56	3035.35	60.53	221.45	2997.03	-93.90	-142.34	167.05	9.71

Closure is 170.5254 Meters on an azimuth of 236.5890

Geological Morning Report**Dec 25, 1998**

Report To: Paul Collens
Report from: Colin Bredin
1-250-774-0521
Satellite Phone: 1-600-700-5443
Satellite Fax: 1-403-543-9147

Well Name: Para et al Bovie C-76A
Surface Location: 60° 20' 122° 45'
Target Location: D-76

Spud Date: Re-entry
Days from Entry: 11

Date: Dec 24, 1998
Time: 06:00 hrs
Hours Drilling: 20

Depth: 3052m
Progress: 77m
Average ROP: 3.8m / hr

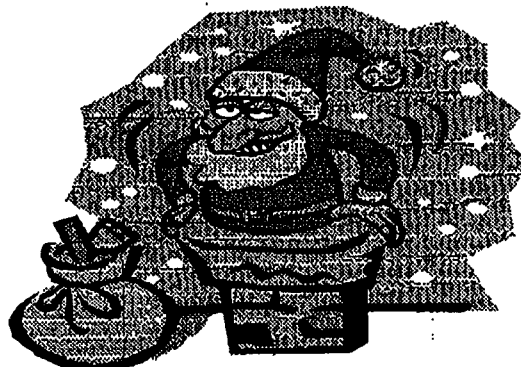
Formation: Slave Point

Operational Status: Drilling

Operational Summary: Drill directional hole.

Remarks: Drilling predominantly dark Limestone, occasional shales. Starting to see a little dolomite / vuggy. No significant shows. Background 30-40%. Still getting connection gas @ 60 minutes. Gas sniffer was drifting, had to re-zero. On track for TVD. Probably have to trip before Sulfur Point.

MERRY CHRISTMAS



December 25, 1998
5:13 am

Onscreen for Windows
Survey Calculation Program
UNITED GEOCOM DRILLING SERVICES

Page 1 of 1

Customer: PARAMOUNT RESOURCES LIMITED
WellName: PARAMOUNT ETAL BOVIE LAKE C76
Location: UNIT C SEC 76 GRID AREA 60°20', 122°45'

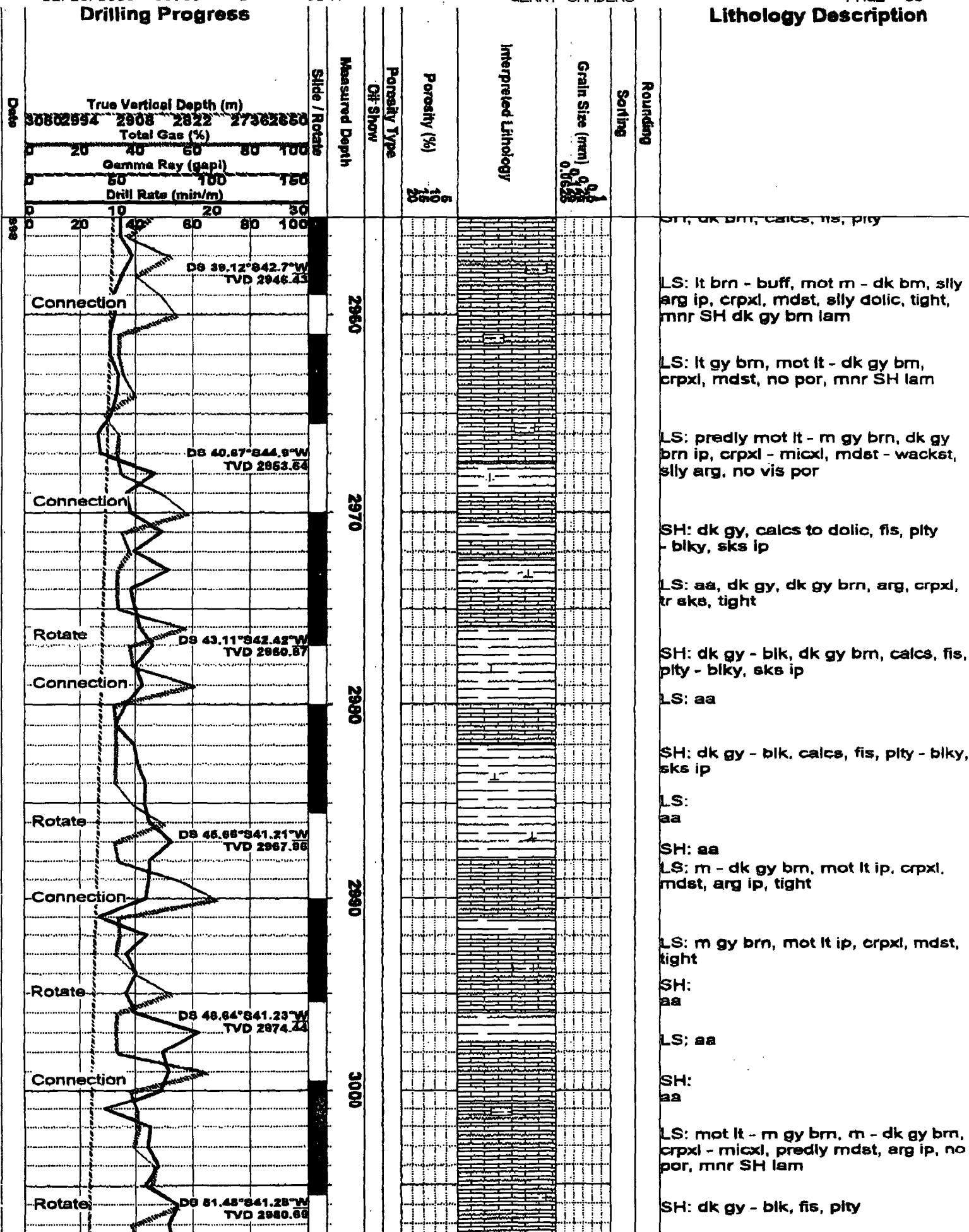
Vertical Section Calculated on: 225.0000
Survey Calculation Method: Minimum Curvature
FileName: C:\WELLS\PARAMO~1\8689RE\8689-P3.SR3

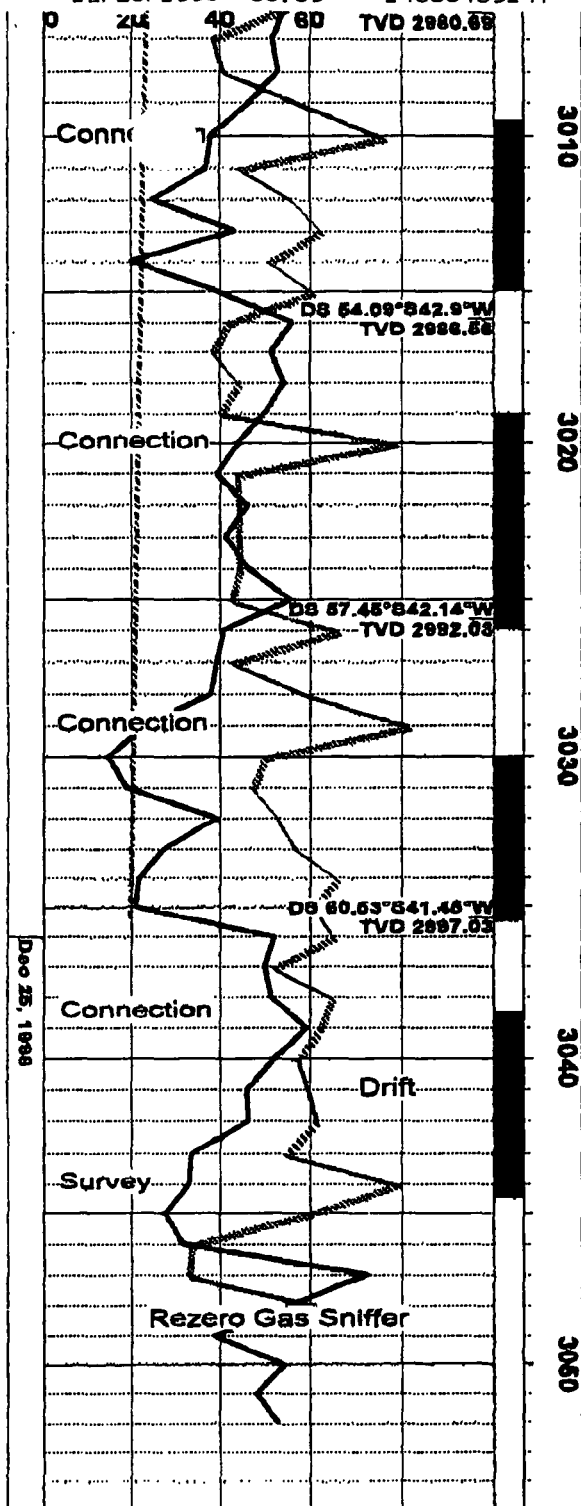
#	Depth Meters	Inc Degree	Azimuth Degree	TVD Meters	North Meters	East Meters	Section Meters	Dogleg /30m
40	2880.58	15.78	236.19	2876.69	-29.69	-79.40	77.14	8.68
41	2890.30	18.66	238.35	2885.97	-31.24	-81.82	79.95	9.10
42	2900.02	18.32	232.90	2895.19	-32.98	-84.36	82.98	5.43
43	2909.74	19.84	232.84	2904.37	-34.90	-86.90	86.12	4.69
44	2919.11	23.34	230.44	2913.09	-37.04	-89.60	89.55	11.55
45	2928.84	26.33	226.04	2921.92	-39.77	-92.64	93.62	10.83
46	2938.53	29.83	225.86	2930.46	-42.94	-95.91	98.18	10.84
47	2948.21	34.52	221.93	2938.66	-46.66	-99.48	103.33	15.91
48	2957.93	39.12	222.70	2946.43	-50.97	-103.40	109.15	14.27
49	2967.32	40.67	224.90	2953.64	-55.31	-107.57	115.17	6.70
50	2977.04	43.11	222.42	2960.88	-60.01	-112.04	121.66	9.10
51	2986.95	45.66	221.21	2967.96	-65.17	-116.66	128.58	8.13
52	2996.48	48.64	221.23	2974.44	-70.43	-121.27	135.55	9.38
53	3006.22	51.48	221.28	2980.69	-76.04	-126.19	143.00	8.75
54	3015.93	54.09	222.90	2986.56	-81.78	-131.38	150.72	8.99
55	3025.66	57.45	222.14	2992.03	-87.71	-136.81	158.76	10.54
56	3035.35	60.53	221.45	2997.03	-93.90	-142.34	167.05	9.71

Closure is 170.5254 Meters on an azimuth of 236.5890

Drilling Progress

Lithology Description





SH: dk gy - blk, fis, pily

LS: m - dk gy, mnrlt - m gy,
crpxl, mdst, arg ip, no porLS: m - dk gy brn, mot lt - m gy brn
ip, crpxl - micxl, predly mdst, no vis
por, tr sks

SH: dk gy - blk, fis, pily

LS: m - dk gy brn, crpxl - micxl,
predly mdst, mnrl wackst, sks ip, no
por.

SH: dk gy - blk, fis, pily

LS: m gy, m - dk gy brn, crpxl -
micxl, predly mdst, tr sks, no por,
mnrl SH lam

LS: aa

DOL: sy, wh - trmsl prly, cln, lith - fy
xln, tr of intxl bit, no vis por, mnrl c
drsy dol xls, prob vugy por 10-12%DOL: lt gy - wh trmsl, prly, cln, predly
lith, mnrl fy xln, tr of intxl bit, no vis
por, mnrl c dol xls, prob vugy por

D 24, 1998
5:03 am

Onscreen for Windows
Survey Calculation Program
UNITED GEOCOM DRILLING SERVICES

Page 1 of 1

Customer: PARAMOUNT RESOURCES LIMITED
WellName: PARAMOUNT ETAL BOVIE LAKE C76
Location: UNIT C SEC 76 GRID AREA 60°20' , 122°45'

Vertical Section Calculated on: 225.0000
Survey Calculation Method: Minimum Curvature
FileName: C:\WELLS\PARAMO-1\8689RE\8689-P3.SR3

#	Depth Meters	Inc Degree	Azimuth Degree	TVD Meters	North Meters	East Meters	Section Meters	Dogleg /30m
30	2784.25	8.87	222.36	2782.53	-16.84	-64.12	57.25	0.51
31	2793.96	10.93	221.67	2792.09	-18.08	-65.24	58.91	6.38
32	2803.16	11.89	221.24	2801.11	-19.44	-66.44	60.73	3.14
33	2813.41	12.05	216.55	2811.14	-21.10	-67.78	62.84	2.88
34	2823.16	12.08	220.92	2820.67	-22.69	-69.05	64.87	2.81
35	2832.29	11.88	224.57	2829.61	-24.08	-70.34	66.76	2.57
36	2842.22	11.77	235.00	2839.33	-25.39	-71.88	68.78	6.46
37	2851.45	12.24	239.45	2848.35	-26.42	-73.50	70.65	3.37
38	2861.14	12.90	244.09	2857.81	-27.42	-75.35	72.67	3.73
39	2870.87	13.32	241.60	2867.29	-28.43	-77.32	74.77	2.17
40	2880.58	15.78	236.19	2876.69	-29.69	-79.40	77.14	8.68
41	2890.30	18.66	238.35	2885.97	-31.24	-81.82	79.95	9.10
42	2900.02	18.32	232.90	2895.19	-32.98	-84.36	82.98	5.43
43	2909.74	19.84	232.84	2904.37	-34.90	-86.90	86.12	4.69
44	2919.11	23.34	230.44	2913.09	-37.04	-89.60	89.55	11.55
45	2928.84	26.33	226.04	2921.92	-39.77	-92.64	93.62	10.83
46	2938.53	29.83	225.86	2930.46	-42.94	-95.91	98.18	10.84
47	2948.21	34.52	221.93	2938.66	-46.66	-99.48	103.33	15.91
48	2957.93	39.12	222.70	2946.43	-50.97	-103.40	109.15	14.27

Closeup is 115.2763 Meters on an azimuth of 243.7613

PARAMOUNT RESOURCES LTD.

DAILY DRILLING REPORT

UNIQUE I.D. 300 C 766 020122 YSDLOCATION: PAR ETAL 88VIE C76A
WELL LICENCE W10 1817SUPERVISOR: G. SANDERS
CELLULAR #: 1-600 700 5443
SPUD DATE: 98-12-14
R.R. DATE: _____
CONTRACTOR: PRECISION 567
A.F.E. #: 17158 EST. T.D. 3600DAILY COST: 42,642
CUM. COST: 1046,754
DAILY MUD: 1173
CUM MUD: _____

Temp. _____

DAY: 10 REP DATE: 98-12-14 STATUS 08:00 DRILLING
DEPTH: 2978 PROG. 98 KB: 6.35 GL: 426.8 MACP: 2200m
SURVEYS: AS PER ATTACHEDMUD TYPE: INVERT WT: 900 VISC: 51 WL: _____ FC: _____ PH: _____
ADDITIVES: 10 m³ DASH OIL

BIT	SERIAL #	SIZE	MFG	TYPE	JETS	OUT	RUN	HRS	TBG	WEIGHT	RPM
3	137846	152	VAREL	ETD 5376	2-11.7		116m	23.25	68	6-12	80/44

PUMP	DESCR.	LINER	STK	SPM	RATE	PRESS	AV DC	AV DP	NOZZEL VEL
OIL WELL	PT600	114	203	110	.66	10200		34	34
OIL WELL	PT600	114	203						

DRILLING ASSEMBLY

TOOL	OD	ID	LENGTH
BIT	152		.20
MOTOR	126		5.55
FLOAT SUB	118	57	.40
1 NM DC	118	68	9.29
1 PULSAR SUB	132		1.35
1 T&P X0	120	76	.45
2 NM DC	118	57	12.65
1 TARS	124	58	4.85
40 H ₂ O P			
		TOTAL	367.91

CASING SUMMARY

RAN _____ JTS OF _____ MM,
LANDED AT _____ MKB. TOTAL LENGTH _____
CEMENTED WITH _____
PLUG DOWN AT _____ HRS. ON _____ WITH _____ M3 CEMENT RETURNS.

TIME DISTRIBUTION

MOVE/RIG-UP _____ RIG REP: _____
DRILL MH & RH: _____ LOGGING: _____
RIG SERVICE: .50 CEMENT: _____
SURVEY: 3.25 WOC: _____
PRESSURE TEST: _____ RUN CSG: _____
DRILL: 20.25 DST: _____
DRILL OUT: _____ TRIP: _____
CIRCULATE: _____ L.D.D.S.: _____
NIPPLE UP BOP: _____ REAM: _____TOTAL HOURS: 24KG/M, _____ CASING.
METERS, _____

DRILL & SURVEY AHEAD.

STILL HAVING TROUBLE MAINTAINING ANGLE & DIRECTION -

DRILLING REPORT DAY 1

PARAMOUNT RESOURCES LTD.

DAILY DRILLING REPORT

UNIQUE I.D. 300 C 766010122450

LOCATION: PARA ETAL BOWE C76A
WELL LICENCE W10 1817SUPERVISOR: G. SANDERS
CELLULAR #: 1-600 700 5442
SPUD DATE: 98-12-14
R.R. DATE:
CONTRACTOR: PRECISION 507
A.F.E. #: 17198 EST. T.D. 3600DAILY COST: 54746
CUM. COST: 1 004 112
DAILY MUD:
CUM MUD:
TEMP - 19DAY: 9 REP DATE: 98-12-22 STATUS 06:00 DRILLING
DEPTH: 2580 PROG. 40m KB: 6.35 GL: 4268 MACP: 21.000
SURVEYS:MUD TYPE: INVERT WT: 900 VISC: 55 WL: FC: PH:
ADDITIVES: 30 34 34 34 2 Calcium CHLORIDE.

BIT	SERIAL #	SIZE	MFG	TYPE	JETS	OUT	RUN	HRS	TBG	WEIGHT	RPM
2RR	208327	152	REED	EMP 53	5-1/2	2862	206m	52.74	141	6.12	80746
3	137846	152	REED	STD 537C	5-1/2		18m	3	08	6.12	80746

PUMP	DESCR.	LINER	STK	SPM	RATE	PRESS	AV DC	AV DP	NOZZEL VEL
OIL WELL	PT 600	114	203	110	.66	10200		54	34
OIL WELL	PT 600	114	203						

DRILLING ASSEMBLY

TOOL	OD	ID	LENGTH
BIT	152		.20
MOTOR	126		5.55
Flow Sub	118	57	5.40
1 NM DC	118	68	9.29
1- Pulsar Sub	132		1.55
1 TOP X0	120	70	.45
2 NM DC	118	57	17.05
1 5ARS	124	58	4.58
40 Hrs OP	89	TOTAL	767.91

CASING SUMMARY

RAN	JTS OF	MM,
LANDED AT	MKB.	TOTAL LENGTH
CEMENTED WITH		
PLUG DOWN AT	HRS. ON	WITH

TIME DISTRIBUTION

MOVERIG-UP	RIG REP:
DRILL MH & RH:	LOGGING:
RIG SERVICE:	.50
SURVEY:	2.0
PRESSURE TEST:	1.75
DRILL:	4.75
DRILL OUT:	
CIRCULATE:	1.0
NIPPLE UP BOP:	
1st Tools	3.75
3rd P. Drain	.25
TOTAL HOURS:	24
KG/M,	CASING.
METERS.	

DRILL AHEAD TO 2862m - P.O. CH. LAYED DOWN BHA.
 RAN IN HWOP INSTALLED CSG PACKER AND PRESSURE TESTED PIPE RAMS
 TOP & BOTTOM TO 1400kPa & 3500kPa 10 min OK. PRESSURE TESTER ANNOUNCED
 1400kPa & 1750kPa 10 min OK. P.O. CH LAYED DOWN PACKER.
 Picked up New motor. Set angle = 1.83° RAN IN w/ motor. Filled pipe
 = TEST MUD = 550m, 730m INVERT, 2000m 2560m WASHED 9m TO 27m & BACK.
 Direction -
 DRILL AHEAD.

DRILLING REPORT DAY 1

Geological Morning Report**Dec 23, 1998**

Report To: Paul Collens
Report from: Colin Bredin
1-250-774-0321
Satellite Phone: 1-600-700-5443
Satellite Fax: 1-403-543-9147

Well Name: Para et al Bovie C-76A
Surface Location: 60° 20' 122° 45'
Target Location: D-76

Spud Date: Re-entry
Days from Entry: 9

Date: Dec 23, 1998
Time: 06:00 hrs
Hours Drilling: 5.5

Depth: 2878m
Progress: 38m
Average ROP: 6.9m / hr

Formation: Fort Simpson

Operational Status: Drilling

Operational Summary: Drill directional hole, Tip for motor angle, Drill directional hole.

Remarks: Drilling Shale, no shows. Still getting connection gas.
Couldn't hold direction or build so tripped for motor angle
1.83

December 23, 1998
5:12 am

Onscreen for Windows
Survey Calculation Program
UNITED GEOCOM DRILLING SERVICES

Page 1 of 1

Customer: PARAMOUNT RESOURCES LIMITED
WellName: PARAMOUNT ETAL BOVIE LAKE C76
Location: UNIT C SEC 76 GRID AREA 60°20', 122°45'

Vertical Section Calculated on: 225.0000

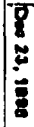
Survey Calculation Method: Minimum Curvature

FileName: C:\WELLS\PARAMO-1\8689RE\8689-P3.SR3

#	Depth Meters	Ino Degree	Azimuth Degree	TVD Meters	North Meters	East Meters	Section Meters	Dogleg /30m
28	2765.14	7.95	230.44	2763.63	-14.81	-62.13	54.41	2.45
29	2774.90	8.72	222.72	2773.29	-15.78	-63.16	55.82	4.17
30	2784.25	8.87	222.36	2782.53	-16.84	-64.12	57.25	0.51
31	2793.96	10.93	221.67	2792.09	-18.08	-65.24	58.91	6.38
32	2803.16	11.89	221.24	2801.11	-19.44	-66.44	60.73	3.14
33	2813.41	12.05	216.55	2811.14	-21.10	-67.78	62.84	2.88
34	2823.16	12.08	220.92	2820.67	-22.69	-69.05	64.87	2.81
35	2842.22	11.77	235.00	2839.33	-25.31	-71.95	68.77	4.59
36	2851.45	12.24	239.45	2848.35	-26.35	-73.56	70.65	3.37
37	2861.14	12.90	244.09	2857.81	-27.34	-75.42	72.66	3.73

Closure is 80.2240 Meters on an azimuth of 250.0746

Lithology Description





BHA Report

BHA 3 - Build & Hold Section

FILE #: 9889P

COMPANY: Paramount Resources Limited

SURFACE LOCATION: UNIT C SEC 78 GRID AREA 6720

WELL NAME: PARAMOUNT ETAL BOVIE LAKE 078A

SURVEY SERVICE CO.: United GeoCom

CO. REP: GERRY SANDERS

RIG & NO: PRECISION 507

JOB TYPE: RE Directional

SURVEY TYPE: NEGATIVE PULSE MWD

BHA NO.: 3

QTY	COMPONENT	MANFCT.	SERIAL #	MODEL	O.D.	I.D.	F.N.	BOT. CONN.	TOP CONN.	LEN.	C.LEN.
1	Bit	Varel	137848	EDT 537-G	152	0	0		3 1/2" REG Pin	0.20	0.20
1	Drilling Motor	Computalog	475-190	Comm III	128	0	0.56	3 1/2" REG Box	3 1/2" IF Box	5.35	5.55
1	Float Sub	Computalog	718		118	57	0	3 1/2" IF Pin	3 1/2" IF Box	0.40	5.95
1	Flex NMDC	Computalog	475-01K		118	68	0.38	3 1/2" IF Pin	3 1/2" IF Box	9.29	15.24
1	Pulsar Sub	Computalog	P8800-82		132	0	0	3 1/2" IF Pin	4" FH Box	1.35	16.59
1	TOP X/O	Computalog	TX500-59		120	70	0	4" FH Pin	3 1/2" IF Box	0.45	17.04
1	Flex NMDC	Computalog	317		115	67	0.38	3 1/2" IF Pin	3 1/2" IF Box	8.45	25.40
1	Flex NMDC	Computalog	337K		113	57	0.39	3 1/2" IF Pin	3 1/2" IF Box	8.60	34.00
1	JARS	Cougar	DJ6-500-36	DJ6	124	58	0.43	3 1/2" IF Pin	3 1/2" IF Box	4.95	39.04
40	HWDP	Rig			89	0	0	3 1/2" IF Pin	3 1/2" IF Box	397.91	405.95

GENERAL INFORMATION

DATES RUN: n/a TO n/a
 DEPTH IN: 0.00 ANGLE IN: 0.00
 DEPTH OUT: 0.00 ANGLE OUT: 0.00
 METERAGE: 0.00 BUILD: 0.00
 DRILL HRS: 0.00
 AVG R.O.P.: 0.00

PUMP INFORMATION

PUMPS	PUMP 1	PUMP 2	PUMP 3
S.P.M.:	0	0	0
STROKE VOL(m3/stk):	0.0000	0.0000	0.0000
TOTAL FLOW (m3/min):	0.00		
PUMP PRESSURE:	OFF BTM: 0	ON BTM: 0	

MOTOR INFORMATION

MANFCT: Computalog MOTOR HRS: 0.00
 SERIAL #: 475-190
 MODEL: Comm III
 LOBE CFG: 7/8
 SETTING: 1.83"
 KICK PAD: No

MUD INFORMATION

MUD TYPE: n/a
 DENSITY: 0 VISCOSITY: 0 LIQUID TYPE:
 SAND: 0.000 WTR LOSS: 0 LIQUID RATE: 0
 SOLIDS: 0.000 PLAST VISC: 0 GAS TYPE:
 OIL: 0.000 YIELD PT: 0 GAS RATE: 0
 TEMP: 0 pH: 0

BIT INFORMATION

TYPE: EDT 537-G MANFCT: Varel
 TEETH: BEARINGS: GAUGE: NOZZLES: 9.5, 12.7, 12.7, n/a: 324.2 mm2 TFA

COMMENTS

Dec 23, 1998
5:12 am

Onscreen for Windows
Survey Calculation Program
UNITED GEOCOM DRILLING SERVICES

Page 1 of 1

Customer: PARAMOUNT RESOURCES LIMITED
WellName: PARAMOUNT ETAL BOVIE LAKE C76
Location: UNIT C SEC 76 GRID AREA 60°20' , 122°45'

Vertical Section Calculated on: 225.0000
Survey Calculation Method: Minimum Curvature
FileName: C:\WELLS\PARAMO-1\8689RE\8689-P3.SR3

#	Depth Meters	Inc Degrec	Azimuth Degree	TVD Meters	North Meters	East Meters	Section Meters	Dogleg /30m
28	2765.14	7.95	230.44	2763.63	-14.81	-62.13	54.41	2.45
29	2774.90	8.72	222.72	2773.29	-15.78	-63.16	55.82	4.17
30	2784.25	8.87	222.36	2782.53	-16.84	-64.12	57.25	0.51
31	2793.96	10.93	221.67	2792.09	-18.08	-65.24	58.91	6.38
32	2803.16	11.89	221.24	2801.11	-19.44	-66.44	60.73	3.14
33	2813.41	12.05	216.55	2811.14	-21.10	-67.78	62.84	2.88
34	2823.16	12.08	220.92	2820.67	-22.69	-69.05	64.87	2.81
35	2842.22	11.77	235.00	2839.33	-25.31	-71.95	68.77	4.59
36	2851.45	12.24	239.45	2848.35	-26.35	-73.56	70.65	3.37
37	2861.14	12.90	244.09	2857.81	-27.34	-75.42	72.66	3.73

Closure is 80.2240 Meters on an azimuth of 250.0746

BAKER Hughes INTELLIGENCE										DATE 12/23/98		CHECK NUMBER 6	
FIELD SERVICE REPORT "OIL MUD"										SPUD DATE 12/15/98		DAYS FROM SPUD 8	
Job #: 28400										PRESENT ACTIVITY HOLE SECTION		directional drill Production	
OPERATOR PARAMOUNT RESOURCES					CONTRACTOR PRECISION DRILLING					RIG NO. 507			
REPORT FOR MR. GERRY SANDERS					REPORT FOR MR. PETER HUSTON								
WELL NAME AND LOCATION PARAMOUNT BOVIE LAKE - 60 - 20 - 122 - 45 W M PROVINCE NWT													
BIT RECORD		DRILLING ASSEMBLY		HOLE or CASING		CASING PROGRAM		ANNULAR VELOCITY		PUMP PERFORMANCE			
BIT NO.	3	PIPE	70.0 88.0 2485	157.1	2000	Cond		48.3	TR	2059	PUMPS 1+2		
SIZE mm	132	PIPE						43.4	LA	2833	MODEL		
TYPE	ETD937G	HWY	88.0 88.0 388			Interm	157.1 177.8 2885	67.1	TU	2872	MODEL		
N O B I Z L E	1	DC	67.0 121.0 30			Interm					LINEA / STRL mm		
	2	DC				Line					114 / 203 114 / 203		
	3	DC				Line					DISPLACMT PER STR m³		
	4					Line					0.0059 0.0059		
	5					Line					STROKES PER MIN.		
	6					Line					110		
	7					Line					DISPLACMT PER MIN.		
	8					Line					0.849		
	9					Line					PRESSURE MPa		
	10					Line					8419		
DEPTH IN M	2862												
MWD ON BIT	6.00												
DRILL RT. MM	8.2												
API	MM												
POHCS ON BIT	6.3												
NOZZLE VCL	33.67												
BIT PRESS LOSS MPa	565.21												
PLP, MPa	0.03												
SPRNG @ BIT	5.70												
TIME 24 HR	4.00												
MEASURED DEPTH	2872												
FLOWLINE TEMP °C	28												
DENSITY kg/m³	900												
MUD SYSTEM	CC												
GRADIENT MPa/m	8.829												
HYDROSTATIC MPa @ DEPTH	25216												
E.C.D. MPa	0.15												
ANN PRESS LOSS MPa	415												
RUBBER VCL	55												
PLASTIC VCL	7.00												
YIELD POINT Pa													
QAL STRENGTH Pa 16000 psi	0.9												
N	0.423												
K Pa	0.28												
SAND @	0.009												
BRIDG ANALYSIS													
OIL %	89.0%												
WATER %	4.0%												
SOLIDS %	7.0%												
BRINE %	4.4%												
SOLIDS %	8.0%												
OIL/WATER RATIO	95.3												
E.S. VOLTS	1300												
MATERIALS ADDED SINCE LAST CHECK													
Code	Size	Product	Qty	Date									
7202	40.0 kg	Calcium Chloride Flakes	2	12/22/98									
WHIMB: PROTECTIVE CLOTHING REQUIRED WHEN MIXING CHEMICALS. REFER TO MSDS LABELS FOR FURTHER INFORMATION.													
RECOMMENDATIONS:													
IF AND INCREASE IN VOLUME IS REQUIRED PLEASE ADD 5M3 OF BASE OIL FROM TANK #3.													
WHILE DRILLING NEW HOLE PLEASE MONITOR ANY LOSSES. IF SEEPAGE LOSSES ARE ENCOUNTERED PLEASE ADD MICA, CELLOPHANE, CALCIUM CARBONATE, AND WALNUT SHELLS AS REQUIRED.													
FOR TOTAL LOSSES MIX A PILL WITH EQUAL AMOUNTS OF THE ABOVE MIX IT AS THICK AS CAN BE PUMPED AND SPOT ABOVE THE THIEF ZONE. REPEAT AS NECESSARY.													
IF H2S IS ENCOUNTERED MIX 10 SACKS OF LIME AND 5 PAILS OF HSO600. REPEAT AND/OR INCREASE AS NEEDED. (2LITERS/M3 OF HSO600 TREATS 200PPM/M3)													
PLEASE MAINTAIN WEIGHT AS LOW AS POSSIBLE WITH ALL SOLIDS CONTROL EQUIPMENT. PLEASE MONITOR HOURS, UNDERFLOW AND OVER FLOW AND MARK IT IN TOUR BOOK.													
PLEASE MARK ALL ADDITIONS OF INVERT AND/OR BASE OIL IN THE TOUR BOOK.													
"KEEP ALL WATER OUT OF THE MUD."													
P.M. FAX MIKE BOLIKEROFF PHONE (403) 332-8880 MOBILE (403) 618-3422													
P.M. TRUCKER H.L. POWER LTD. WAREHOUSE Port Nelson PHONE (804) 776-7883													
PRODUCT COST SINCE LAST CHECK \$113.30													
TOTAL SERVICES SINCE LAST CHECK \$0.00													
TOTAL COST TO DATE \$548.20													
IN CONSIDERATION OF THE FURNISHING OF THIS REPORT AND ORAL SUGGESTIONS, IT IS AGREED THAT NO RECOMMENDATIONS MADE HEREON SHALL BE CONSTRUED AS AUTHORIZING THE REFINEMENT OF ANY VALID PATENT, AND IT IS AGREED THAT BAKER HUGHES INTELLIGENCE SHALL NOT BE LIABLE FOR ANY DAMAGES RESULTING FROM THE FURNISHING OF THIS REPORT AND ORAL SUGGESTIONS AND IS TO BE HELD HARMLESS.													
NOTE: Wp = WATER PHASE, MUD = WHOLE MUD, LA = LAMINAR FLOW, TR = TRANSITIONAL FLOW, TU = TURBULENT FLOW													

PARAMOUNT RESOURCES LTD.

DAILY DRILLING REPORT

UNIQUE I.D. 300C76602012242LOCATION: PARA EST. BOVIE C764
WELL LICENCE WID 1517SUPERVISOR: G. SANDERS
CELLULAR #: 1-600-700-5443
SPUD DATE: 98-12-14
R.R. DATE: _____
CONTRACTOR: PRECISION 507
A.F.E. #: 17198 EST. T.D. 3600DAILY COST: 147563
CUM. COST: 910162
DAILY MUD: _____
CUM MUD: _____

TEMP -13

DAY: 7 REP DATE: 98-12-21 STATUS: DRILLING
DEPTH: 2716 PROG. 37 KB: 6.5 GL: 426.8 MACP: 12000
SURVEYS: _____MUD TYPE: INVERT WT: 900 VISC: 58 WL: _____ FC: _____ PH: _____
ADDITIVES: _____

BIT	SERIAL #	SIZE	MFG	TYPE	SETS	OUT	RUN	HRS	TBG	WEIGHT	RPM
2	DQ8321	152	RECO	ENP53	25	20	30	29	121	3-7	80
2RA	DQ8321	152	RECO	ENP53	25	20	30	32.75		6-9	80

PUMP	DESCR.	LINER	STK	SPR	RATE	PRESS	AV DC	AV DP	NOZZEL VEL
OILWELL	600PT	152	203	200	6.5	2000		54	35m/s
OILWELL	600PT	152	203						

DRILLING ASSEMBLY

TOOL	OD	ID	LENGTH
BIT	152		20
MOTOR	122		5.47
FLOAT SUB	118		1.40
1-NM DC	118		1.27
PULSAR SUB	132		2.35
1 CB X6			1.47
1 UB HO Sub	119		1.87
2 NM DC	115		17.05
1 FAR	125		4.58
1 TO-HWOP	120		
TOTAL			34.79

CASING SUMMARY

RAN _____ JTS OF _____
LANDED AT _____ MKB. TOTAL LENGTH _____
CEMENTED WITH _____
PLUG DOWN AT _____

TIME DISTRIBUTION

MOVE/RIG-UP _____ RIG REP: _____
DRILL MH & RH: _____ LOGGING: _____
RIG SERVICE: .50 CEMENT: _____
SURVEY: 4.25 WOC: _____
PRESSURE TEST: _____ RUN CSG: _____
DRILL: 5.25 DST: _____
DRILL OUT: _____ TRIP: 7.75
CIRCULATE: 1.75 L.D.D.S.: _____
SIPPLE UP BOP: _____ REAM: _____
WEL TOOLS 3.75 J.P.C. .50
3.0 PM .25TOTAL HOURS: 24M/GM. _____ CASING. _____
METERS. _____

M3 CEMENT RETURNS.

RAN IN W/ Gyro. Surveyed - West Gyro Lay Down Same & RELEASED.
DRILL AHEAD 9m. Pull out of hole. 2535m 1540m 400m
RIG SERVICE & FUNCTION ANNOUNCE - BY 5m
BREAK DOWN TOOLS & MAKE UP NEW TOOLS.
R.H. TO 235m - SHALLOW TEST AND 5m
SLIP & CUT DRILLING LINE. R.H. FILL LINE EVERY 20 STOS.
BREAK CIRC & WASH 9m TO B.M. SURVEY & ORIENT TOOL.
RIG SERVICE FUNCTION TOP APP 2m 0m
DRILL & SURVEY AHEAD - CHANGED MUD. 11.5. 1k.
HOLD WEEKLY ACCUMULATOR FUNCTION. START PRESS 2000 PSI 12000 PSI
DRILLING REPORT DAY 1

December 21, 1998
5:47 amOssage for Windows
Survey Calculation Program
UNITED GEODIN DRILLING SERVICES

Page 1 of 1

Customer: PARAMOUNT RESOURCES LIMITED
WellName: PARAMOUNT ETAL BOVIE LAKE C76
Location: UNIT C SEC 76 GRID AREA 60°20', 122°45'Vertical Section Calculated on: 225.0000
Survey Calculation Method: Minimum Curvature
FileName: C:\WELLS\PARAMO-1\8689RE\8689-P3.SR3

#	Depth Meters	Inc Degree	Azimuth Degree	TVD Meters	North Meters	East Meters	Section Meters	Dogleg /30m
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	122.20	1.42	268.68	22.19	-0.03	-1.51	1.10	0.35
2	275.00	2.70	262.72	74.89	-0.53	-6.98	5.31	0.25
3	427.80	1.25	251.99	127.59	-1.51	-12.13	9.64	0.29
4	580.60	0.99	245.65	180.36	-2.57	-14.92	12.36	0.06
5	733.40	1.86	249.43	233.81	-3.98	-18.44	15.86	0.17
6	886.20	1.59	238.28	285.84	-5.97	-22.57	20.18	0.08
7	1039.00	2.06	237.76	338.57	-8.55	-26.69	24.92	0.09
8	1191.80	2.64	222.55	391.24	12.60	-31.40	31.11	0.17
9	1344.60	1.40	222.93	443.94	16.56	-35.05	36.50	0.24
10	1497.30	1.66	277.23	496.59	17.65	-38.51	39.71	0.28
11	1650.10	1.75	308.13	549.33	15.93	-42.54	41.35	0.18
12	1802.90	1.31	40.65	602.09	13.17	-43.24	39.89	0.44
13	1955.70	0.98	46.47	654.86	10.94	-41.16	36.84	0.07
14	2108.50	0.86	244.96	707.66	10.53	-41.25	36.61	0.36
15	2261.30	1.99	269.26	760.41	11.05	-44.94	39.59	0.25
16	2414.10	1.43	300.25	813.14	10.12	-49.24	41.97	0.21
17	2566.90	1.67	286.32	865.89	-8.53	-53.02	43.53	0.09
18	2635.00	1.93	276.19	913.95	-8.13	-55.12	44.72	0.18
19	2677.81	3.05	216.13	966.73	-8.97	-56.50	46.30	1.87
20	2687.56	2.96	213.38	986.46	-9.39	-56.80	46.80	0.52
21	2697.30	3.52	211.74	996.19	-9.86	-57.09	47.34	1.75

Closure is 57.9366 Meters on an azimuth of 260.2046



Drilling Services
Computalog Ltd. © Geoservice P.A. Ltd. 2017 Wayne

BHA Report

BHA 2 Build Section

FILE #: 9688P

COMPANY: Paramount Resources Limited

SURFACE LOCATION: UNIT C SEC 78 GRID AREA 60°20'

WELL NAME: PARAMOUNT ETAL BOVIE LAKE C78A

SURVEY SERVICE CO.: United GeoCom

CO. REP: GERRY SANDERS

RIG & NO: PRECISION 507

JOB TYPE: RE Directional

SURVEY TYPE: NEGATIVE PULSE MWD

BHA NO.: 2

QTY	COMPONENT	MANFCT.	SERIAL #	MODEL	RO.D	LEN	BOT. CONN.	TOP CONN.	LEN.	C.LEN.
1	BA	Reed	DQ8327	HP53H	152	0		3 1/2" REG Pin	0.20	0.20
1	Drilling Motor	Computalog	475-190	Comm III	126	0	3 1/2" REG Box	3 1/2" IF Box	5.35	5.55
1	Float Sub	Computalog	716		118	0	3 1/2" IF Pin	3 1/2" IF Box	0.40	5.85
1	Flex NMDC	Computalog	475-01K		118	0	3 1/2" IF Pin	3 1/2" IF Box	9.29	15.24
1	Pulser Sub	Computalog	P8800-82		132	0	3 1/2" IF Pin	4" FH Box	1.35	16.59
1	TOP XO	Computalog	TX500-69		120	0	4" FH Pin	3 1/2" IF Box	0.45	17.04
1	Muleshoe	Computalog	84		119	0	3 1/2" IF P;	3 1/2" IF Box	0.37	17.41
1	Flex NMDC	Computalog	317		116	0	3 1/2" IF Pin	3 1/2" IF Box	8.45	25.86
1	Flex NMDC	Computalog	337K		113	0	3 1/2" IF Pin	3 1/2" IF Box	8.60	34.46
1	JARS	Gauger	DJ6-500-36	DJ6	124	0	3 1/2" IF Pin	3 1/2" IF Box	4.95	39.41
40	MWD/P	Rig			89	0	3 1/2" IF Pin	3 1/2" IF Box	367.91	407.32

GENERAL INFORMATION

DATES RUN: n/a TO n/a
 DEPTH IN: 0.00 ANGLE IN: 0.00
 DEPTH OUT: 0.00 ANGLE OUT: 0.00
 METERAGE: 0.00 BUILD: 0.00
 DRILL HRS: 0.00
 AVG R.O.P.: 0.00

PUMP INFORMATION

PUMPS	PUMP 1	PUMP 2	PUMP 3
0	0	0	0
0.0000	0.0000	0.0000	0.0000
0.00			
OFF BTM: 0	ON BTM: 0		

MOTOR INFORMATION

MANFCT. Computalog MOTOR HRS: 0.00
 SERIAL #: 475-190
 MODEL: Comm III
 LOSE CFG: 7/8
 SETTING: 1.50"
 KICK PAD: No

FLUID INFORMATION

FLUID TYPE: 0
 DENSITY: 0 VISCOSITY: 0 LIQUID TYPE:
 TEMPERATURE: 0 FTR LOSS: 0 LIQUID RATE: 0
 PULS: 0 LAST VISC: 0 GAS TYPE:
 FIELD PT: 0 GAS RATE: 0
 H: 0

BIT INFORMATION

TYPE: HP53H MANFCT: Reed
 TEETH: BEARINGS: GAUGE: 9.5, 12.7, 12.7, n/a; 324.2 mm² TFA

COMMENTS

Geological Logging Report

Dec 21, 1998

Report To: Paul Collens

Report from: Colin Bredin

1-250-774-0521

Satellite Phone: 1-600-752-2509

Satellite Fax: 1-403-543-2507

Well Name: Para et al Bovie C-76A

Surface Location: 60° 20' 122° 45'

Target Location: D-76

Date: Re-entry

Days from Entry: 7

Date: Dec 21, 1998

Time: 06:00 hrs

Hours Drilling: 4

Depth: 2714m

Gas: 35m

Avg. ROP: 8.75m / hr

Formation: Fort Simpson

Operational Status: Drilling

Operational Summary: Drill directional hole for MWD, Drill directional hole.

Remarks: Finally, a break was made in business. Drilling Shale. A little trip gas and some gas but nothing significant.

Paramount Resources Ltd.
301C766020122450

Para et al Bovie C-76A
60° 20' 122° 45'

December 21, 1998
5:47 am

One person or more
Survey Calculation Method
UNITED GEOLOGICAL DRILLING SERVICES

Customer: PARAMOUNT RESOURCES LIMITED
WellName: PARAMOUNT ETAL BOVIE LAKE C76
Location: UNIT C SEC 76 GRID AREA 60°20', 122°40'

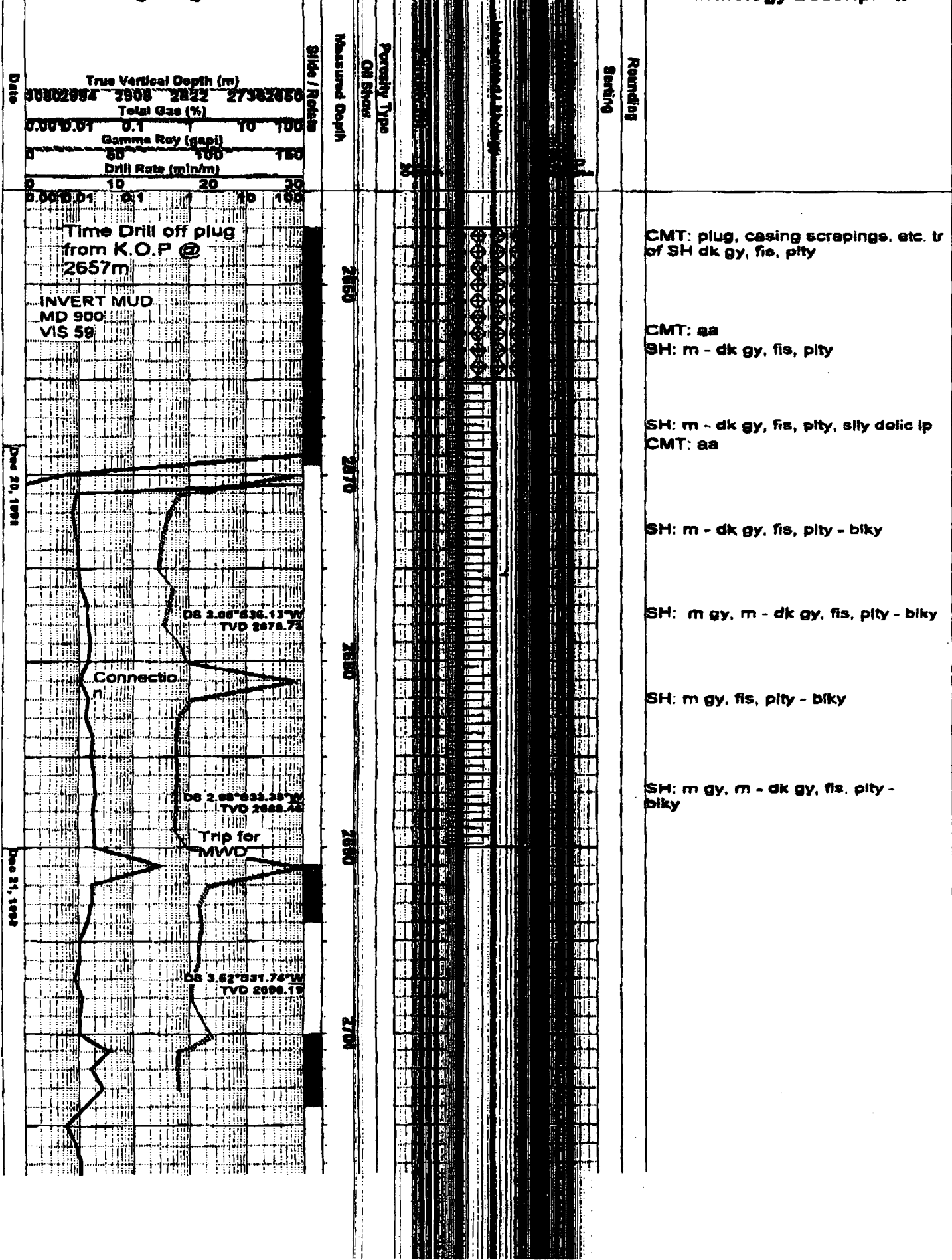
Vertical Section Calculated on: 225.0000
Survey Calculation Method: Minimum Curvature
FileName: CAWELL.SP.AMO-1W689RG8689-P3.SR3

#	Depth Meters	Inc Degree	Azimuth Degree	North Meters	East Meters	Section Meters	Dogleg /30m
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	122.20	1.42	268.68	-0.03	-1.51	1.10	0.33
2	275.00	2.70	262.72	-0.53	-6.98	5.31	0.25
3	427.80	1.25	251.99	-1.51	-12.13	9.64	0.29
4	580.60	0.99	245.65	-2.57	-14.92	12.36	0.06
5	733.40	1.86	249.43	-3.98	-18.44	15.86	0.17
6	886.20	1.59	238.28	-5.97	-22.57	20.18	0.08
7	1039.00	2.06	237.76	-8.55	-26.69	24.92	0.09
8	1191.80	2.64	222.55	-12.60	-31.40	31.11	0.17
9	1344.60	1.40	222.93	-16.56	-35.05	36.50	0.24
10	1497.30	1.66	277.23	-17.65	-38.51	39.71	0.28
11	1650.10	1.75	308.13	-15.93	-42.54	41.35	0.18
12	1802.90	1.31	40.65	-13.17	-43.24	39.89	0.44
13	1955.70	0.98	46.47	-10.94	-41.16	36.84	0.07
14	2108.50	0.86	244.96	-10.53	-41.25	36.61	0.36
15	2261.30	1.99	269.24	-11.05	-44.94	39.59	0.25
16	2414.10	1.43	300.25	-10.12	-49.24	41.97	0.21
17	2566.90	1.67	286.32	-8.53	-53.02	43.53	0.09
18	2635.00	1.93	276.15	-8.13	-55.12	44.72	0.18
19	2677.81	3.05	216.15	-8.97	-56.50	46.30	1.87
20	2687.56	2.96	213.35	-9.39	-56.80	46.80	0.52
21	2697.30	3.52	211.75	-9.86	-57.09	47.34	1.75

Closure is 57.9366 Meters on an azimuth of 268.2046

Drilling Progress

Lithology Description



Sur File: 8689d

Date 12-19-98

Time: 03:44:26

Customer: PARAMOUNT RESOURCES LIMITED

Location: UNIT C SEC 76 GRID 60 DEG 20' 12" 45'

: N.W.T.

: ET AL BOVIE LAKE

Comments: control 5741 TEL 5572 GYRO 5796

: DEC 19-1998

: GYRO SERIAL NO. 5796

Survey Ref Pt : 0.0

Local Grid Off: 0.0

Drift Method : 0

Computation Method: 0

Stat	Minutes	Length	Incl	Bearing
R 0	0.00	0.00	0.57	255.86
S 1	0.00	0.00	0.57	255.86
S 2	11.53	400.00	1.35	262.97
S 3	53.57	2637.00	1.71	253.35
S 4	56.00	2637.00	1.69	249.98
S 5	59.93	2637.00	1.76	254.56
S 6	62.47	2637.00	1.79	254.18
S 7	66.42	2637.00	1.79	253.49
S 8	69.73	2637.00	0.99	350.86
S 9	88.58	1000.00	1.91	224.34

Moving pipe.
up hole.

Approx

PARAMOUNT RESOURCES LTD.

DAILY DRILLING REPORT

UNIQUE I.D. 3000766020122 450

LOCATION: PARAMOUNT BOVIE C76N
WELL LICENCE W1171817SUPERVISOR: G SANGERS
CELLULAR #: 1-600-700-5443
SPUD DATE: 98-12-14
R.R. DATE:
CONTRACTOR: PRECISION 507
A.F.E. #: 17198 EST.T.D. 2200DAILY COST: 39037
DAILY MUD: 762594
DAILY MUD:

Temp - 24°C

DAY: 6 REP DATE: 98-12-20 START TIME: 00:00
DEPTH: 2679 PROG. 18 GL: 426.8 MACP: 22000
SURVEYS:MUD TYPE: INVERT WT: 905
ADDITIVES: WL: FC: PH:

BIT	SERIAL #	SIZE	MFG	TYPE	DATE	RUN	HRS	TBG	WEIGHT	RPM
2	068327	152	REED	ENP33	12/14/98	29	29		3-7	80

PUMP	DESCR.	LINER	STK	DATE	AV DC	AV DP	NOZZEL VEL
Oilwell	800 PT	152	268	12/14/98		54	
Oilwell	600 PT	152					

DRILLING ASSEMBLY

TOOL	OD	ID	LENGTH
BIT	152		
MOTOR	122		
FLOAT SUB	118		
1 INCH DC	118		
PULSER SUB	132		
LCB X6			
1 1/2 INCH SUB	119		
2 INCH DC	118		
1 1/2 INCH SUB	125		
1 1/2 INCH SUB	125		
CASING SUMMARY			

RAN JTS OF MKB. TOTAL LENGTH
LANDED AT MKB. TOTAL LENGTH
CEMENTED WITH
PLUG DOWN AT HRS. ON

MATERIAL DISTRIBUTION

VE/RIG-UP	RIG REP:
ALL MH & RH:	LOGGING:
SERVICE: .50	CEMENT:
SURVEY: 50	WOC:
PRESSURE TEST:	RUN CSG:
ILL: 12.0	DST:
ILL OUT:	TRIP:
REGULATE: .25	L.D.D.S.:
PLE UP BOP:	REAM:
PLE Gyrn 6.25	

TOTAL HOURS: 29
CASING.

M3 CEMENT RETURNS.

TIME DRILL - SURVEY - ORIENTED
CHANGED OUT GYRA TO GEOMAGNETIC TO WORK WELL STANDS
HEAR BETTER
LAYED DOWN CIRC. HEAD. & ROTATED TOO MUCH - NO REPAIRS
PICKED UP KELLY & ROTATED
CIRC. HEAD CLEAN PRIOR TO DRILLING
WILL DRILL ONE MORE SINGLE THEN GO TO CHARGE OUT MWD

DRILLING REPORT DAY 1

JERREEN T. RICHARDS
24-99 ARMY ROAD
CALIFORNIA

WAYNE TOMMS

Company PARAMOUNT RESOURCE INC Supervisor WAYNE TOMMS
LSD PARA ET AL BOVIE C76 A Supervisor G. SANDERS
Contractor PRECISION 507 Date 98-12-20

Supervision Date: <u>98-12-05 through 98-12-19</u>		\$ 8400.00
<u>14</u>	days @ <u>\$600.00</u> per day	
Travel		
Base-Loc <u>1619</u>	km @ <u>\$75</u> per km.	\$ 1214.25
Return	km @ <u>\$75</u> per km.	
Vehicle Minimum <u>12</u>	days @ <u>\$75.00</u> per day	\$ 900.00
Additional Travel	km @ <u>\$75</u> per km.	
Mobile Charges		
<u>14</u>	days @ <u>\$32.00</u> per day	\$ 448.00
Subsistence		
<u>2</u>	days @ <u>\$110.00</u> per day	\$ 220.00
Additional Charges		
Sub Total		\$ 11182.25
EST # R102631638		\$ 787.36
		\$ 11949.61

Invoice 100

Geological Logging Report**Dec 19, 1998****Report To: Paul Collens**
Report from: Colin Bredin

1-250-774-0521

Satellite Phone: 1-600-700-1143

Satellite Fax: 1-403-543-5750

Well Name: Para et al Bovie C-76A**Surface Location: 60° 20' 122° 45'****Target Location: D-76****Date: Re-entry****Time from Entry: 5****Date: Dec 19, 1998****Time: 06:00 hrs****Hours Drilling: 8****Depth: 2661m****Spindle: 3.8m****Rate of Penetration: 0.47m/hr****Formation: At KOF****Operational Status: Oriented****Operational Summary: Run gyro. Oriented. Time drill off plug.****Remarks:** 8 hours of drilling. 8 hours cooling gyro and orienting
pool. New gyro arrived this morning from Gyro Data Inc.
We'll see how much of a salesman B.S.**Paramount Resources Ltd.**
301C766020122450**Para et al Bovie C-76A**
60° 20' 122° 45'

Geological Logging Report**Dec 20, 1998**

Report To: Paul Collens
Report from: Colin Bredin
1-250-774-0521
Satellite Phone: 1-600-774-0521
Satellite Fax: 1-403-542-0521

Well Name: Para et al Bovie C-76A
Surface Location: 60° 20' 122° 45'
Target Location: D-76

Log Date: Re-entry
Days from Entry: 6

Date: Dec 20, 1998
Time: 06:00 hrs
Hours Drilling: 12
Depth: 2679m
Penetration: 18m
Average ROP: 1.5m / hr

Formation: Fort St. James

Operational Status: Drilling

Operational Summary: Run gear. Gears too tight time drill off plug. Drill directional hole.

Remarks: New gear seems to be working okay. Good shale in 2667.5m. Gears okay so rotated out. Good ROP was achieved (1.5m/hr) Should be able to get rid of gyro and start making some hole.

Paramount Resources Ltd.
301C766020122450

Para et al Bovie C-76A
60° 20' 122° 45'

PARAMOUNT RESOURCES LTD.

DAILY DRILLING REPORT

UNIQUE I.D. 300c766020122450LOCATION: PARA ETAL BOULE C76A
WELL LICENCE W101817SUPERVISOR: G SANDERSDAILY COST: 28568CELLULAR #: 1-6007005443CUM. COST: 692275SPUD DATE: 98-12-18

DAILY MUD:

R.R. DATE:

CUM MUD:

CONTRACTOR: PRECISION 567A.F.E. #: 17198 EST. T.D. 3600TEMP-19DAY: 4 REP DATE: 98-12-18 STATUS 06:00 CHANGE OUT GYRO
DEPTH: 2657.8 PROG. .8 KB: 6.35 GL: 426.8 MACP: 23000
SURVEYS:MUD TYPE: INVERT WT: 915K/LM VISC: 55 WL: FC: PH:
ADDITIVES:

BIT	SERIAL #	SIZE	MFG	TYPE	JETS	OUT	RUN	HRS	TBG	WEIGHT	RPM
<u>2"</u>	<u>DQ 8327</u>	<u>152</u>	<u>REBO</u>	<u>EHP53</u>	<u>2-16</u> <u>1-12</u>		<u>.8</u>	<u>4</u>			

PUMP	DESCR.	LINER	STK	SPM	RATE	PRESS	AV DC	AV DP	NOZZEL VEL
<u>OIL WELL</u>	<u>600PT</u>	<u>114</u>	<u>203</u>	<u>105</u>					
<u>OIL WELL</u>	<u>600PT</u>								

DRILLING ASSEMBLY

TOOL	OD	ID	LENGTH
BIT	<u>152</u>		<u>.20</u>
B/S MOTOR	<u>136</u>		<u>5.49</u>
228MM DC	<u>136</u>		<u>.40</u>
XIO 1-NM DC	<u>118</u>		<u>9.29</u>
XIO PULSER SUB	<u>132</u>		<u>1.35</u>
6DC 1-C8 FO			<u>.43</u>
1 UB H6 SUB	<u>119</u>		<u>.37</u>
KELLY 2 1/4" DC	<u>113</u> <u>115</u> <u>124</u>		<u>12.05</u>
1-3/4" 10 H40P	<u>124</u>		<u>.48</u>
	<u>124</u>		<u>.48</u>
		TOTAL	<u>367.91</u> <u>407.34</u>

CASING SUMMARY

RAN _____ JTS OF _____ TOTAL LENGTH _____
 LANDED AT _____ MKB. _____
 CEMENTED WITH _____
 PLUG DOWN AT _____

TIME DISTRIBUTION

MOVE/RIG-UP _____ RIG REP: _____
 DRILL MH & RH: _____ LOGGING: _____
 RIG SERVICE: .25 CEMENT: _____
 SURVEY: 4.26 WOO: 2.75
 PRESSURE TEST: _____ RUN CSG: _____
 DRILL: TIME 4.0 DST: _____
 DRILL OUT: _____ TRIP: _____
 CIRCULATE: 2.25 L.D.D.S.: _____
 NIPPLE UP BOP: _____ REAM: _____
 HOL TOOLS 3.25
 RUN GYRO 7.0

TOTAL HOURS: 24.0KG/M, _____ CASING.
METERS.

HRS. ON _____ WITH _____ M3 CEMENT RETURNS.

TRIP IN - INSTALLED BEARING ASSY, IN RH - CIRC DP CLEAR - RIGGED IN GYRO -
 SURVEY TO TO - HOIST GYRO IN WIRELINE - CIRC HOLE CLEAR - TRAPPED AIR CAUSING
 WELL TO BE CIRC THROUGH DEGASSER - WELL SPELLED INVERT OUT OF STORAGE BOX.
 CIRC UP SURVEY & TEMP W/ MWO. WAIT ON ORDERS & DIRECTIONAL INFO, RIGGED IN
 GYRO & RUN TO BTM - TEMP 110°C GYRO FAILED - PUL GYRO - CHANGED OUT GYRO - RUN IN
 W/ GYRO - ORIENT TOOL FACE - TIME DRILL - CHECK TOOL BACK W/ GYRO - GYRO
 READING EXCESSIVE HEAT 110-215°C - CIRC GYRO UP HOLE TO COOL DOWN NO
 SUCCESS. CHANGING OUT GYRO @ 0600 HRS
 TRANSFERRED 30M³ INHIBITED WATER TO SUMP @ AL TRANSITION RIG.

DRILLING REPORT DAY 4

Geological Morning Report

Dec 18, 1998

Report To: Paul Collens
Report from: Colin Bredin
1-250-774-0521
Satellite Phone: 1-600-700-5443
Satellite Fax: 1-403-543-9147

Well Name: Para et al Bovie C-76A
Surface Location: 60° 20' 122° 45'
Target Location: D-76

Spud Date: Re-entry
Days from Entry: 4

Date: Dec 18, 1998
Time: 06:00 hrs
Hours Drilling: 3

Depth: 2657.2.0m
Progress: 0.8m
Average ROP: 0.26m / hr

Formation: At window

Operational Status: Orient tool / Cool gyro

Operational Summary: Run in with directional assembly, Run gyro, Orient tool and time drill off plug.

Remarks: Gyro problems, Heat problems, Orientation problems, and let's not forget the declination anomaly generated by Santa's sleigh. Not much progress in the last 24 hours. Gyro man is confident in the tools function for the vertical surveys. The trouble arises when they sit to orient; gyro overheats giving spurious readings. Made another adjustment to proposal after our chat to keep it in D-76.

Attn: Paul COLLINS

December 17, 1998
1:09 pm

Onscreen for Windows
Survey Calculation Program
UNITED GEOCOM DRILLING SERVICES

Page 1 of 3

Customer: PARAMOUNT RESOURCES LIMITED
WellName: ET AL BOVIE LAKE C78A
Location: UNIT C SEC 78 GRID 60 DEG 20' 122 DEG 45'
SRG MULTISHOT
SURVEYORS: LEON EARL / ARVIND KAPADIA
Vertical Section Calculated on: 262.0075
Survey Calculation Method: Minimum Curvature
FileName: C:\WELLS\PARA\8689S.TXT

Vertical Well
Survey's.

466-6002

#	Depth Meters	Inc Degree	Azimuth Degree	TVD Meters	North Meters	East Meters	Section Meters	Dogleg /30m
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	30.60	0.63	288.86	30.60	0.05	-0.16	0.15	0.62
2	61.10	0.89	287.18	61.10	0.16	-0.49	0.47	0.06
3	91.70	1.17	277.37	91.69	0.26	-0.98	0.93	0.49
4	122.20	1.42	268.88	122.19	0.29	-1.66	1.61	0.32
5	152.80	1.92	269.92	152.77	0.28	-2.55	2.49	0.49
6	183.30	2.14	269.84	183.25	0.27	-3.83	3.58	0.22
7	213.90	2.37	262.76	213.83	0.19	-4.83	4.76	0.35
8	244.50	2.75	266.04	244.40	0.06	-6.19	6.12	0.40
9	275.00	2.70	262.72	274.86	-0.08	-7.64	7.57	0.16
10	305.60	2.76	263.58	305.43	-0.25	-9.08	9.03	0.07
11	336.10	2.90	262.11	335.89	-0.44	-10.58	10.54	0.16
12	366.70	2.56	263.30	366.46	-0.63	-12.02	12.00	0.34
13	397.30	1.96	262.08	397.03	-0.78	-13.22	13.20	0.59
14	427.80	1.25	251.99	427.52	-0.95	-14.06	14.05	0.75
15	458.40	1.32	245.97	458.11	-1.20	-14.70	14.72	0.15
16	488.90	1.30	247.78	488.61	-1.47	-15.34	15.39	0.04
17	519.40	1.06	241.98	519.10	-1.74	-15.91	16.00	0.27
18	550.00	1.00	241.24	549.69	-2.00	-16.39	16.51	0.06
19	580.60	0.99	245.65	580.29	-2.24	-16.87	17.02	0.08
20	611.20	1.52	241.84	610.86	-2.54	-17.47	17.65	0.52
21	641.70	1.64	240.01	641.37	-2.95	-18.20	18.44	0.13
22	672.20	1.76	248.02	671.86	-3.34	-19.02	19.30	0.26
23	702.80	1.91	243.81	702.44	-3.74	-19.91	20.24	0.20
24	733.40	1.86	249.43	733.03	-4.14	-20.83	21.21	0.19
25	764.00	1.92	244.49	763.61	-4.54	-21.76	22.18	0.17
26	794.50	1.93	248.60	794.09	-4.95	-22.70	23.17	0.14
27	825.10	1.70	239.86	824.68	-5.36	-23.57	24.09	0.35
28	855.60	1.74	239.31	855.16	-5.82	-24.36	24.93	0.04
29	886.20	1.59	238.28	885.75	-6.28	-25.12	25.75	0.15
30	916.65	1.41	238.79	916.19	-6.70	-25.80	26.48	0.18
31	947.30	1.37	234.91	946.83	-7.10	-26.42	27.15	0.10
32	977.80	1.50	233.74	977.32	-7.55	-27.04	27.82	0.13
33	1008.40	1.93	236.90	1007.91	-8.05	-27.80	28.65	0.45
34	1039.00	2.06	237.78	1038.49	-8.61	-28.71	29.62	0.13
35	1069.50	2.34	243.09	1068.97	-9.18	-29.72	30.71	0.34
36	1100.10	2.54	240.30	1099.54	-9.80	-30.87	31.93	0.23
37	1130.60	2.40	243.60	1130.01	-10.42	-32.03	33.16	0.18
38	1161.20	2.47	230.82	1160.58	-11.12	-33.11	34.34	0.54
39	1191.80	2.64	222.55	1191.15	-12.06	-34.10	35.44	0.38

Attn: Paul COLLINS

December 17, 1998
1:09 pmOnscreen for Windows
Survey Calculation Program
UNITED GEOCOM DRILLING SERVICES

Page 2 of 3

Customer: PARAMOUNT RESOURCES LIMITED
 WellName: ET AL BOVIE LAKE C78A
 Location: UNIT C SEC 78 GRID 60 DEG 20' 122 DEG 45'
 SRG MULTISHOT
 SURVEYORS: LEON EARL / ARVIND KAPADIA
 Vertical Section Calculated on: 262.0075
 Survey Calculation Method: Minimum Curvature
 FileName: C:\WELLS\PARA8689S.TXT

#	Depth Meters	Inc Degree	Azimuth Degree	TVD Meters	North Meters	East Meters	Section Meters	Dogleg /30m
40	1222.32	2.80	217.57	1221.64	-13.16	-35.03	36.52	0.28
41	1252.90	2.77	205.14	1252.18	-14.43	-35.80	37.46	0.59
42	1283.40	2.82	203.75	1282.65	-15.73	-36.39	38.22	0.16
43	1314.00	2.09	209.89	1313.22	-16.85	-36.95	38.93	0.57
44	1344.60	1.40	222.93	1343.81	-17.81	-37.48	39.57	0.78
45	1375.10	1.10	240.43	1374.30	-18.03	-37.99	40.13	0.47
46	1405.70	1.00	275.78	1404.90	-18.15	-38.51	40.66	0.63
47	1436.20	1.50	286.05	1435.39	-18.01	-39.16	41.28	0.54
48	1471.00	1.75	279.66	1470.18	-17.79	-40.12	42.20	0.27
49	1497.30	1.68	277.23	1496.46	-17.68	-40.89	42.95	0.13
50	1527.90	1.37	276.82	1527.05	-17.58	-41.70	43.74	0.28
51	1558.50	1.47	282.40	1557.64	-17.45	-42.45	44.46	0.16
52	1589.00	1.93	286.87	1588.13	-17.20	-43.31	45.28	0.49
53	1619.60	1.74	299.16	1618.71	-16.81	-44.21	46.11	0.37
54	1650.10	1.75	308.13	1649.20	-16.30	-44.98	46.81	0.27
55	1680.70	1.78	319.60	1679.79	-15.65	-45.65	47.39	0.35
56	1711.20	1.33	339.25	1710.27	-14.95	-46.09	47.72	0.68
57	1741.80	1.35	0.71	1740.87	-14.26	-46.21	47.74	0.49
58	1772.40	1.19	20.87	1771.46	-13.61	-46.09	47.53	0.46
59	1802.90	1.31	40.65	1801.95	-13.05	-45.75	47.12	0.44
60	1833.50	1.19	43.50	1832.54	-12.55	-45.30	46.61	0.13
61	1864.00	1.28	44.29	1863.04	-12.08	-44.85	46.09	0.08
62	1894.60	1.40	46.02	1893.63	-11.57	-44.34	45.52	0.12
63	1925.20	1.25	52.69	1924.22	-11.11	-43.81	44.93	0.21
64	1955.70	0.98	46.47	1954.72	-10.73	-43.38	44.43	0.29
65	1986.30	0.67	50.30	1985.31	-10.44	-43.03	44.06	0.30
66	2016.80	0.48	60.95	2015.81	-10.26	-42.78	43.79	0.22
67	2047.40	0.29	72.47	2046.41	-10.18	-42.59	43.59	0.20
68	2071.90	0.63	251.11	2070.91	-10.20	-42.66	43.66	1.13
69	2106.50	0.86	244.96	2107.51	-10.38	-43.10	44.13	0.20
70	2139.10	1.60	254.38	2138.10	-10.60	-43.72	44.77	0.74
71	2169.60	2.07	263.14	2168.58	-10.78	-44.68	45.74	0.54
72	2200.20	2.02	265.49	2199.16	-10.88	-45.76	46.83	0.10
73	2230.70	2.16	269.71	2229.64	-10.93	-46.87	47.94	0.21
74	2261.30	1.89	269.26	2260.22	-10.94	-47.98	49.04	0.17
75	2291.90	1.88	276.00	2290.81	-10.88	-49.01	50.05	0.25
76	2322.40	1.69	281.05	2321.29	-10.76	-49.95	50.96	0.24
77	2353.00	1.65	286.64	2351.88	-10.53	-50.81	51.78	0.22
78	2383.50	1.41	298.71	2382.37	-10.22	-51.56	52.48	0.31
79	2414.10	1.43	300.25	2412.96	-9.86	-52.23	53.09	0.09

1471071358 07701 14055453147
Attn. Paul COLLINS

December 17, 1998
1:09 pm

Onscreen for Windows
Survey Calculation Program
UNITED GEOCOM DRILLING SERVICES

Page 3 of 3

Customer: PARAMOUNT RESOURCES LIMITED
WellName: ET AL BOVIE LAKE 076A
Location: UNIT C SEC 78 GRID 80 DEG 20' 122 DEG 45'
SRG MULTISHOT
SURVEYORS: LEON EARL / ARVIND KAPADIA
Vertical Section Calculated on: 262.0075
Survey Calculation Method: Minimum Curvature
FileName: C:\WELLS\PARA\8686S.TXT

#	Depth Meters	Inc Degree	Azimuth Degree	TVD Meters	North Meters	East Meters	Section Meters	Dogleg /30m
80	2444.60	1.08	293.16	2443.45	-9.55	-52.82	53.64	0.37
81	2475.20	1.36	288.13	2474.04	-9.32	-53.44	54.21	0.29
82	2505.00	1.31	289.65	2503.84	-9.10	-54.10	54.84	0.06
83	2536.30	1.50	296.64	2535.13	-8.79	-54.80	55.49	0.24
84	2566.90	1.67	286.32	2565.71	-8.49	-55.59	56.23	0.32
85	2597.40	1.80	280.85	2596.20	-8.27	-56.51	57.11	0.28
86	2627.00	1.68	276.73	2625.78	-8.13	-57.42	57.99	0.25
87	2635.00	1.93	276.19	2633.78	-8.10	-57.67	58.24	0.92

Closure is 58.2381 Meters on an azimuth of 262.0075

51.19 DEGREE'S OUT
ON Hole Direction.

P 2635.00

INC - 1.93

AZI - 276.19

TVD - 2633.95

LAT - 8.11 S

DEP - 55.10 W

Vertical Sec - 44.70

8689P5 PARAMOUNT BOVIE LAKE C76 RE-ENTRY 98/12/17
Plane of Vertical Section 225.00

Section 1 (Const Build/Turn)

MD	Inc	Dir	Tvd	Vsec	Lat	Dep	Values to be applied			
							Build	Turn	Dleg	T Face
2635.0	1.93	276.19	2633.8	46.5	-8.1	-57.7	2.0	-14.0	2.1	13.3
2640.0	2.26	273.86	2638.8	46.6	-8.1	-57.9	2.0	-14.0	2.1	15.5
2670.0	4.26	259.86	2668.7	47.9	-8.2	-59.6	2.0	-14.0	2.3	27.5
2700.0	6.26	245.86	2698.6	50.3	-9.0	-62.2	2.0	-14.0	2.5	37.4
2730.0	8.26	231.86	2728.4	54.0	-11.0	-65.4	2.0	-14.0	2.8	45.2

Section 2 (Const Build/Turn)

MD	Inc	Dir	Tvd	Vsec	Lat	Dep	Values to be applied			
							Build	Turn	Dleg	T Face
2755.4	9.96	220.00	2753.4	58.0	-13.8	-68.3	2.0	0.0	2.0	0.0
2760.0	10.26	220.00	2758.0	58.8	-14.4	-68.8	2.0	0.0	2.0	0.0
2790.0	12.26	220.00	2787.4	64.7	-18.9	-72.6	2.0	0.0	2.0	0.0
2820.0	14.26	220.00	2816.6	71.5	-24.2	-77.0	2.0	0.0	2.0	0.0
2850.0	16.26	220.00	2845.5	79.4	-30.2	-82.1	2.0	0.0	2.0	0.0
2880.0	18.26	220.00	2874.2	88.3	-37.1	-87.8	2.0	0.0	2.0	0.0

Section 3 (Const Dogleg)

MD	Inc	Dir	Tvd	Vsec	Lat	Dep	Values to be applied			
							Build	Turn	Dleg	T Face
2907.3	20.09	220.00	2900.0	97.2	-43.9	-93.6	10.0	0.6	10.0	1.2
2910.0	20.97	220.05	2902.5	98.1	-44.6	-94.2	10.0	0.4	10.0	0.8
2940.0	30.97	220.45	2929.4	111.2	-54.7	-102.6	10.0	0.2	10.0	0.6
2970.0	40.97	220.67	2953.7	128.8	-68.0	-114.1	10.0	0.1	10.0	0.5
3000.0	50.97	220.82	2974.5	150.2	-84.3	-128.1	10.0	0.1	10.0	0.5
3030.0	60.97	220.93	2991.3	175.0	-103.1	-144.4	10.0	0.1	10.0	0.4
3060.0	70.97	221.02	3003.5	202.3	-123.8	-162.3	10.0	0.1	10.0	0.4

Section 4 (Hold Section)

MD	Inc	Dir	Tvd	Vsec	Lat	Dep	Values to be applied			
							Build	Turn	Dleg	T Face
3085.3	79.40	221.08	3009.9	226.7	-142.2	-178.4	0.0	0.0	0.0	0.0
3090.0	79.40	221.08	3010.8	231.3	-145.7	-181.4	0.0	0.0	0.0	0.0
3120.0	79.40	221.08	3016.3	260.7	-167.9	-200.8	0.0	0.0	0.0	0.0
3150.0	79.40	221.08	3021.8	290.1	-190.1	-220.2	0.0	0.0	0.0	0.0
3180.0	79.40	221.08	3027.3	319.6	-212.4	-239.6	0.0	0.0	0.0	0.0
3210.0	79.40	221.08	3032.9	349.0	-234.6	-258.9	0.0	0.0	0.0	0.0
3240.0	79.40	221.08	3038.4	378.4	-256.8	-278.3	0.0	0.0	0.0	0.0
3270.0	79.40	221.08	3043.9	407.8	-279.0	-297.7	0.0	0.0	0.0	0.0
3300.0	79.40	221.08	3049.4	437.2	-301.3	-317.1	0.0	0.0	0.0	0.0
3330.0	79.40	221.08	3054.9	466.7	-323.5	-336.4	0.0	0.0	0.0	0.0
3360.0	79.40	221.08	3060.4	496.1	-345.7	-355.8	0.0	0.0	0.0	0.0
3390.0	79.40	221.08	3066.0	525.5	-368.0	-375.2	0.0	0.0	0.0	0.0
3420.0	79.40	221.08	3071.5	554.9	-390.2	-394.6	0.0	0.0	0.0	0.0

8689P5 PARAMOUNT BOVIE LAKE C76 RE-ENTRY

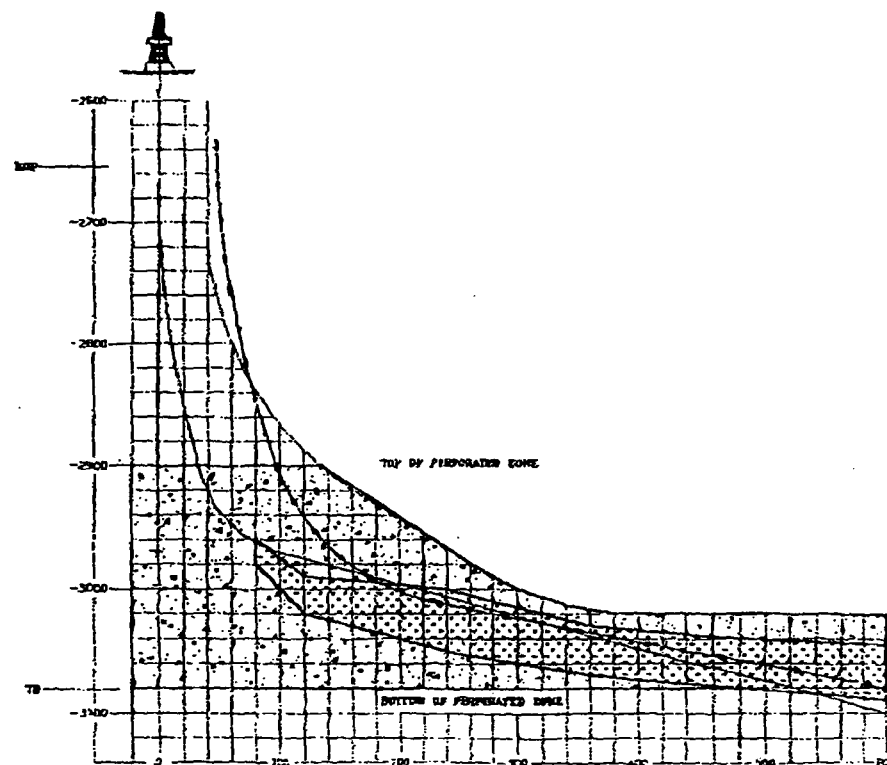
MD	Inc	Dir	Tvd	Vsec	Lat	Dep	Values to be applied			
							Build	Turn	Dleg	T Face
3450.0	79.40	221.08	3077.0	584.3	-412.4	-414.0	0.0	0.0	0.0	0.0
3466.4	79.40	221.08	3080.0	600.4	-424.5	-424.5	0.0	0.0	0.0	0.0

PARAMOUNT ET AL BOVIE LAKE C76A

CLOSURE TO TD: 800.38m @ AZ 225.00°

VERTICAL PROJECTION

SCALE 1 (unit) = 20 m



- P1 PROPOSAL
- - - - - P5 PROPOSAL
-  PERFORATED ZONE
-  TARGET CONE

TOTAL DEPTH:
3466.4 Maximum Depth
3090.00 True Vertical Depth
800.38 Horizontal Offset

12/17/98

19:14

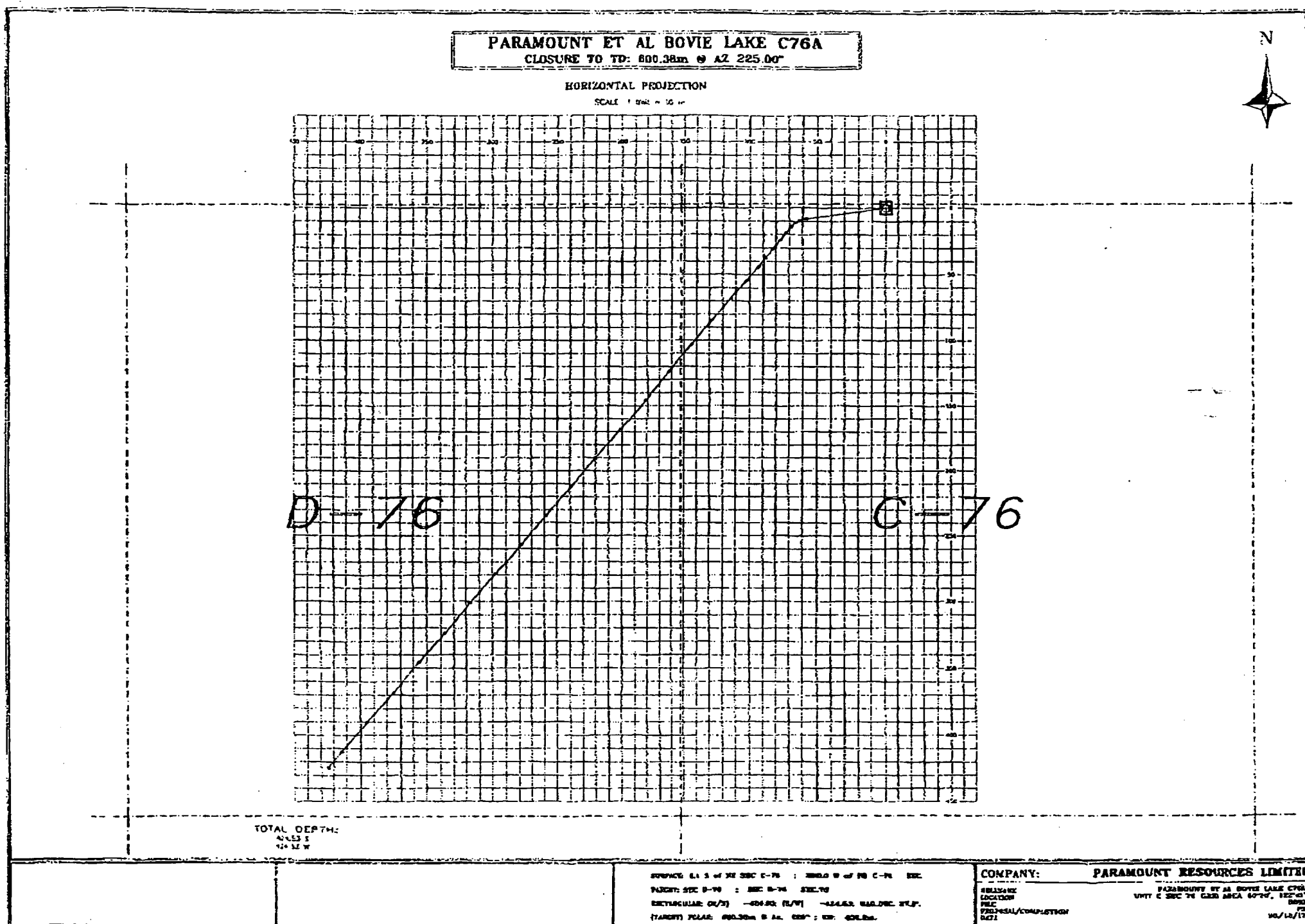
0403 468 8002

UNITED GeoCom

01

COMPANY: PARAMOUNT RESOURCES LIMITED
TAXES: SEC 1-70 : SEC 1-70 : SEC 1-70
REVENUE: (N/A) : (N/A) : (N/A)

COMPANY: PARAMOUNT RESOURCES LIMITED
TAXES: SEC 1-70 : SEC 1-70 : SEC 1-70
REVENUE: (N/A) : (N/A) : (N/A)



PARAMOUNT RESOURCES LTD.

DAILY DRILLING REPORT

UNIQUE I.D. 300C766020122450LOCATION: PARA ETAL BOULE C76A
WELL LICENCE WID 1817SUPERVISOR: G. SANDERSDAILY COST: 42679CELLULAR #: 1-6007005443CUM. COST: 663707SPUD DATE: 98-12-14

DAILY MUD: _____

R.R. DATE: _____

CUM MUD: _____

CONTRACTOR: PRECISION 507A.F.E. #: 17198 EST. T.D. 3600TEMP - 16.DAY: 3 REP DATE: 98-12-17 STATUS 06:00 R.I.H. w/ DIRECTIONAL TOOLS
DEPTH: 2656 PROG. 72 KB: 6.35 GL: 426.8 CF 7.25 MACP: 22000
SURVEYS: _____MUD TYPE: INVERT WT: 915 VISC: 55 WL: _____ FC: _____ PH: _____
ADDITIVES: _____

BIT	SERIAL #	SIZE	MFG	TYPE	JETS	OUT	RUN	HRS	TBG	WEIGHT	RPM
1A	AE69908	152	SMITH	DM	OPEN	2656	137m	11	641	6-8	80
2	DQ8327	152	REGO	EHP53	2-16 1-12						

PUMP	DESCR.	LINER	STK	SPM	RATE	PRESS	AV DC	AV DP	NOZZEL VEL
OILWELL	A600PT	114	203	110	.685m	5600	54		
OILWELL	A600PT								

DRILLING ASSEMBLY

TOOL	OD	ID	LENGTH
BIT	152		.20
B/S MOTOR	136		5.49
228MM DC FLOW SUB	136		.40
XIO 1 NM DC	118		9.29
XIO PULSER SUB	132		1.35
6DC 1-CB X0			.43
1-UB H0 SUB	119		.37
KELLY 2-NMDC	119/115		17.05
342 40-HWDP	124 120	TOTAL	4.83

CASING SUMMARY

RAN	JTS OF	TOTAL	767.91
LANDED AT	MKB.	TOTAL LENGTH	467.34
CEMENTED WITH			
PLUG DOWN AT	HRS. ON	WITH	M3 CEMENT RETURNS.

TIME DISTRIBUTION

MOVE/RIG-UP	RIG REP:
DRILL MH & RH:	LOGGING:
RIG SERVICE:	CEMENT:
SURVEY:	WOC:
PRESSURE TEST:	RUN CSG:
DRILL:	DST:
DRILL OUT: C.	TRIP:
CIRCULATE:	L.D.D.S.:
NIPPLE UP BOP:	REAM:
HANDLE TOOLS	

TOTAL HOURS: 24
KG/M, _____ CASING.
METERS.

DRILLED OUT CEMENT TO 2656m. Circ Hole Clean. Pump pill. Flow V
P.O.H. Flow check @ 2500m 1400m 1130m 280m
RIG SERVICE - RECOVER ROTATING HEAD. INSTAL SPLIT MASTER BUSHING.
PICKED UP DIRECTIONAL TOOLS.
RUN IN 4 STOS HWOP & SHALLOW TEST MWD.
RUN IN Gyro on WIRE LINE
RIG SERVICE
PICK UP 10 STS HWOP - TRIPPING IN BREAK CIRC & CHECK TOOL EVERY
20 STOS.

Geological Morning Report**Dec 17, 1998**

Report To: Paul Collens
Report from: Colin Bredin
1-250-774-0521
Satellite Phone: 1-600-700-5443
Satellite Fax: 1-403-543-9147

Well Name: Para et al Bovie C-76A
Surface Location: 60° 20' 122° 45'
Target Location: D-76

Spud Date: Re-entry
Days from Entry: 3

Date: Dec 17, 1998
Time: 06:00 hrs
Hours Drilling: 5

Depth: 2656.60m
Progress: 78.6m
Average ROP: 15.7m / hr

Formation: In casing

Operational Status: Run in hole.

Operational Summary: Drill out cement to 2656.6m, Trip for directional tools.

Remarks: Should be drilling by late morning.

PARA MOUNT RESOURCES LTD.

DAILY DRILLING REPORT

UNIQUE I.D. 300c766020122450LOCATION: PARA ETAL BOUE C764
WELL LICENCE WID1817SUPERVISOR: G. SANDERS
CELLULAR #: 1-600-700 5443
SPUD DATE: 98-12-14
R.R. DATE: _____
CONTRACTOR: PRECISION 567
A.F.E. #: 17198 EST. T.D. 3350DAILY COST: 76568
CUM. COST: 621028
DAILY MUD: _____
CUM MUD: _____DAY: 2 REP DATE: 98-12-16 STATUS 08:00 DRILL OUT CEMENT.
DEPTH: 2584 PROG. 65m KB: 6.35 GL: 426.8 CF7.25 MACP: 99000
SURVEYS: _____MUD TYPE: INVERT WT: 915 kg/m³ VISC: 55 WL: _____ FC: _____ PH: _____
ADDITIVES: _____

BIT	SERIAL #	SIZE	MFG	TYPE	JETS	OUT	RUN	HRS	TBG	WEIGHT	RPM
1A	AE69908	152	SMITH	DM	OPEN		6.75	6.75		6-8	80

PUMP	DESCR.	LINER	STK	SPM	RATE	PRESS	AV DC	AV DP	NOZZEL VEL
GILWELL	600	114	208	110	.68m ³	5600		54	
GILWELL	600								

DRILLING ASSEMBLY

TOOL	OD	ID	LENGTH
BIT	152		120
B/S	117		79
228MM DC 30 HWD	226		276
X/O DP	123		2296
X/O			
6DC			
KELLY			72.00
TOTAL			2584.99

CASING SUMMARY

RAN _____ JTS OF _____ MM, _____ KG/M, _____ CASING.
 LANDED AT _____ MKB. TOTAL LENGTH _____ METERS.
 CEMENTED WITH _____
 PLUG DOWN AT _____ HRS. ON _____ WITH _____ M3 CEMENT RETURNS.

TIME DISTRIBUTION

MOVE/RIG-UP _____ RIG INX. .25
 RIG REP: _____
 DRILL MH & RH: _____ LOGGING: _____
 RIG SERVICE: .50 CEMENT: _____
 SURVEY: _____ WOC: _____
 PRESSURE TEST: _____ RUN CSG: _____
 DRILL: _____ DST: _____
 DRILL OUT: 6.75 TRIP: _____
 CIRCULATE: .75 L.D.D.S.: _____
 NIPPLE UP BOP: _____ REAM: _____
 Pick up D.P. 4.05 CLEAN TANK 3.50
 DRILL Plug 8.30 Pump Switch 2.00
 RIG OUT LAM PUMP 2.00 DISACK 2.00
 TOTAL HOURS: 24 RIG D

FINISHED Picking up D.P. & HW. TAGGED Plug @ 2495m Drill Plug out.
 TAGGED CEMENT @ 2519m. Polished 2m. Circ hole clean. CLEANED MUD
 TANKS. & Fill Suction TANK w/ INVERT. Displaced hole w/ 2m DIESEL
 Followed w/ INVERT. DRILLING OUT CEMENT @ 27m/hr. AT PRESENT. TURN ON
 TOP OF Plug took ADDED time to DRILL up.
 HAD NEB INSPECTION. REQUIREMENT LISTED. NEED DRILLING AUTHORITY-
 INSPECTION REPORT TO FOLLOW.
 CEMENT Plug SEEMS TO BE FAIRLY GOOD @ PRESENT DEPTH

Geological Morning Report**Dec 16, 1998**

Report To: Paul Collens
Report from: Colin Bredin
1-250-774-0521
Satellite Phone: 1-600-700-5443
Satellite Fax: 1-403-543-9147

Well Name: Para et al Bovie C-76A
Surface Location: 60° 20' 122° 45'
Target Location: D-76A

Spud Date: Re-entry
Days from Entry: 2

Date: Dec 16, 1998
Time: 06:00 hrs
Hours Drilling: 6.25

Depth: 2578.0m
Progress: 83.0m
Average ROP: 13.3m / hr

Formation: In casing

Operational Status: Drilling cement

Operational Summary: Run in hole, Drill out plug, Displace to invert, Drill cement.

Remarks: Plan is to drill to KOP. Trip for directional tools. Gas detector is rigged in and running.

PARAMOUNT RESOURCES LTD.

RIG SAFETY CHECK

WELL NAME:	PARAMOUNT ETAL BOULE CT6A			DATE:	98-12-17
LOCATION:	LAT: 60° 20' LONG: 122° 45'				
CONTRACTOR:	PRECISION DRILLING			RIG	567
PERSONNEL	BOP	EXPIRES	H2S	FIRST AID	OTHER
Supervisor	2ND	OCT 2000	OCT 99	OCT 2000	
Rig Manager	2ND	MAY 99	OCT 01	OCT 01	BOILER
Driller Del DINGMAN	2ND				
Driller Tim LANG	1ST				
Driller MARK MIAHAN	1ST				
CODES: Y = YES N = NO G = GOOD NA = NOT ACCEPTABLE NR = NOT REQUIRED					
MISCELLANEOUS:			MANIFOLD SHACK		
Boiler per ERCB instructions	YES		Proper gauges		
Light plant operational	YES		Properly heated	YES	
Sockets/ wires/conn/ condition	YES		Lines staked prop.	YES	
Mud lines secure	YES		M.A.C.P.	YES	
Motor shut offs functional	YES		NOT OBSTRUCTED	YES	
Pipe racks level	YES		SITE INSPECTION		
Pipe racked properly	YES		Rig signs up	YES	
Rig floor area neat	YES		H2S signs up	YES	
Air horn functional	YES		Flare pit correct	YES	
Escape line anchored correct	YES		Flare lines straight	YES	
All lines flagged	YES		Flare lines correct	YES	
Escape line area clear	YES		Ditches	YES	
Escape buggy installed	YES		Doghouse neat	YES	
Floors/stairs/handrails correct	YES		First Aid kit	YES	
All safety equipment functional	YES		FLARE STACK	YES	
Personal safety equip. used	YES		FIRE TRUCK	NO	
MACP posted	YES		BOP		
STICK DIAGRAM	YES		All bolts installed	YES	
ACCUMULATORS			Function test daily	YES	
Cond of cylinders	YES		Properly installed	YES	
Fittings and lines installed	YES		UNDERBALANCED:	YES	
Controls identified	YES		BLEED OFF SPOOL	YES	
Functional	YES		TIE IN RIGMANIFOLD	YES	
ACCIDENTS:		LOST TIME:		NON LOST TIME:	
OCCURENCE:		N/A		1	
COMMENTS:					
RIG MANAGER:		OPERATOR REP: G.P. Sanders			



INLAND Pressure Testers Inc.

Box 6067, Fort St. John, B.C. V1J 4H6
(604) 785-5563

ACCUMULATOR FUNCTION AND PRESSURE TEST

Date Dec 15 1998
Location Peace River Road 11000
Operating Company PRECISION "507"
Tests were made by GERRY SANDERS

1. Pressure on accumulator with pressure pump switch in off position. 2200 kPa.
2. Close annular. Pressure loss. 4000 kPa.
Time to close 16 sec.
3. Close pipe rams. Pressure loss. 2000 kPa.
Time to close. 6 sec.
4. Open pipe rams. Pressure loss. _____ kPa.
Time to open. _____ sec.
5. Open HCR valve. Pressure loss. 1500 kPa.
Time to close. 3 sec.
6. Total Pressure Loss. 7000 kPa.
7. Pressure left on accumulator at end of test. 15000 kPa.
8. Turn on accumulator pump time required to build up pressure 1 Min.
35 sec.
9. Precharge Pressure 7040 kPa.
10. Fluid Level 44 (0.44)

Remarks: _____

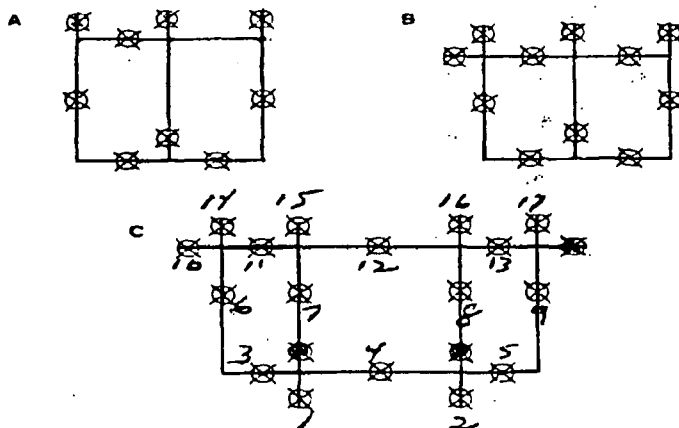


INLAND
Pressure Testers Inc.
 BOX 8067, FORT ST. JOHN, B.C. V1J 4H8
 Phone (604) 786-5583 or (604) 774-2550

TEST DETAIL SHEET
 0721

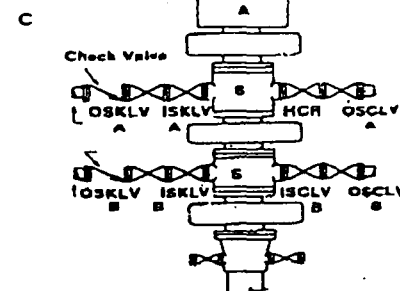
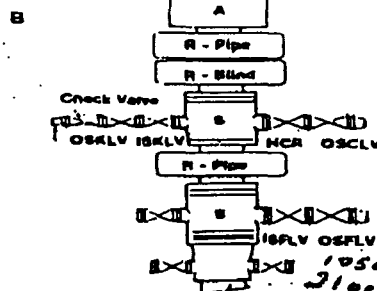
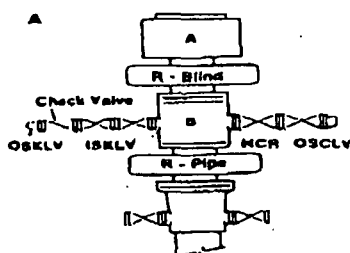
OIL COMPANY	LOCATION #	WELL NAME	CASING DEPTH														
PARAMOUNT	C-76-A	PARAMOUNT BOVIE	2490														
DATE	CONTRACTOR	MUD WEIGHT	CASING SIZE														
DEC 11-12-13-14-15/98	PRECISION 507	1000 Kg/m ³	177.8														
TEST #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	PRESSURE LOSS
BLIND RAMS							X										
UPPER PIPE RAMS							X										
LOWER PIPE RAMS									X								
HYDRIL B.O.P.									X								
HCR								X									
OSCLV							X										
ISKLV							X										
OSKLV								X									
ISFLV																	
OSFLV																	
CHECK VALVES									X								
UPPER KELLY COCK													X				
LOWER KELLY COCK																	
STABBING VALVE										X							
I.S.B.O.P.											X						
MANIFOLD V	X																
MANIFOLD V		X												X			
MANIFOLD V			X												X		
MANIFOLD V				X												X	
MANIFOLD V FOREMOST					X												
MANIFOLD V FOREMOST TO CHOK						X											
CASING							X										

MANIFOLD TYPE C



- 1 MANIFOLD 2-5-8-4
- 2 " 1-3-7-12-16-13-5
- 3 " 6-11-15-14-17-2
- 4 " 10-14-15-16-17
- 5 FOREMOST MANIFOLD TO FIRST
- 6 FOREMOST MANIFOLD TO CHOK
- 7 BLIND OSCLV ISKLV CASI
- 8 LOWER P.D.E RAMS
- 9 UPPER PIPE HCR OSKLV
- 10 HYDRIL CHECK VALVE
- 11 STABB VALVE
- 12 I.S.B.O.P
- 13 TOP KELLY COCK
- 14 R. BOB.
- 15 FOREMOST
- 16

STACK TYPE



LOW PRESSURE TEST 1100 kPa FOR 10 MINUTES HIGH 3500 kPa FOR 10 MINUTES

You must fill in the appropriate blanks bellow, this will send the information throughout the entire summary. After filling in these blanks, you must:

Fill in the rentals in "RENTALS" and;

The Mud inventory in "Mud 1". You will have to change the costs in the "Mud Cost 1" sheet to reflect your current costs. You do not have to put it in the other mud sheets.

To fill in the text boxes (remarks) just put the cursor in the box and click your mouse and start typing it has word wrap so you need not worry on how much you type. You can put the tabs in any order you want by moving them with your mouse (click and drag). If you need another pressure gradient for you MACP you must change it here.

WELL NAME:	<u>PORA EOL BONE C 76A</u>	PUMP MODEL:	<u>600</u>
LOCATION:	<u>Lat. 60° 20' Long. 122° 45'</u>	PUMP MANF.:	<u>SLWELL</u>
UNIQUE I.D.:	<u>3066766020122450</u>	PUMP LINER:	<u>114 L 203</u>
LICENSE #:	<u>WID 1813</u>	PUMP STROKE:	<u>130</u>
SUPERVISOR:	<u>G. SANDERS</u>	PUMP OUT PUT:	<u>55623</u>
Shack Phone	<u>1-606-766-5443</u>	PUMP2 MANF:	<u>SLWELL</u>
2nd Phone	<u>551-1111</u>	PUMP2 MODEL:	<u>600 SLWELL</u>
SPUD DATE:	<u>9-8-12-14</u>	PUMP2 LINER:	<u>114 L 203</u>
CONTRACTOR:	<u>PRECISION DRILLING</u>	PUMP2 STROKE:	<u>130</u>
AFE #:	<u>17198</u>	PUMP2 OUTPUT:	<u>55623</u>
EST TD:	<u>3356m</u>	MACP GRADIENT	<u>18.00</u>
KB TO GRD	<u>6.11</u>		
GRD ELEV.	<u>426.8m</u>		

MAY PRESS 17000 kpa

Geological Morning Report**Dec 15, 1998**

Report To: Paul Collens
Report from: Colin Bredin
1-250-774-0521

Well Name: Para et al Bovie C-76A
Surface Location: 60° 20' 122° 45'
Target Location: D-76A

Spud Date: Re-entry
Days from Entry: 1

Date: Dec 15, 1998
Time: 06:00 hrs
Hours Drilling: 0

Depth: 2495.0m
Progress: 0.00m
Average ROP: 0m / hr

Formation: In casing

Operational Status: Run in to bridge plug.

Operational Summary: Pressure test, Run in hole.

Remarks: Should be drilling out plug this afternoon.

PARAMOUNT RESOURCES LTD.

DAILY DRILLING REPORT

UNIQUE I.D. 300 C 766020122450LOCATION:
WELL LICENCE

SUPERVISOR:

G. SANDERS

CELLULAR #:

1-600 700 5443

SPUD DATE:

98-12-17

R.R. DATE:

CONTRACTOR:

PRECISION 507

A.F.E. #:

17198EST. T.D. 3350

DAILY COST:

48064

CUM. COST:

544460

DAILY MUD:

CUM MUD:

DAY:

1REP DATE: 98-12-15 STATUS 08:00R.I.H. W/ BIT #1

DEPTH:

PROG.

KB:

GL:

MACP:

SURVEYS:

MUD TYPE:

WT:

VISC:

WL:

FC:

PH:

ADDITIVES:

BIT	SERIAL #	SIZE	MFG	TYPE	JETS	OUT	RUN	HRS	TBG	WEIGHT	RPM
1A	AE69908	152	Smith	DM	Open						

PUMP	DESCR.	LINER	STK	SPM	RATE	PRESS	AV DC	AV DP	NOZZEL VEL

DRILLING ASSEMBLY

TOOL	OD	ID	LENGTH
BIT			
B/S			
228MM DC			
X/O			
X/O			
6DC			
KELLY			
TOTAL			

CASING SUMMARY

RAN _____ JTS OF _____ MM,
 LANDED AT _____ MKB. TOTAL LENGTH _____
 CEMENTED WITH _____
 PLUG DOWN AT _____ HRS. ON _____ WITH _____ M3 CEMENT RETURNS.

TIME DISTRIBUTION

MOVE/RIG-UP _____ RIG REP: _____
 DRILL MH & RH: _____ LOGGING: _____
 RIG SERVICE: 50 CEMENT: _____
 SURVEY: _____ WOC: _____
 PRESSURE TEST: 17.56 RUN CSG: _____
 DRILL: _____ DST: _____
 DRILL OUT: _____ TRIP: _____
 CIRCULATE: _____ L.D.D.S.: _____
 NIPPLE UP BOP: _____ REAM: _____
PU DRILL PIPE 6
R.O. L.D. DRILL

TOTAL HOURS: 24
 KG/M, _____ CASING.
 METERS, _____

PICKED UP 30 JTS HEAVY WAIT DRILL PIPE - SET PACKER ATTEMPTED TO PRESSURE TEST PIPE RAM. COULDN'T GET PACKER SEAT. RESET IN SEVERAL DIFFERENT PLACES WITH NO RESULTS. FOUND COMMUNICATION BETWEEN 7" & 9 5/8" CSG. - PRESSURE TESTED 9 5/8" CSG TO 3400 KPA TRIED TO PRESSURE UP 177mm CSG. W/ PACKER NO RESULTS. PRESSURAO UP ON 177mm CSG TO 22000 KPA ON LOWER PIPE RAM 10min OK. PRESSURE TESTED UPPER PIPE RAM 22000 KPA 10min OK. ANNOUNCED 17500 KPA OK ROTATING HEAD 20000 KPA OK DIA ACCUMULATOR CHECK OK. HELD B.O.P. DRILL & SAFETY MESSIN. PICKING UP D.P. @ 6600 KPA

DRILLING REPORT DAY 1

PARA MOUNT RESOURCES LTD.

DAILY DRILLING REPORT

UNIQUE I.D. 300 C766020 122450LOCATION: PARA ETAL BOVIE C76A
WELL LICENCE W101817SUPERVISOR: G SANDERS
CELLULAR #: 1-605 705 5443
SPUD DATE: 98-12-14
R.R. DATE: _____
CONTRACTOR: PRECISION 507
A.F.E. #: 17198 EST. T.D. 3350DAILY COST: 26311
CUM. COST: 496396
DAILY MUD: 3355
CUM MUD: 3355DAY: 1 REP DATE: 98-12-14 STATUS 08:00 MAKE UP D.H.R.
DEPTH: _____ PROG. _____ KB: _____ GL: _____ MACP: _____
SURVEYS: _____MUD TYPE: _____ WT: _____ VISC: _____ WL: _____ FC: _____ PH: _____
ADDITIVES: _____

BIT-	SERIAL #	SIZE	MFG	TYPE	JETS	OUT	RUN	HRS	TBG	WEIGHT	RPM
1A	<u>AE66908</u>	<u>152</u>	<u>SAMM</u>	<u>DM</u>	<u>OPEN</u>						

PUMP	DESCR.	LINER	STK	SPM	RATE	PRESS	AV DC	AV DP	NOZZEL VEL

DRILLING ASSEMBLY

TOOL	OD	ID	LENGTH
BIT	<u>152</u>		
B/S			
228MM DC			
X/O			
X/O			
6DC			
KELLY			
TOTAL			

TIME DISTRIBUTION

MOVE/RIG-UP	RIG REP:
DRILL MH & RH:	LOGGING:
RIG SERVICE:	CEMENT:
SURVEY:	WOC:
PRESSURE TEST:	RUN CSG:
DRILL:	DST:
DRILL OUT:	TRIP:
CIRCULATE:	L.D.D.S.:
NIPPLE UP BOP:	REAM:

CASING SUMMARY

RAN	JTS OF	MM,	KG/M,	CASING.
LANDED AT	MKB.	TOTAL LENGTH	METERS.	
CEMENTED WITH				
PLUG DOWN AT	HRS. ON	WITH	M3 CEMENT RETURNS.	

TEAR APART-REBUILD-REFIT FLARE LINE. ALL LINES ARE IN. HAD SOME
BLOCKS OFF MANY TIMES & REBUILT. INSTALLED BLEED OFF LINE FROM R.H. &
SPOOL BELOW BTM RAM. PRESSURE TESTED BLIND RAMS, FLARE LINES-
MANIFOLD 1500 KPA & 3500 KPA. TO MIN OK. RIGGED IN PICK UP MACHINE-
PUT ON KELLY SPINNER - ROTARY BUSHINGS. MADE UP BIT ON BIT SUB. RUNNING
IN W/ 18 JOINTS HEAVY WT TO SET PACKER TO PRESSURE TEST PIPS RAMS

PARAMOUNT RESOURCES LTD.

DAILY DRILLING REPORT

UNIQUE I.D. _____

LOCATION: PARA RAIL BOVIE CTR
WELL LICENCE WSD 1817SUPERVISOR: G. SANDERSDAILY COST: 40 668CELLULAR #: 1-600-700-5443CUM. COST: 470085

SPUD DATE: _____

DAILY MUD: _____

R.R. DATE: _____

CUM MUD: _____

CONTRACTOR: PRECISION 567A.F.E. #: 1719A EST. T.D. 3350DAY: 1 REP DATE: 98-12-13 STATUS 08:00 Nipple up B.O.P.

DEPTH: _____ PROG. _____ KB: _____ GL: _____ MACP: _____

SURVEYS: _____

MUD TYPE: _____ WT: _____ VISC: _____ WL: _____ FC: _____ PH: _____

ADDITIVES: _____

BIT	SERIAL #	SIZE	MFG	TYPE	JETS	OUT	RUN	HRS	TBG	WEIGHT	RPM
1A											

PUMP	DESCR.	LINER	STK	SPM	RATE	PRESS	AV DC	AV DP	NOZZEL VEL

DRILLING ASSEMBLY

TOOL	OD	ID	LENGTH
BIT			
B/S			
228MM DC			
X/O			
X/O			
6DC			
KELLY			
TOTAL			

TIME DISTRIBUTION

MOVE/RIG-UP	RIG REP:
DRILL MH & RH:	LOGGING:
RIG SERVICE:	CEMENT:
SURVEY:	WOC:
PRESSURE TEST:	RUN CSG:
DRILL:	DST:
DRILL OUT:	TRIP:
CIRCULATE:	L.D.S.:
NIPPLE UP BOP:	REAM:

CASING SUMMARY

RAN	JTS OF	MM,	KG/M,	CASING.
LANDED AT	MKB.	TOTAL LENGTH	METERS.	
CEMENTED WITH				
PLUG DOWN AT	HRS. ON	WITH	M3 CEMENT RETURNS.	

Nipple up B.O.P. HAVING TO CUT & WELD & BUILD KILL, BLEED FLOW LINE ETC. SLOW GOING.

HAVE MUD VAN ON LEASE.

BLIZZARD RENTALS HAVE PHONE SYSTEM HOOKED UP.

GRADED ACCESS ROAD. ROAD STANDING UP GOOD.

PAR. MOUNT RESOURCES LTD.

DAILY DRILLING REPORT

UNIQUE I.D. _____

LOCATION: PARA ETAL BOVIE C76A
WELL LICENCE WID 1817SUPERVISOR: G. SANDERSCELLULAR #: 1-600-700-5443

SPUD DATE: _____

R.R. DATE: _____

CONTRACTOR: PRECISION 507A.F.E. #: 17198EST. T.D. 3350DAILY COST: 96630CUM. COST: 429 417

DAILY MUD: _____

CUM MUD: _____

DAY: 1REP DATE: 98-12-11STATUS 08:00 Nipple up B.O.P.

DEPTH: _____

PROG. _____

KB: _____

GL: _____

MACP: _____

SURVEYS: _____

MUD TYPE: _____

WT: _____

VISC: _____

WL: _____

FC: _____

PH: _____

ADDITIVES: _____

BIT	SERIAL #	SIZE	MFG	TYPE	JETS	OUT	RUN	HRS	TBG	WEIGHT	RPM
1A											

PUMP	DESCR.	LINER	STK	SPM	RATE	PRESS	AV DC	AV DP	NOZZEL VEL

DRILLING ASSEMBLY

TOOL	OD	ID	LENGTH
BIT			
B/S			
228MM DC			
X/O			
X/O			
6DC			
KELLY			
TOTAL			

TIME DISTRIBUTION

MOVE/RIG-UP	RIG REP: _____
DRILL MH & RH:	LOGGING: _____
RIG SERVICE:	CEMENT: _____
SURVEY:	WOC: _____
PRESSURE TEST:	RUN CSG: _____
DRILL:	DST: _____
DRILL OUT:	TRIP: _____
CIRCULATE:	L.D.D.S.: _____
NIPPLE UP BOP:	REAM: _____

CASING SUMMARY

RAN _____ JTS OF _____ MM,
 LANDED AT _____ MKB. TOTAL LENGTH _____
 CEMENTED WITH _____
 PLUG DOWN AT _____

TOTAL HOURS: _____

KG/M, _____

CASING. _____

METERS. _____

HRS. ON _____

WITH _____

M3 CEMENT RETURNS. _____

RIGGING UP FLOOR PUMPS - ALSO TANKS.
 COYOTE RENTALS RIGGED UP CENTRIFUGES & VAC SYSTEM.
 DC ENERGY FINISHED RIGGING IN INVERT TANK FARM
 ENTEREST RIGGING IN CLOSED SYSTEM.
 INLAND PRESSURE TESTER TEARING APART B.O.P STACK & RE-BUILD SAME
 AS PER OPTION 2.
 VACUUM TRUCK ON LOCATION -
 RIGGED IN SHALE BIN - PUT BEAM AROUND INVERT TANK FARM.
 NIPPLE UP B.O.P.S AS A MODIFIED OPTION 2 USING OUT LET

DRILLING REPORT DAY 1

ON BTM OF DOUBLE GATE (ANNULAR - DOUBLE GATE SINGLE GATE - SPOOL -

PAR MOUNT RESOURCES LTD.

DAILY DRILLING REPORT

UNIQUE I.D. _____

LOCATION: PARA ETAL BOULE C76A
WELL LICENCE WLD 1817SUPERVISOR: G. SANDERSDAILY COST: 33694CELLULAR #: 1-600-700-5443CUM. COST: 332787

SPUD DATE: _____

DAILY MUD: _____

R.R. DATE: _____

CUM MUD: _____

CONTRACTOR: PRECISION 507.A.F.E. #: 17198EST. T.D. 3350DAY: 1 REP DATE: 98-12-10 STATUS 08:00 RIGGING UP.

DEPTH: _____ PROG. _____ KB: _____ GL: _____ MACP: _____

SURVEYS: _____

MUD TYPE: _____ WT: _____ VISC: _____ WL: _____ FC: _____ PH: _____

ADDITIVES: _____

BIT	SERIAL #	SIZE	MFG	TYPE	JETS	OUT	RUN	HRS	TBG	WEIGHT	RPM
1A											

PUMP	DESCR.	LINER	STK	SPM	RATE	PRESS	AV DC	AV DP	NOZZEL VEL

DRILLING ASSEMBLY

TOOL	OD	ID	LENGTH
BIT			
B/S			
228MM DC			
X/O			
X/O			
6DC			
KELLY			
TOTAL			

TIME DISTRIBUTION

MOVE/RIG-UP	RIG REP:
DRILL MH & RH:	LOGGING:
RIG SERVICE:	CEMENT:
SURVEY:	WOC:
PRESSURE TEST:	RUN CSG:
DRILL:	DST:
DRILL OUT:	TRIP:
CIRCULATE:	L.D.D.S.:
NIPPLE UP BOP:	REAM:

CASING SUMMARY

RAN	JTS OF	MM,	KG/M,	CASING.
LANDED AT	MKB.	TOTAL LENGTH	METERS.	
CEMENTED WITH				
PLUG DOWN AT	HRS. ON	WITH	M3 CEMENT RETURNS.	

TOTAL HOURS: _____

RIG UP DERRICK & RAISE. DERRICK UP @ 1:45 PM. FIRE UP BOILER.
 WATER TRUCK FILLED WATER TANKS.
 ENTEST RIGGING IN CLOSED SYSTEM.
 DC ENERGY RIGGING IN TANKS FOR INVERT. / CLOSED SYSTEM.
 RIG IN SHACKS ON LOCATION.
 PASON RIGGING IN EQUIPMENT.
 HAVE RIG FUEL TANK FULL.
 NOTIFIED NEB THAT RIG WAS MOVING IN ON 98-1210.
 HAVE DOUBLE GATE 11-5000 PLUS VALVES ON ROAD W/ 2 DRIVERS.

DRILLING REPORT DAY 1

PAR. MOUNT RESOURCES LTD

DAILY DRILLING REPORT

UNIQUE I.D. _____

LOCATION: PARA ETAL BOVIE C76A
WELL LICENCE WID 1817

SUPERVISOR: G. SANDERS
 CELLULAR #: 1-600-700-5443
 SPUD DATE: _____
 R.R. DATE: _____
 CONTRACTOR: PRECISION 507
 A.F.E. #: 17198 EST. T.D. _____

DAILY COST: 33968
 CUM. COST: 299093
 DAILY MUD: _____
 CUM MUD: _____

DAY: 1 REP DATE: 98-12-16 STATUS 08:00 RIGGING UP.
 DEPTH: _____ PROG. _____ KB: _____ GL: _____ MACP: _____
 SURVEYS: _____

MUD TYPE: _____ WT: _____ VISC: _____ WL: _____ FC: _____ PH: _____
 ADDITIVES: _____

BIT	SERIAL #	SIZE	MFG	TYPE	JETS	OUT	RUN	HRS	TBG	WEIGHT	RPM
1A											

PUMP	DESCR.	LINER	STK	SPM	RATE	PRESS	AV DC	AV DP	NOZZEL VEL

DRILLING ASSEMBLY

TOOL	OD	ID	LENGTH
BIT			
B/S			
228MM DC			
X/O			
X/O			
6DC			
KELLY			
TOTAL			

TIME DISTRIBUTION

MOVE/RIG-UP	RIG REP:
DRILL MH & RH:	LOGGING:
RIG SERVICE:	CEMENT:
SURVEY:	WOC:
PRESSURE TEST:	RUN CSG:
DRILL:	DST:
DRILL OUT:	TRIP:
CIRCULATE:	L.D.D.S.:
NIPPLE UP BOP:	REAM:

CASING SUMMARY

RAN _____ JTS OF _____ MM, _____ KG/M, _____ CASING.
 LANDED AT _____ MKB. TOTAL LENGTH _____ METERS.
 CEMENTED WITH _____
 PLUG DOWN AT _____ HRS. ON _____ WITH _____ M3 CEMENT RETURNS.

POT. UP: DWKS & SUB FLOOR DERRICK PINNED - SPOTTED MATTING -
 SPOT BUILDINGS - STARTED LIGHT PLANT - FIRED UP WEBSITE
 UNITS.

HAD A BUNDLE OF PLANKS BROUGHT OUT FROM FT NELSON - BEAVER
 DIDNT SUPPLY AS REQUESTED. PRECISION HAS SUPPLIED CREW CAMP
 FOR RIG CREWS. HAD HANVOLD EXPEDITING DRIVE UNIT OUT AND DRIVER RETURNED
 W/ DELIVERY TRUCK.

HAD A NO LOST TIME ACCIDENT ON RIG CREW. DERRICK MAN GOT PINNED
 BETWEEN ROTARY TABLE & CRANE AS THEY WERE PICKING UP ROTARY TABLE.
 SENT HIM INTO NELSON AND EXAMINED. IS RETURNING TO RIG FOR LIGHT DUTY.
 FIRST AID REPORT TO FOLLOW.

DRILLING REPORT DAY 1

PAR. MOUNT RESOURCES LTD.

DAILY DRILLING REPORT

UNIQUE I.D. _____

LOCATION: PARA ETAL BOVIE C76A
WELL LICENCE WID 1817SUPERVISOR: G. SANDERSDAILY COST: 254 845CELLULAR #: 1-600-700-5443CUM. COST: 265 125

SPUD DATE: _____

DAILY MUD: _____

R.R. DATE: _____

CUM MUD: _____

CONTRACTOR: PRECISION 507A.F.E. #: 17198 EST. T.D. 3350DAY: 1 REP DATE: 98-12-09 STATUS 08:00 RIGGING UP

DEPTH: _____ PROG. _____ KB: _____ GL: _____ MACP: _____

SURVEYS: _____

MUD TYPE: _____ WT: _____ VISC: _____ WL: _____ FC: _____ PH: _____

ADDITIVES: _____

BIT	SERIAL #	SIZE	MFG	TYPE	JETS	OUT	RUN	HRS	TBG	WEIGHT	RPM
1A											

PUMP	DESCR.	LINER	STK	SPM	RATE	PRESS	AV DC	AV DP	NOZZEL VEL

DRILLING ASSEMBLY

TOOL	OD	ID	LENGTH
BIT			
B/S			
228MM DC			
X/O			
X/O			
6DC			
KELLY			
TOTAL			

TIME DISTRIBUTION

MOVE/RIG-UP	<u>10</u>	RIG REP:	
DRILL MH & RH:		LOGGING:	
RIG SERVICE:		CEMENT:	
SURVEY:		WOC:	
PRESSURE TEST:		RUN CSG:	
DRILL:		DST:	
DRILL OUT:		TRIP:	
CIRCULATE:		L.D.D.S.:	
NIPPLE UP BOP:		REAM:	

CASING SUMMARY

RAN	JTS OF	MM,	KGM,	CASING.
LANDED AT	MKB.	TOTAL LENGTH	METERS.	
CEMENTED WITH				
PLUG DOWN AT	HRS. ON	WITH	M3 CEMENT RETURNS.	

MOVED IN BALANCE OF RIG EQUIPMENT. HAVE FIRST AID TRAILER,
- ENG TRAILER - GEO-TRAILER - DIRECTIONAL TRAILER - 2 CENTRIFUGES AND
1 STAND - VACUUM UNIT - ALPINE ROTATING HEAD - LIGHT PLANT FOR CENTRIFUGES
ON LOCATION.

SUBSTRUCTURE IS ON W/C & LEVELED ON MATTING.

INCINERATOR FOR CAMP SET UP & RUNNING.

PHONED LAND USE INSPECTOR @ 867-695-2626 KENT HALVerson
FORT SIMPSON. - IM TO CONTACT HIM NEXT WEEK AS TO HIS VISITING RIG.
HOPE TO HAVE RIG EQUIPMENT IN PLACE 98-12-09 PM

DRILLING REPORT DAY 1

PA AMOUNT RESOURCES L D.

DAILY DRILLING REPORT

UNIQUE I.D. _____

LOCATION: PARA ETAL BOUIE.
WELL LICENCE WID 1817.SUPERVISOR: G. SANDERSCELLULAR #: 1-600-700-5443

SPUD DATE: _____

R.R. DATE: _____

CONTRACTOR: PRECISION 507.A.F.E. #: 17198.EST. T.D. 3350mDAILY COST: 10280-CUM. COST: 10280

DAILY MUD: _____

CUM MUD: _____

DAY: 1 REP DATE: 98-12-08 STATUS 08:00 MIRT.

DEPTH: _____ PROG. _____ KB: _____ GL: _____ MACP: _____

SURVEYS: _____

MUD TYPE: _____ WT: _____ VISC: _____ WL: _____ FC: _____ PH: _____

ADDITIVES: _____

BIT	SERIAL #	SIZE	MFG	TYPE	JETS	OUT	RUN	HRS	TBG	WEIGHT	RPM
1A											

PUMP	DESCR.	LINER	STK	SPM	RATE	PRESS	AV DC	AV DP	NOZZEL VEL

DRILLING ASSEMBLY

TOOL	OD	ID	LENGTH
BIT			
B/S			
228MM DC			
X/O			
X/O			
6DC			
KELLY			
TOTAL			

TIME DISTRIBUTION

MOVE/RIG-UP	RIG REP:
DRILL MH & RH:	LOGGING:
RIG SERVICE:	CEMENT:
SURVEY:	WOC:
PRESSURE TEST:	RUN CSG:
DRILL:	DST:
DRILL OUT:	TRIP:
CIRCULATE:	L.D.D.S.:
NIPPLE UP BOP:	REAM:

CASING SUMMARY

RAN	JTS OF	MM,	TOTAL HOURS:	KG/M,	CASING.
LANDED AT	MKB.	TOTAL LENGTH	METERS.		
CEMENTED WITH					
PLUG DOWN AT	HRS. ON	WITH	M3 CEMENT RETURNS.		

TURE OUT RIG & MOVING TO LOCATION.
HAVE SEVEN LOADS RIG EQUIPMENT ON LOCATION.
Rigged up TWO PORTABLE LITE'S ON LOCATION. FOR LIGHTS.
HOPE TO HAVE ALL RIG LOADS IN BY NOON. ONE CRANE IS AT FORT LIARD &
ACCESS ROAD IS VERY SLIPPERY. ALL LOADS COMING IN MUST CLIMB
UP AT FORT LIARD TURNS OFF.
Camp is up & RUNNING. SHORT SOME EQUIPMENT. SHOULD BE IN
BY NOON.