

Daily Drilling Reports

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT**FOR 24 HR PERIOD ENDING **98-02-28 @ 08:00**

Yr - Mon - Day - Time

WELL NAME **PARAMOUNT et al ARROWHEAD** LOCATION **NB5**Day **45**Depth **2925**

Meters last 24 hr

Rotating hrs

Activity at report time **MOVE OUT RIG TO M23****DRILLING MUD PROPERTIES AT SHAKER/SUCTION/PIT**

Wt	Vis	WL	Gels	Solids	% PV	YP	pH
Oil	%	Sand	%	Cake	PPMCL	PPMCA	

BIT RECORD

BIT NO.	SIZE mm	MAKE & TYPE	SER. NO.	BIT		DEPTH OUT m	m DRLD TODAY	CUM m. DRLD	Run hrs TODAY	CUM. Rot hr	m/hr	Doll Cond.		
				WT	RPM							T	S	G

CIRCULATION RECORD

BIT NO.	JETS - mm			PUMP			ANN. VEL.		JET VEL.	IHP	SURF. PRESS. kPa
	1	2	3	STROKE	SPM	LINES	IP	DC			

DEVIATION SURVEYS**MUD & CHEMICALS ADDED**

"	at	m	"	at	m
"	at	m	"	at	m
"	at	m	"	at	m
"	at	m	"	at	m

BOTTOM HOLE ASSEMBLY**TIME ANALYSIS**

TOOL	ID mm	OD mm	LENGTH m	WEIGHT kg	OPERATION	TODAY	CUM.
					1. Drilling		
					2. Trips		
					3. Rig Service		
					4. Deviation Surveys		
					5. Beam & Cond. Hole		
					6. Mix & Cond. Mud		
					7. Circulation		
					8. Rig Repair		
					9. Run Casing & Cement		
					10. Fishing		
					11. Logging		
					12. Curing		
					13. Formation Testing		
TOTAL LENGTH			0.00		14. Waiting on:		
COSTS					15. Nipple Up & Test BOPS		
DAILY	\$	26286			16. Drilling Out		
CUMMULATIVE	\$	3418529			17. Lost Circ.		
SUPERVISOR	KEVIN CAMPBELL				18. Laying Down DP & BOP's		
	1(403)210-0371				19. Plug & Abandon		
					20. Rig up - Tear out	24.00	
TELEPHONE					21.		
TOTAL						24.00	

TOTAL LENGTH

0.00

COSTS

DAILY \$ 26286

CUMMULATIVE \$ 3418529

SUPERVISOR **KEVIN CAMPBELL**TELEPHONE **1(403)210-0371**

DAILY REPORTS

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT (page 2)**FOR 24 HR PERIOD ENDING: 98-02-28 @ 08:00
Yr - Mon - Day - Time

WELL NAME: PARAMOUNT at ARROWHEAD LOCATION: N55

GROUND ELEV: 567.9m

KB to GL: 6.7m

KB ELEV: 574.6m

OPERATIONS DETAIL:

08:00 - 08:00 RIG OUT ROTARY TOOLS, MOVE AIR EQUIPMENT TO M23 LEASE

WANT LIST:

WEATHER: -20

ROAD: GOOD WINTER CONDITIONS

IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)

DAILY REPORTS

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT (page 2)**FOR 24 HR PERIOD ENDING 98-02-27 @ 08:00
Yr - Mon - Day - Time

WELL NAME PARAMOUNT et al ARROWHEAD LOCATION N65

GROUND ELEV: 567.9m

KB to GL: 6.7m

KB ELEV: 574.6m

OPERATIONS DETAIL:

08:00 - RIG OUT ROTARY TOOLS: DISASSEMBLE TOP DRIVE, LOAD OUT 89mm

08:00 DP TO SEND BACK TO TOWN TO BE INSPECTED, LOWER DERRICK

WANT LIST:

WEATHER: -15

ROAD: GOOD WINTER CONDITIONS

IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)

SENT BACK TO WEATHERFORD ENTRA (FT. ST. JOHN), 89mm DRILL STRING, AND DRILL COLLARS TO BE INSPECTED. SENT BACK WITH LAND TRUCKING.

DAILY REPORTS

Yr - Mon - Day - Time

Rotating hrs -

pH

400

TOTAL : 26.00

P.02

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT (page 2)**

FOR 24 HR PERIOD ENDING 98-02-25 @ 08:00

Yr - Mon - Day - Time

WELL NAME: PARAMOUNT et al ARROWHEAD LOCATION N65

GROUND ELEV: 567.9m

KB to GL: 6.7m

KB ELEV: 574.6m

OPERATIONS DETAIL:

08:00 - 12:00 RIG OUT WILLIAMS ROTATING HEAD AND FOREMOST

12:00 - 20:00 NIPPLE DOWN BOPs AND CHANGE RAMS BACK TO 5"

20:00 - 08:00 RIG OUT ROTARY TOOLS

RIG RELEASED AT 24:00hrs on 98-02-25**WANT LIST:**

WEATHER: -12

ROAD: GOOD WINTER CONDITIONS

IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT (page 2)**

FOR 24 HR PERIOD ENDING 98-02-25 @ 06:00

Yr - Mon - Day - Time

WELL NAME PARAMOUNT at al ARROWHEAD LOCATION N65

GROUND ELEV: 567.9m

KB to GL: 6.7m

KB ELEV: 574.6m

OPERATIONS DETAIL:

08:00 - 09:30 RIG TO AND CEMENT LINER WITH SANJEL
 09:30 - 10:15 LAY DOWN CEMENT HEAD AND PULL 3 STDS SLOWLY
 10:15 - 11:30 CIRCULATE BOTTOMS UP @ 2240mKB
 11:30 - 11:45 RIG SERVICE: F/T ANNULAR (14sec), AND LOWER PIPE RAMS (4sec)
 11:45 - 14:15 POOH
 14:15 - 16:15 LAY DOWN HANGING TOOL, AND CEMENT HEAD, MAKE UP BRIDGE PLUG
 16:15 - 19:15 RIH WITH BRIDGE PLUG AND SET
 19:15 - 19:45 PRESSURE TEST BRIDGE PLUG FOR 10min AT 11,000kPa, TEST OK
 19:45 - 21:45 DISPLACE HOLE WITH INHIBITED WATER
 21:45 - 03:00 RIG TO AND LAY DOWN DRILL PIPE
 03:00 - 04:30 RIH WITH STANDS LEFT IN DERRICK
 04:30 - 08:00 LAY DOWN DRILL PIPE AND DRILL COLLARS

NOTE: RAN BAKER BRIDGE PLUG MODEL "C" SIZE 47B. SET AT: TOP = 1964.08mKB, BOTTOM = 1966.08mKB. PRESSURE TEST TO 11,000kPa, HELD 10 mins OK. DISPLACED HOLE TO MEP 426 BAKER INHIBITED WATER.

WANT LIST:

WEATHER: -10

ROAD: GOOD WINTER CONDITIONS

IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)

DAILY REPORTS

WELL	Code	Description N85	36	37	38	39	40	41
	30	Logistics						
	101	Surveying						
	102	Legal and Licence						
	103	Access Preparation						
	104	Wellsite Preparation						
	105	Conductor, Retheile						
	106	Wellbore Restoration						
	106	Access Restoration						
	118	Maintenance						
	117	Towing						
	118	Supervision						
	200	Drilling Costs						
	201	Move In - Rig up						
	203	Drilling Rig Daywork	9984	9984	9984	9984	9984	9984
	205	Boiler	1300	1300	1300	1300	1300	864
	206	Tear out - Rig out						
	210	Camp and Catering	1600	1600	1500	1500	1600	1600
	212	Aviation Support						
	214	Fuel		1988		6318		
	216	Communications	180	160	160	160	180	160
	218	Water	1800	1800	1800	1800	1800	1800
	219	Vacuum Truck						
	220	Drilling Fluids	28093	2358	8002	10780	1578	14450
	222	Air Drilling	5629	7220	3750		3750	
	223	Underbalanced Drilling	4762	4762	4762	5042	4762	4762
	224	Technical Support						
	225	Drilling Supervision	1800	1800	1800	1800	1800	1800
	228	Directional Drilling & Surveys						
	230	Medical & Safety Services	4655	4655	4655	4655	4655	4655
	232	Fishing						
	234	Contract Services						
	238	Transportation	19470		1215	5300	2188	
	240	Equipment Rentals	5020	5025	5025	5025	5025	2033
	242	Drilling BRTs						
	244	Abandonment & Plugback						
	248	Lost Equipment						
	250	Miscellaneous Materials						
	252	Surface Casing						
	254	Cement Surface Casing						
	256	Intermediate Casing						
	258	Cement Intermediate Casing						
	262	Wireline - Slickline						
	300	Evaluations						
	301	Coring						
	302	Logging				88394		
	303	Formation Testing				16800		
	304	Geological Supervision						
	305	Analyses						
	312	Production/ADP Testing						
	400	Production Casing						
	401	Casing Accessories						
	402	Production Casing					3056	
	403	Cement Production Casing						
	404	Production Casing Services						
	600	Well Equipment						
	601	Drilling Wellhead Parts						
	602	Completion Wellhead Parts						
	603	Tubing						
	605	Tubing Accessories						
	Total		81778	42152	44553	156158	41158	41808
	Cum Total		2929811	2971763	3018318	3171474	3212832	3264240

LINER #2																																																																
CASING SUMMARY																																																																
WELL NAME PARAMOUNT ET AL.		LOCATION _ ARROWHEADN65		DATE: 98-02-23/24																																																												
SURFACE () INTERMEDIATE () PRODUCTION () LINER#2 (^)																																																																
Size: 139.7	NO.	DESCRIPTION	MEASURED LENGTH	KB Depth																																																												
KB: 6.7 m	39	139.7MM, 25.3KG/M, L80, RG 3, FLUSH HYD 511, ALGOMA, NEW.	553.33																																																													
KB - CF: 6.97M	1	1-SMITH INTERNATIONAL LINER HANGER.	2.73																																																													
Scratchers Centralizers																																																																
Total String			556.06																																																													
minus KB to Csg Top (STICK UP)																																																																
Landed Depth KB			2856.09	Cut-off Jt. Length																																																												
Hole Depth KB			2925.00																																																													
Distance Csg Landed Off Bottom			68.91																																																													
<table style="width: 100%; border: none;"> <tr> <td style="width: 20%;">Cementing Company</td> <td style="width: 40%;">SANJEL</td> <td style="width: 20%;">Volume:</td> <td style="width: 20%;">1.M3</td> </tr> <tr> <td>Wash-Type</td> <td>H2O</td> <td>Volume:</td> <td>5.2 M3</td> </tr> <tr> <td>Cement Type</td> <td>Lead Slurry</td> <td colspan="2">THERIMAL 40.7 TONNES DENSITY 1885KG/l</td> </tr> <tr> <td>Additives</td> <td colspan="3">1% CFR. 89% CFL2. 1.2% LTR. 7% H+R-B.</td> </tr> <tr> <td>Cement Type</td> <td>Tail Slurry</td> <td>Volume:</td> <td></td> </tr> <tr> <td>Additives</td> <td colspan="3"></td> </tr> <tr> <td>Cement Type</td> <td>Above Stage Collar</td> <td>Volume:</td> <td></td> </tr> <tr> <td>Additives</td> <td colspan="3"></td> </tr> <tr> <td>Displacement Rate:</td> <td>Max 0.7</td> <td>m3/min</td> <td>Average 0.5</td> </tr> <tr> <td>Calculated Cement Top(s):</td> <td>(all)</td> <td>mKB</td> <td>(tail)</td> </tr> <tr> <td>Returns:</td> <td>Mud</td> <td>Cement</td> <td></td> </tr> <tr> <td>String Wt. in Mud Wt of:</td> <td>1075</td> <td>kg/m3 =</td> <td>57,000</td> </tr> <tr> <td>Wt. set on slips:</td> <td colspan="3">daN</td> </tr> <tr> <td>Remarks:</td> <td colspan="3">LINER DIFFERENTIAL STUCK @ 2856.09M KB. CEMENTED LINER @ THIS DEPTH. FULL RETURN ON CEMENT JOB, PUT 30M CEMENT PLUG ON TOP OF THE LINER TOP.</td> </tr> <tr> <td colspan="4" style="text-align: right;">Supervisor ROD. MacEACHERN</td> </tr> </table>					Cementing Company	SANJEL	Volume:	1.M3	Wash-Type	H2O	Volume:	5.2 M3	Cement Type	Lead Slurry	THERIMAL 40.7 TONNES DENSITY 1885KG/l		Additives	1% CFR. 89% CFL2. 1.2% LTR. 7% H+R-B.			Cement Type	Tail Slurry	Volume:		Additives				Cement Type	Above Stage Collar	Volume:		Additives				Displacement Rate:	Max 0.7	m3/min	Average 0.5	Calculated Cement Top(s):	(all)	mKB	(tail)	Returns:	Mud	Cement		String Wt. in Mud Wt of:	1075	kg/m3 =	57,000	Wt. set on slips:	daN			Remarks:	LINER DIFFERENTIAL STUCK @ 2856.09M KB. CEMENTED LINER @ THIS DEPTH. FULL RETURN ON CEMENT JOB, PUT 30M CEMENT PLUG ON TOP OF THE LINER TOP.			Supervisor ROD. MacEACHERN			
Cementing Company	SANJEL	Volume:	1.M3																																																													
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Supervisor ROD. MacEACHERN																																																																

CSG_SUM4.XLS

LINER # 2**PIPE TALLY**DATE: 98-2-23WELL NAME PARAMOUNT et al ARROWHEADLOCATION N65CONTRACTOR NABORS #16PIPE DESCRIPTION 139.7 mm. 25.3 KG/M GRADE L-80 RANGE 3CPLG SLICK THREAD HYD511 MFG. ALGOMA NEW OR USED NEWTYPE OF STRING SURFACE TALLIED BY NABORS #16 THREADS OFF

LENGTH		LENGTH		LENGTH		LENGTH		LENGTH		LENGTH	
1	14.00	21	14.11	41	13.97	61		81		101	
2	13.91	22	*14.51	42	13.55	62		82		102	
3	13.92	23	13.90	43	13.79	63		83		103	
4	13.96	24	*14.27	44	13.71	64		84		104	
5	14.01	25	13.92	45		65		85		105	
6	13.86	26	14.25	46		66		86		106	
7	12.43	27	13.19	47		67		87		107	
8	13.94	28	*14.26	48		68		88		108	
9	13.93	29	14.15	49		69		89		109	
10	13.98	30	14.19	50		70		90		110	
TTL		TTL		TTL		TTL		TTL		TTL	
1-10	137.94	21-30	97.71	41-50	55.02	61-70		81-90		101-110	
11	13.62	31	14.06	51		71		91		111	
12	13.93	32	14.21	52		72		92		112	
13	13.57	33	*14.45	53		73		93		113	
14	13.81	34	14.11	54		74		94		114	
15	13.46	35	14.20	55		75		95		115	
16	13.78	36	14.24	56		76		96		116	
17	13.11	37	14.17	57		77		97		117	
18	13.45	38	13.48	58		78		98		118	
19	13.43	39	13.48	59		79		99		119	
20	13.84	40	13.52	60		80		100		120	
TTL		TTL		TTL		TTL		TTL		TTL	
11-20	138.00	31-40	125.45	51-60		71-80		81-100		111-120	
TTL		TTL		TTL		TTL		TTL		TTL	
01-20	273.94	21-40	223.16	41-60	55.02	61-80		81-100		101-120	
TOTAL 1-20	273.94	PAGE 1 TOTAL		609.61				Shoe=	0.41		
TOTAL 21-40	223.16	LEFT OUT:		57.49				Float=	0.80		
TOTAL 41-60	55.02	FLOAT & SHOE		1.21				Shoe jt.=	15.21		
TOTAL 61-80		GRAND TOTAL:		553.33		REMARKS:					
TOTAL 81-100						JTS # 22, 24, 28, and 33 STAY OUT. LEAVING AN OVERLAP IN THE 177.8mm LINER					
TOTAL 100-120						BY THE 139.7mm LINER OF 227.24m. 139.7mm LINER TOP AT 2299.94mKB,					
TOTAL 1-120	552.12					BOTTOM OF 139.7mm SHOE AT 2866.03mKB,					
						LINER HANGER = 2.73m					
						AGENT OF OPERATOR:					

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT (page 2)**

FOR 24 HR PERIOD ENDING

98-02-24-08:00

Yr Mon Day Time

WELL NAME **PARAMOUNT ET AL ARROWHEAD**LOCATION **N65****OPERATIONS DETAIL:****08:00-** RUN 139.7mm LINER INTO HOLE, BREAK CIRCULATION @2527mKB,**01:30** RIH SLOWLY, DRIFT DRILL PIPE IN DERRICK, AND STRAP.**01:30-** LINER STUCK AT 2833mKB, SLOWLY WORK FREE TO 2856mKB, LINER**06:00** DIFFERENTIALLY STUCK @ 2856mKB, 0m FREE MOVEMENT.**06:00-07:30** RIG TO AND SET LINER HANGER**07:30-08:00** RIG TO CEMENT WITH SANJEL**WANT LIST:****WEATHER:** -9**ROAD: GOOD WINTER COND.****IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)**

ORL-RPT.418

P.02

403 266 6032 1656

DRILLRITE SUPERVISION

FEB-24-98 06:51 AM

FEB-24-1998 10:14

403 266 6032

94%

P.04

PARAMOUNT RESOURCES

PIPE TALLY

DATE: 98-2-23

WELL NAME PARAMOUNT at al ARROWHEAD

LOCATION N65

CONTRACTOR NABORS #16

PIPE DESCRIPTION 139.7 mm. 25.3 KG/M GRADE L-80 RANGE 3

CPLG SLICK THREAD HYD511 MFG. ALGOMA NEW OR USED NEW

TYPE OF STRING SURFACE TALLIED BY NABORS #16 THREADS OFF

LENGTH		LENGTH		LENGTH		LENGTH		LENGTH		LENGTH	
1	14.00	21	14.11	41	13.97	61		81		101	
2	13.91	22	14.51	42	13.55	62		82		102	
3	13.92	23	13.90	43	13.79	63		83		103	
4	13.95	24	14.27	44	13.71	64		84		104	
5	14.01	25	13.92	45		65		85		105	
6	13.88	26	14.25	46		66		86		106	
7	12.43	27	13.19	47		67		87		107	
8	13.94	28	14.28	48		68		88		108	
9	13.93	29	14.15	49		69		89		109	
10	13.98	30	14.19	50		70		90		110	
TTL		TTL		TTL		TTL		TTL		TTL	
1-10	137.94	21-30	97.71	41-50	55.02	61-70		81-90		101-110	
11	13.62	31	14.06	51		71		91		111	
12	13.93	32	14.21	52		72		92		112	
13	13.57	33	14.45	53		73		93		113	
14	13.81	34	14.11	54		74		94		114	
15	13.46	35	14.20	55		75		95		115	
16	13.78	36	14.24	56		76		96		116	
17	13.11	37	14.17	57		77		97		117	
18	13.45	38	13.48	58		78		98		118	
19	13.43	39	13.48	59		79		99		119	
20	13.84	40	13.52	60		80		100		120	
TTL		TTL		TTL		TTL		TTL		TTL	
11-20	136.00	31-40	125.45	51-60		71-80		91-100		111-120	
TTL		TTL		TTL		TTL		TTL		TTL	
01-20	273.94	21-40	223.16	41-80	55.02	61-80		81-100		101-120	
TOTAL 1-20		273.94	PAGE 1 TOTAL			609.61	Shoe= 0.41 Float= 0.80 Shoe jt.= 15.21				
TOTAL 21-40		223.16	LEFT OUT:			57.49					
TOTAL 41-60		55.02	FLOAT & SHOE			1.21					
TOTAL 61-80			GRAND TOTAL:			553.33	TOTAL JOINTS ON LOCATION 44				
TOTAL 81-100			REMARKS:			JTS # 22,24,28, and 33 STAY OUT. LEAVING AN OVERLAP IN THE 177 8mm LINER BY THE 139.7mm LINER OF 227.24m. 139.7mm LINER TOP AT 2302.76mKB, BOTTOM OF 139.7mm SHOE AT 2856.08mKB.					
TOTAL 100-120											
TOTAL 1-120		552.12									
AGENT OF OPERATOR:											

Shoe= 0.41
 Float= 0.80
 Shoe jt.= 15.21

TOTAL JOINTS ON LOCATION 44

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT**FOR 24 HR PERIOD ENDING **98-02-23-08:00**

Yr - Mon - Day - Time

WELL NAME **PARAMOUNT et al ARROWHEAD**LOCATION **N65**Day **40**Depth **2925**Metres last 24 hr **0**

HRS OB

Activity at report time **RUNNING 139.7mm LINER****DRILLING MUD PROPERTIES AT SHAKER/SUCTION/PIT**

Wt 1095 Vis 65 WL 9 Gels 4/9 Solids 0.089 PV 20 YP 20 pH 9.5
 Oil % Sand TRACE S Cake 1.5 PPMCL 84,000 PPMCa 7,400

BIT RECORD

BIT NO.	SIZE mm	MAKE & TYPE	SER. NO.	BIT		DEPTH OUT m	m DRLD TODAY	CUM m. DRLD	Rot hrs TODAY	CUM. Rot hr	m/hr	Dull Cond.		
				WT	RPM							T	B	G
4RR	152	F3D	LN4323		CLEAN	OUT	TRIP					1	1	1

CIRCULATION RECORD

BIT NO.	JETS - mm			PUMP				ANN. VEL.		JET VEL.	HHP	SURF. PRESS. kPa
	1	2	3	STROKE	SPM	LINER	m ³ /MIN	DP	DC			

DEVIATION SURVEYS**MUD & CHEMICALS ADDED**

° at m ° at m
 ° at m ° at m
 ° at m ° at m
 ° at m ° at m

CAL CARB - 49 XCIDE - 2
 RHODOPOL - 11
 CAUSTIC - 4
 SAWDUST - 50

BOTTOM HOLE ASSEMBLY**TIME ANALYSIS**

TOOL	ID mm	OD mm	LENGTH m	WEIGHT daN	OPERATION	TODAY	CUM.
					1. Drilling		
					2. Trips	12.25	
					3. Rig Service	0.50	
					4. Deviation Surveys		
					5. Ream & Cond. Hole		
					6. Mix & Cond. Mud		
					7. Circulation	7.50	
					8. Rig Repair WILLIAMS HED.		
					9. Run Casing & Cement	2.00	
					10. Slip and Cut Drilling Line		
					11. Logging	1.75	
					12. Rig up / tearout Loggers		
					13. AIR DRY HOLE		
TOTAL LENGTH					14. DISPLACE HOLE TO N2		
COSTS					15. Spot LCM Pill		
					16. Drilling Out		
DAILY	\$158,908				17. B.O.P. DRILL		
CUMMULATIVE	\$3,132,725				18.SHUT IN MONITOR WELL		
GR ELEV.567.9M					19. CIRC. AND MUD UP		
K.B.574.6					20. MONITOR WELL FOR LOSSES		
					21. WAIT ON LOGGERS		
					TOTAL	24	
SUPERVISOR ROD MacEACHERN/KEVIN CAMPBELL							
PH.1-403-210-2951							

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT (page 2)**FOR 24 HR PERIOD ENDING 98-02-23-08:00
Yr - Mon - Day - TimeWELL NAME PARAMOUNT ET AL ARROWHEADLOCATION N65

OPERATIONS DETAIL:

08:00-09:45 LOG WITH SCHLUMBERGER

09:45-10:00 RIG SERVICE; F/T BLIND RAMS (4sec), CHECK MOTOR KILLS

10:00-16:15 RIH

16:15-23:45 WTB; 1m FILL, CIRC AND COND HOLE(UNLOAD, DRIFT, AND STRAP CASING)

23:45-24:00 RIG SERVICE; F/T ANNULAR (14sec)

00:00-06:00 POOH TO RUN LINER

06:00-08:00 RIG UP TONG HAND AND RUN 139.7mm LINER

LOG RUN #6 FMI

WANT LIST:

WEATHER: -15ROAD: GOOD WINTER COND.

IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT**FOR 24 HR PERIOD ENDING **98-02-22-08:00**

Yr - Mon - Day - Time

WELL NAME **PARAMOUNT et al ARROWHEAD**LOCATION **N65**Day **39**Depth **2925**Metres last 24 hr **0**

HRS OB

Activity at report time **LOGGING WITH SCHLUMBERGER****DRILLING MUD PROPERTIES AT SHAKER/SUCTION/PIT**

Wt 1095 Vis 65 WL 9 Gels 4/9 Solids 0.089 PV 20 YP 20 pH 9.5
 Oil % Sand TRACE S Cake 1.5 PPMCL 84,000 PPMCa 7,400

BIT RECORD

BIT NO.	SIZE mm	MAKE & TYPE	SER. NO.	BIT		DEPTH OUT m	m DRLD TODAY	CUM m. DRLD	Rot hrs TODAY	CUM. Rot hr	m/hr	Dull Cond.		
				WT	RPM							T	B	G
4RR	152	F3D	LN4323		CLEAN	OUT	TRIP					1	1	1

CIRCULATION RECORD

BIT NO.	JETS - mm			PUMP				ANN. VEL.		JET VEL.	HHP	SURF. PRESS. kPa	
	1	2	3	STROKE	SPM	LINER	m ³ /MIN	DP	DC				
4RR	OPEN	OPEN	OPEN	254	60	152	0.834	70	105	20		7000	

DEVIATION SURVEYS**MUD & CHEMICALS ADDED**

° at m	° at m	RHODOPOL - 5	CAL CARB - 70
° at m	° at m	DEFOAM - 1	ULTRA SEAL - 16
° at m	° at m	SODA ASH - 2	LIME - 24
° at m	° at m	CAUSTIC - 8	

BOTTOM HOLE ASSEMBLY**TIME ANALYSIS**

TOOL	ID mm	OD mm	LENGTH m	WEIGHT daN	OPERATION		TODAY	CUM.
BIT		156	0.15		1. Drilling			
1-N.B. SHOCK SUB		121	1.83		2. Trips		6.50	
2-D.C.		121	18.6	1915	3. Rig Service		0.25	
					4. Deviation Surveys			
					5. Ream & Cond. Hole			
6 D.C.		121	56.01	5993	6. Mix & Cond. Mud			
1 JARS		121	3.87		7. Circulation		4.75	
1 FLOAT SUB		120	0.61		8. Rig Repair WILLIAMS HED.			
13 D.C.		121	120.5	13014	9. Run Casing & Cement			
					10. Slip and Cut Drilling Line			
					11. Logging		12.00	
					12. Rig up / tearout Loggers			
					13. AIR DRY HOLE			
					14. DISPLACE HOLE TO N2			
					15. Spot LCM Pill			
					16. Drilling Out			
					17. B.O.P. DRILL			
					18. SHUT IN MONITOR WELL			
					19. CIRC. AND MUD UP			
					20. MONITOR WELL FOR LOSSES		0.50	
					21. WAIT ON LOGGERS			
					TOTAL		24	

COSTS

DAILY \$44,553

CUMMULATIVE \$2,973,817

GR ELEV. 567.9M K.B. 574.6

SUPERVISOR **ROD MacEACHERN/KEVIN CAMPBELL**

PH. 1-403-210-2951

PARAMOUNT RESOURCES LTD.

DAILY DRILLING REPORT (page 2)

FOR 24 HR PERIOD ENDING

98-02-22-08:00

Yr Mon Day Time

WELL NAME PARAMOUNT ET AL ARROWHEAD

LOCATION N65

OPERATIONS DETAIL:

08:00-11:30 CIRC AND COND HOLE

11:30-12:00 PULL WILLIAMS HEAD AND MONITOR WELL FOR LOSSES

12:00-13:15 CIRC AND COND HOLE

13:15-13:30 RIG SERVICE; F/T ANNULAR (14sec) AND F/T REMOTE CHOKE

13:30-20:00 POOH FOR LOGGING, CHAIN OUT

20:00-08:00 LOG WITH SCHLUMBERGER

LOG RUN #5 - HNGS-HMRS

LOG RUN #6 - FMI

WANT LIST:

WEATHER: -15

ROAD: GOOD WINTER COND.

IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT**FOR 24 HR PERIOD ENDING **98-02-21-08:00**

Yr - Mon - Day - Time

WELL NAME **PARAMOUNT et al ARROWHEAD**LOCATION **N65**Day **38**Depth **2925**Metres last 24 hr **0**

HRS OB

Activity at report time **CIRCULATING MUD TO COOL DOWN HOLE****DRILLING MUD PROPERTIES AT SHAKER/SUCTION/PIT**

Wt 1090 Vis 52 WL 12 Gels 4/9 Solids 0.089 PV 25 YP 20 pH 9
 Oil % Sand TRACE S Cake 1.5 PPMCL 81000 PPMCa 7200

BIT RECORD

BIT NO.	SIZE mm	MAKE & TYPE	SER. NO.	BIT		DEPTH OUT m	m DRLD TODAY	CUM m. DRLD	Rot hrs TODAY	CUM. Rot hr	m/hr	Dull Cond.		
				WT	RPM							T	B	G
4	152	F3D	LN4323		CLEAN	OUT	TRIP					1	1	1

CIRCULATION RECORD

BIT NO.	JETS - mm			PUMP				ANN. VEL.		JET VEL.	HHP	SURF. PRESS.	
	1	2	3	STROKE	SPM	LINER	m ³ /MIN	DP	DC			kPa	
4	OPEN	OPEN	OPEN	254	60	152	0.834	70	105	20		7000	

DEVIATION SURVEYS

°	at	m	°	at	m
°	at	m	°	at	m
°	at	m	°	at	m
°	at	m	°	at	m

MUD & CHEMICALS ADDED

RHODOPOL - 6

BOTTOM HOLE ASSEMBLY

TOOL	ID mm	OD mm	LENGTH m	WEIGHT daN
BIT		156	0.15	
1-N.B. SHOCK SUB		121	1.83	
2-D.C.		121	18.6	1915
6 D.C.		121	56.01	5993
1 JARS		121	3.87	
1 FLOAT SUB		120	0.61	
13 D.C.		121	120.5	13014
	TOTAL		201.5	20922

TIME ANALYSIS

OPERATION	TODAY	CUM.
1. Drilling		
2. Trips	6.00	
3. Rig Service	0.25	
4. Deviation Surveys		
5. Ream & Cond. Hole		
6. Mix & Cond. Mud		
7. Circulation	1.50	
8. Rig Repair WILLIAMS HED.	1.50	
9. Run Casing & Cement		
10. Slip and Cut Drilling Line	0.75	
11. Logging	14.00	
12. Rig up / tearout Loggers		
13. AIR DRY HOLE		
14. DISPLACE HOLE TO N2		
15. Spot LCM Pill		
16. Drilling Out		
17. B.O.P. DRILL		
18. SHUT IN MONITOR WELL		
19. CIRC. AND MUD UP		
20. MONITOR WELL FOR LOSSES		
21. WAIT ON LOGGERS		
TOTAL	24.	

COSTS

DAILY \$42,152
 CUMMULATIVE \$2,929,264
 GR ELEV. 567.9M K.B. 574.6

SUPERVISOR **ROD MacEACHERN/KEVIN CAMPBELL**
 PH. 1-403-210-2951

PARAMOUNT RESOURCES LTD.

DAILY DRILLING REPORT (page 2)

FOR 24 HR PERIOD ENDING

98-02-21-08:00

Yr Mon Day Time

WELL NAME PARAMOUNT ET AL ARROWHEAD

LOCATION N65

OPERATIONS DETAIL:

08:00-22:00 LOG WITH SCHLUMBERGER

22:00-23:00 RIH D.C.s AND 1 STAND OF PIPE

23:00-23:15 RIG SERVICE; F/T ANNULAR (12sec), AND HCR (3sec)

23:15-00:45 CHANGE OUT BOTTOM RUBBER ON WILLIAMS ROTATING HEAD

00:45-01:30 SLIP AND CUT DRILLING LINE

01:30-06:30 RIH (BREAK CIRC @ 2530mKB), WTB LAST STAND, NO FILL

06:30-08:00 CIRCULATE HOLE TO COOL WELL DOWN

LOG RUN #3 - FMI-NDT-CNL-MLT

LOG RUN #4 - DTA-DTC-MDT-DIPOHOLE

WELL TOOK 21m3 OF DRILLING MUD WHEN TRIPPING IN THE HOLE

WANT LIST:

WEATHER: -21

ROAD: GOOD WINTER COND.

IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT**FOR 24 HR PERIOD ENDING **98-02-19-08:00**

Yr - Mon - Day - Time

WELL NAME **PARAMOUNT et al ARROWHEAD**LOCATION **N65**Day **36**Depth **2925**Metres last 24 hr **0**

HRS OB

Activity at report time **CIRC AND MUD UP****DRILLING MUD PROPERTIES AT SHAKER/SUCTION/PIT**

Wt **1120** Vis **43** WL **12** Gels **4/9** Solids **0.089** PV **25** YP **20** pH **9.8**
 Oil **%** Sand **TRACE** S **1.5** PPMCL **81000** PPMCa **7200**

BIT RECORD

BIT NO.	SIZE mm	MAKE & TYPE	SER. NO.	BIT		DEPTH OUT m	m DRLD TODAY	CUM m. DRLD	Rot hrs TODAY	CUM. Rot hr	m/hr	Dull Cond.		
				WT	RPM							I	B	G
4	152	F3D	LN4323		CLEAN	OUT	TRIP					R	N	G

CIRCULATION RECORD

BIT NO.	JETS - mm			PUMP				ANN. VEL.		JET VEL.	HHP	SURF. PRESS.	
	1	2	3	STROKE	SPM	LINER	m ³ /MIN	DP	DC			kPa	
4	OPEN	OPEN	OPEN	254	60	152	0.834	70	105	20		7000	

DEVIATION SURVEYS

°	at	m	°	at	m
°	at	m	°	at	m
°	at	m	°	at	m
°	at	m	°	at	m

MUD & CHEMICALS ADDED

ULTRASEAL - 24	ZINC CARB - 2
RHODOPOL - 14	CAUSTIC - 2
XCIDE - 2	UNIFOAM - 2
SAFE COAT - 2	CAL CARB - 224

BOTTOM HOLE ASSEMBLY

TOOL	ID mm	OD mm	LENGTH m	WEIGHT dnN
BIT		156	0.15	
1-N.B. SHOCK SUB		121	1.83	
2-D.C.		121	18.6	1915
6 D.C.		121	56.01	5993
1 JARS		121	3.87	
1 FLOAT SUB		120	0.61	
13 D.C.		121	120.5	13014
TOTAL			201.5	20922

TIME ANALYSIS

OPERATION	TODAY	CUM.
1. Drilling		
2. Trips	5.50	
3. Rig Service	0.50	
4. Deviation Surveys		
5. Ream & Cond. Hole	3.00	
6. Mix & Cond. Mud		
7. Circulation	0.50	
8. Rig Repair WILLIAMS HED.		
9. Run Casing & Cement		
10. PRESS TEST		
11. Logging		
12. Rig up / tearout Loggers		
13. AIR DRY HOLE		
14. DISPLACE HOLE TO N2	2.75	
15. Spot LCM Pill	0.50	
16. Drilling Out		
17. B.O.P. DRILL		
18. SHUT IN MONITOR WELL		
19. CIRC. AND MUD UP	11.00	
20. MONITOR WELL FOR LOSSES	0.25	
21. WAIT ON LOGGERS		
TOTAL	24	

COSTS

DAILY \$125,975
 CUMMULATIVE \$2,738,486
 GR ELEV. 567.9M K.B. 574.6

SUPERVISOR **ROD MacEACHERN/KEVIN CAMPBELL**
 PH. 1-403-210-2951

DRL-RPT.36A

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT (page 2)**FOR 24 HR PERIOD ENDING **98-02-19-08:00**
Yr. Mon - Day - TimeWELL NAME **PARAMOUNT ET AL ARROWHEAD**LOCATION **N65****OPERATIONS DETAIL:**

08:00-09:15 RIH TO 2000mKB, BREAK CIRC, RIH TO 2540mKB
09:15-09:30 RIG SERVICE: F/T ANNULAR (12 sec), CHECK MOTOR KILLS
09:30-12:15 DISPLACE HOLE TO N2 @ 2540mKB
12:15-19:15 POOH INTO CASING @ 2530mKB, MIX MUD AND BUILD VOLUME
19:15-22:15 REAM FROM: 2600mKB - 2925mKB
22:15-22:45 SPOT LCM PILL
22:45-23:45 POOH INTO CASING @2530mKB
23:45-24:00 RIG SERVICE: F/T UPPER PIPE RAMS (4sec), AND REMOTE CHOKE
00:00-00:15 PULL UP ROTATING HEAD, AND MONITOR WELL FOR FLUID LOSS
00:15-04:00 CIRC., AND MIX MUD @2530mKB
04:00-05:30 RIH 2530mKB - 2907mKB, REAM FROM 2907mKB - 2927mKB (NO FILL)
05:30-06:00 SPOT LCM PILL @ 2927mKB
06:00-06:45 POOH INTO CASING @ 2530mKB
06:45-08:00 CIRC., AND MIX MUD

WANT LIST:**WEATHER:** -28**ROAD:** GOOD WINTER COND.**IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)**

DRL-RPT.368

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT (page 2)**FOR 24 HR PERIOD ENDING 98-02-17-08:00
Yr - Mon - Day - TimeWELL NAME PARAMOUNT ET AL ARROWHEADLOCATION N65**OPERATIONS DETAIL:**

08:00-13:00 WELL SHUT IN WAIT ON LOGGERS

13:00-14:00 BLEED OF WELL, PUT WELL ON VACUUM, AND POOH

14:00-19:00 RIG UP & RUN TEMPERATURE LOG W/ COMPUTERLOG

19:00-22:45 RIH TO 1500mKB

22:45-23:00 RIG SERVICE, CHECK CROWN SAVER

23:00-00:45 DISPLACE HOLE TO N2

00:45-01:30 RIH TO 2000mKB

01:30-04:45 DISPLACE HOLE TO N2

04:45-05:45 RIH, HIT BRIDGE @ 2638mKB, WORK THROUGH BRIDGE, RIH TO 2744mKB

05:45-06:15 POOH INTO CASING @ 2411mKB

06:15-08:00 SHUT IN WELL, WAIT ON ORDERS

WHEN DISPLACING HOLE OVER TO N2, HAD TO MOVE ALLOT OF WATER BUILT UP IN THE ANNULUS, WHEN THE N2 WAS FINALLY ABLE TO GET THE ANNULUS MOVING, WELL WAS PRODUCING APPROXIMATELY 1.0m³ / MIN. DURING THE TWO TIMES HOLE WAS DISPLACED TO N2 AT 1500mKB AND 2000mKB, WELL PRODUCED 200m³ OF FORMATION FLUID.

WANT LIST:WEATHER: -15ROAD: GOOD WINTER COND.

IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)

DRL-RPT.34B

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT**FOR 24 HR PERIOD ENDING **98-02-17-08:00**
Yr - Mon - Day - TimeWELL NAME **PARAMOUNT et al ARROWHEAD**LOCATION **N65**Day **34**Depth **2925**Metres last 24 hr **0**

HRS OB

Activity at report time **WELL SHUT IN, WAIT ON ORDERS****DRILLING MUD PROPERTIES AT SHAKER/SUCTION/PIT**

Wt _____ Vis _____ WL _____ Gels _____ Solids _____ PV _____ YP _____ pH _____
 Oil _____ % Sand _____ S _____ Cake _____ PPMCL **0** PPMCa **0**

BIT RECORD

BIT NO.	SIZE mm	MAKE & TYPE	SER. NO.	BIT		DEPTH OUT m	m DRLD TODAY	CUM m. DRLD	Rot hrs TODAY	CUM. Rot hr	m/hr	Dull Cond.		
				WT	RPM							T	B	G
3RR	155	HZS84F	702078									4	2	1
4	152	F3D	LN4323		CLEAN	OUT	TRIP					R	N	G

CIRCULATION RECORD

BIT NO.	JETS - mm			PUMP			m ³ /MIN	ANN. VEL.		JET VEL.	HHP	SURF. PRESS. kPa
	1	2	3	STROKE	SPM	LINER		DP	DC			
3RR	OPEN	OPEN	OPEN	43 M3 NITROGEN								

DEVIATION SURVEYS

° at _____ m	° at _____ m
° at _____ m	° at _____ m
° at _____ m	° at _____ m
° at _____ m	° at _____ m

MUD & CHEMICALS ADDED

VISPLUS - 2	UNIFOAM - 2
VISCOM - 2	
CAUSTIC - 3	
RHODOPOL - 2	

BOTTOM HOLE ASSEMBLY

TOOL	ID mm	OD mm	LENGTH m	WEIGHT daN	TIME ANALYSIS		
					OPERATION	TODAY	CUM.
BIT		156	0.15		1. Drilling		
1-N.B. SHOCK SUB		121	1.83		2. Trips	7.00	
2-D.C.		121	18.6	1915	3. Rig Service	0.25	
					4. Deviation Surveys		
6 D.C.		121	56.01	5993	5. Ream & Cond. Hole		
1 JARS		121	3.87		6. Mix & Cond. Mud		
1 FLOAT SUB		120	0.61		7. Circulation		
13 D.C.		121	120.5	13014	8. Rig Repair WILLIAMS HED.		
					9. Run Casing & Cement		
					10. PRESS TEST		
					11. Logging	5.00	
	TOTAL		201.5	20922	12. UNPLUG ENTREST FLOW LINE		
					13. AIR DRY HOLE		
					14. DISPLACE HOLE TO N2	5.00	

COSTS

DAILY \$60,249
 CUMMULATIVE \$2,612,511
 GR ELEV. 567.9M K.B. 574.6

SUPERVISOR **ROD MacEACHERN/KEVIN CAMPBELL**
 PH. 1-403-210-2951

15. RIG UP UNDERBALA EQPT.	
16. Drilling Out	
17. B.O.P. DRILL	
18. SHUT IN MONITOR WELL	1.75
19. BLEED OFF CSG PRESSURE	
20. PUT WELL ON VACCUM	
21. WAIT ON LOGGERS	5.00
TOTAL	24

DRL-RPT.34A

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT (page 2)**FOR 24 HR PERIOD ENDING **98-02-17-08:00**
Yr - Mon - Day - TimeWELL NAME **PARAMOUNT ET AL ARROWHEAD**LOCATION **N65****OPERATIONS DETAIL:****08:00-13:00 WELL SHUT IN WAIT ON LOGGERS****13:00-14:00 BLEED OF WELL, PUT WELL ON VACUUM, AND POOH****14:00-19:00 RIG UP & RUN TEMPERATURE LOG w/ COMPUTERLOG****19:00-22:45 RIH TO 1500mKB****22:45-23:00 RIG SERVICE, CHECK CROWN SAVER****23:00-00:45 DISPLACE HOLE TO N2****00:45-01:30 RIH TO 2000mKB****01:30-04:45 DISPLACE HOLE TO N2****04:45-05:45 RIH, HIT BRIDGE @ 2638mKB, WORK THROUGH BRIDGE, RIH TO 2744mKB****05:45-06:15 POOH INTO CASING @ 2411mKB****06:15-08:00 SHUT IN WELL, WAIT ON ORDERS**

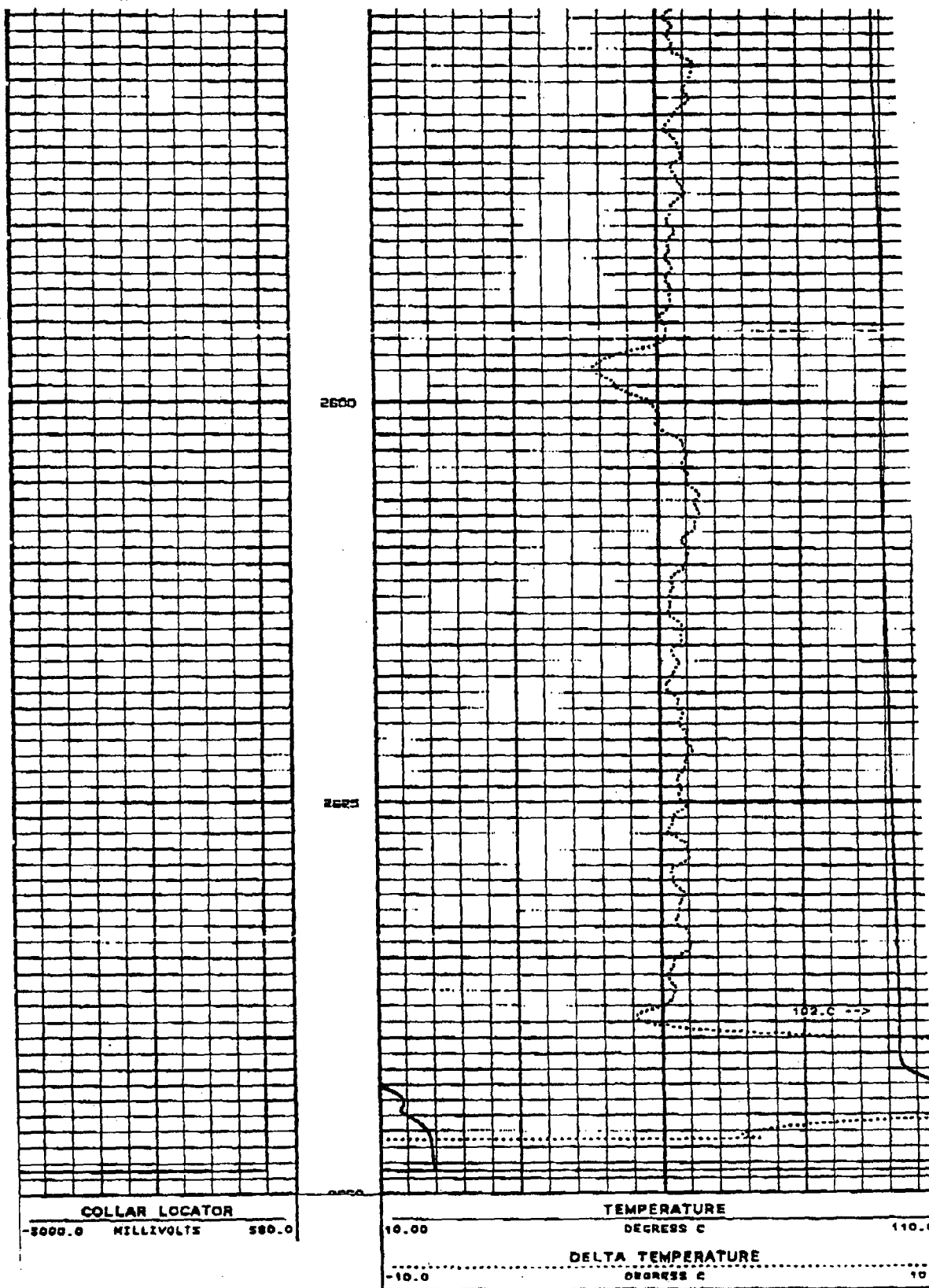
WHEN DISPLACING HOLE OVER TO N2, HAD TO MOVE ALLOT OF WATER BUILT UP IN THE ANNULUS, WHEN THE N2 WAS FINALLY ABLE TO GET THE ANNULUS MOVING, WELL WAS PRODUCING APPROXIMATELY 1.0m3 / MIN. DURING THE TWO TIMES HOLE WAS DISPLACED TO N2 AT 1500mKB AND 2000mKB, WELL PRODUCED 200m3 OF FORMATION FLUID.

WANT LIST: _____

WEATHER: **-15**ROAD: **GOOD WINTER COND.**

IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)

DRL-RPT.34B



FINISH DEPTH: 2500.0 METERS DIRECTION: DOWN DATE: 02/16/98 TIME: 18:53 MODE: TRACE PLAYBACK
OSTEM1

TEMP

v.07.21.97

VERSION: 1.04

+10.0 ?

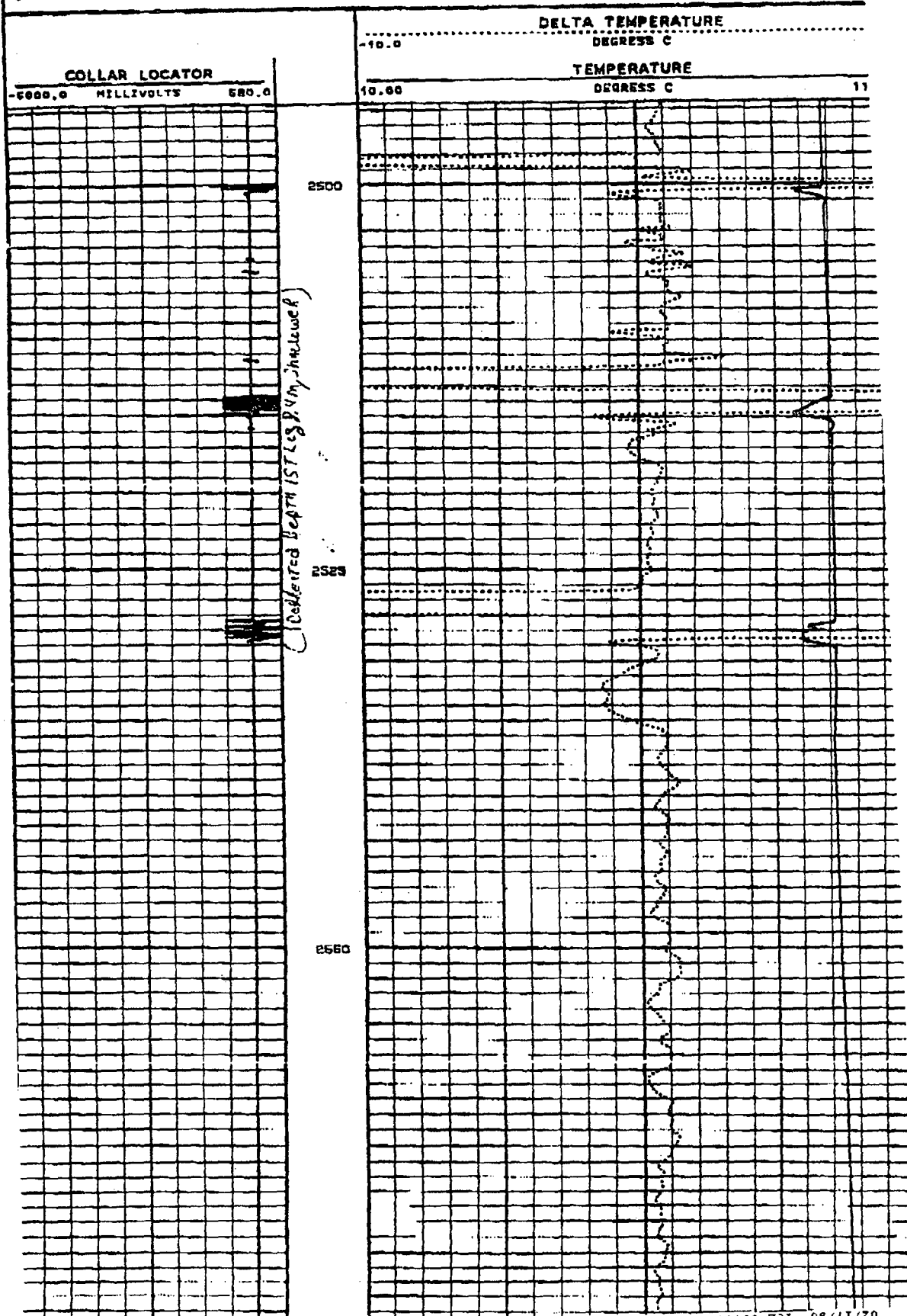
V.07.21.87

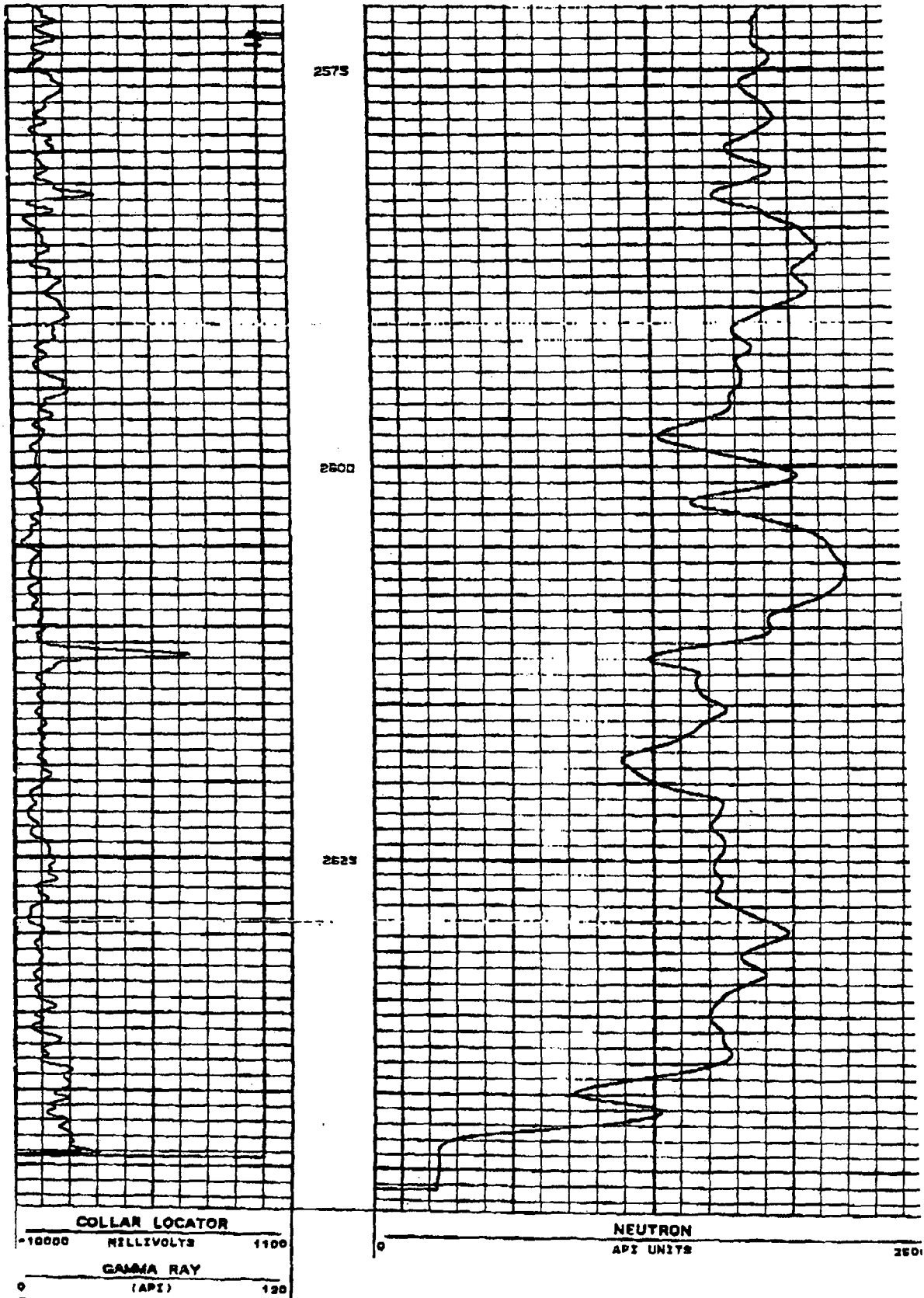
VERSION: 1.04

TEMP

OSTEM1

START DEPTH: 1780.0 METERS DIRECTION: DOWN DATE: 02/18/88 TIME: 18:25 MODE: TRACE PLAY





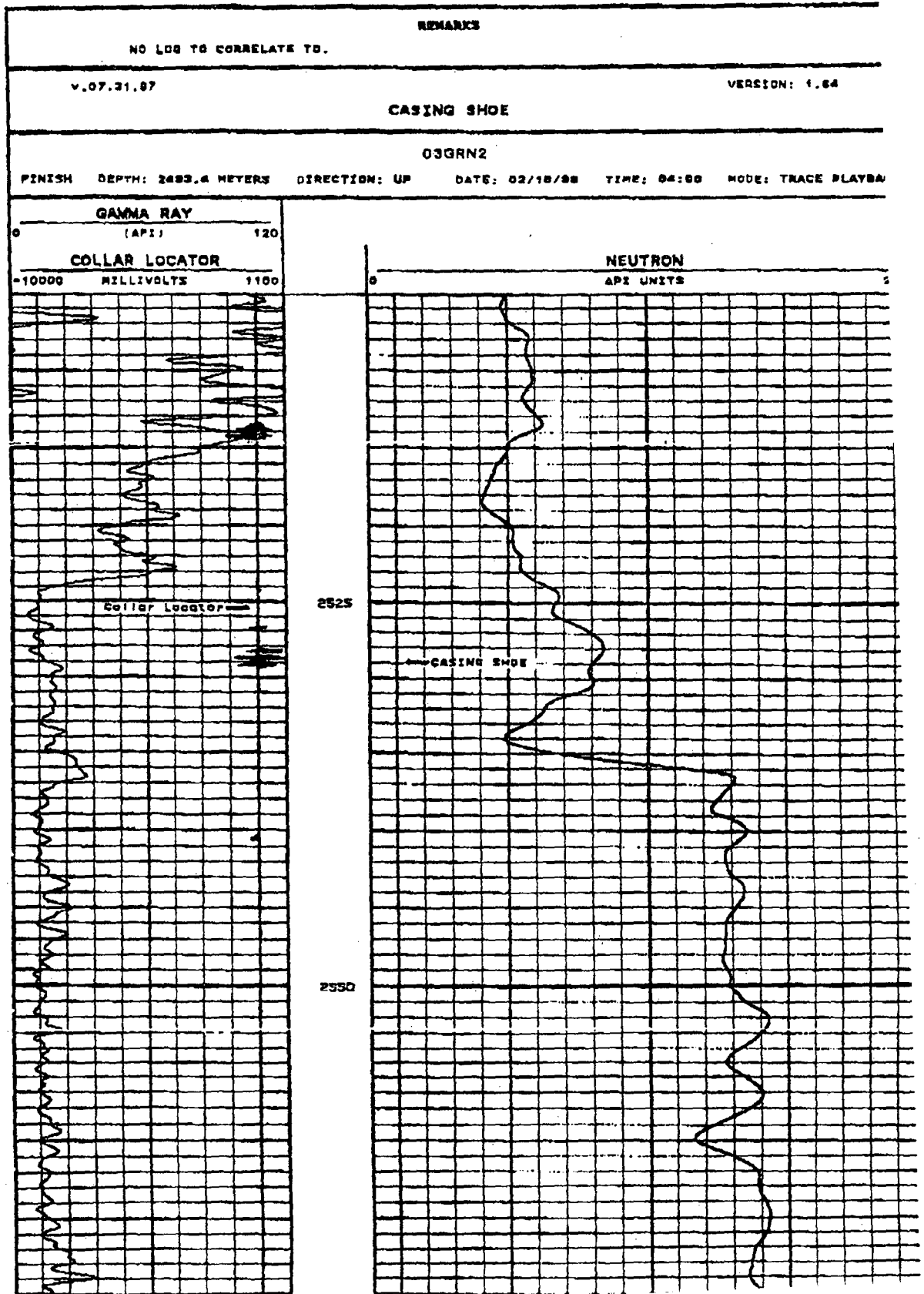
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03GRN2

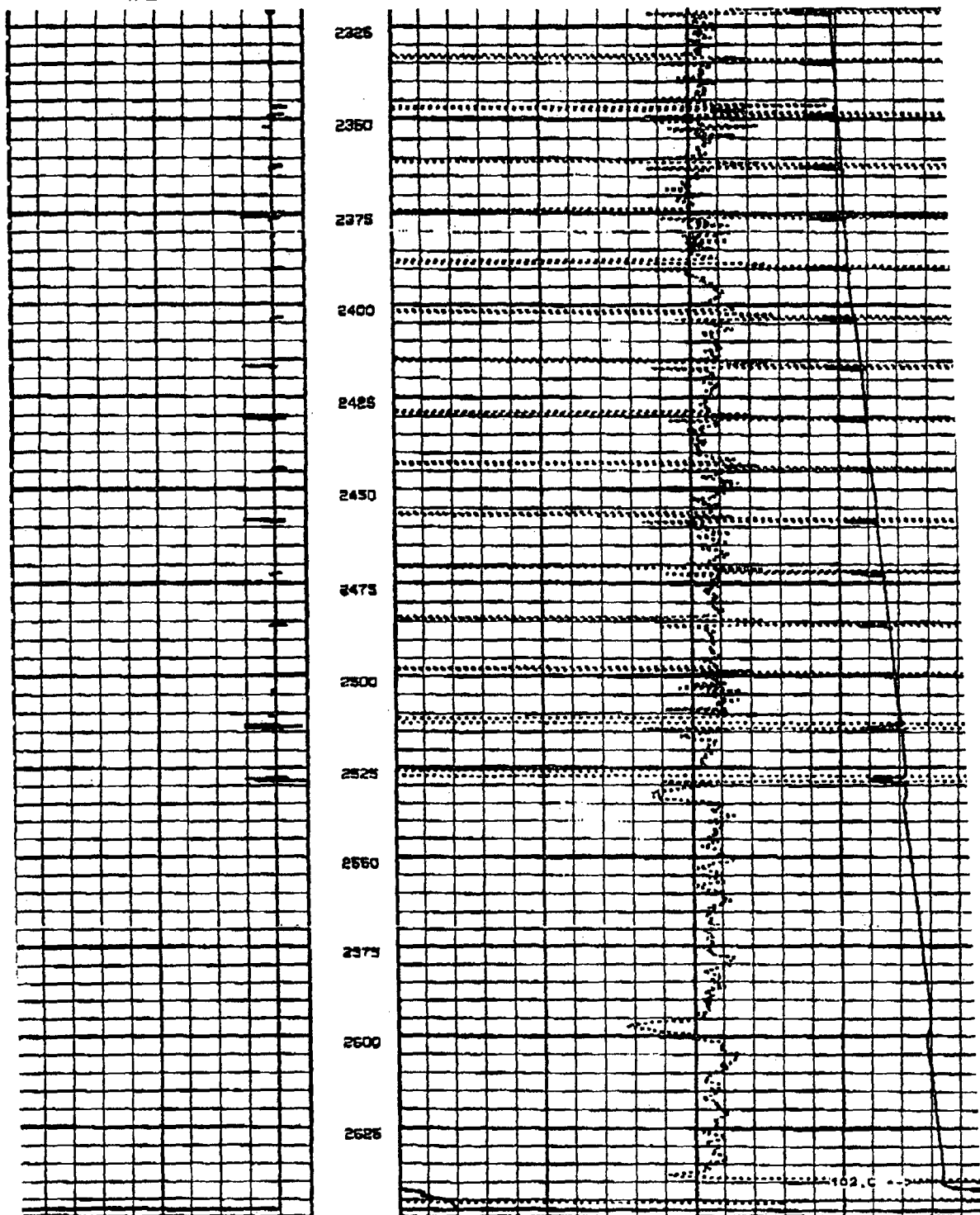
CASING SHOE

V.07.31.97

VERSION: 1.84

+ 9.9 ?





COLLAR LOCATOR
-5000.0 MILLIVOLTS 500.0

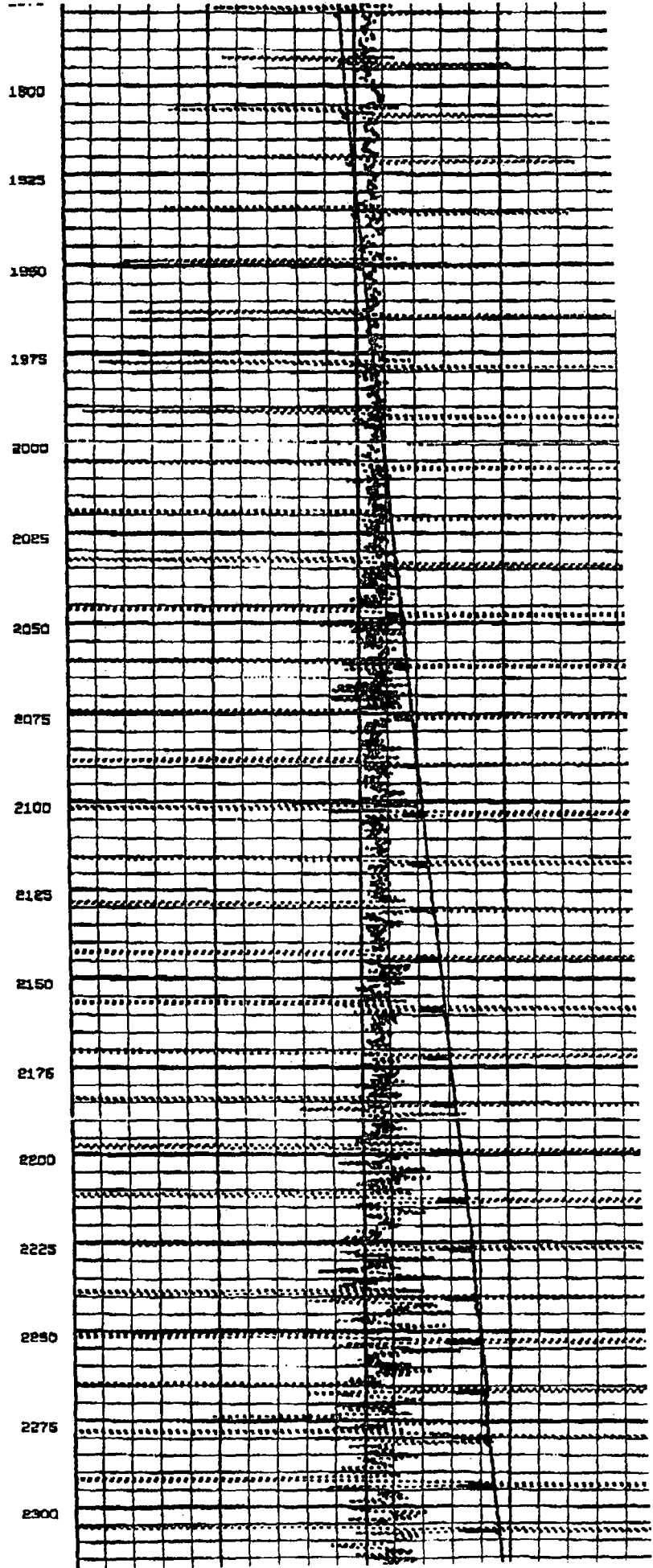
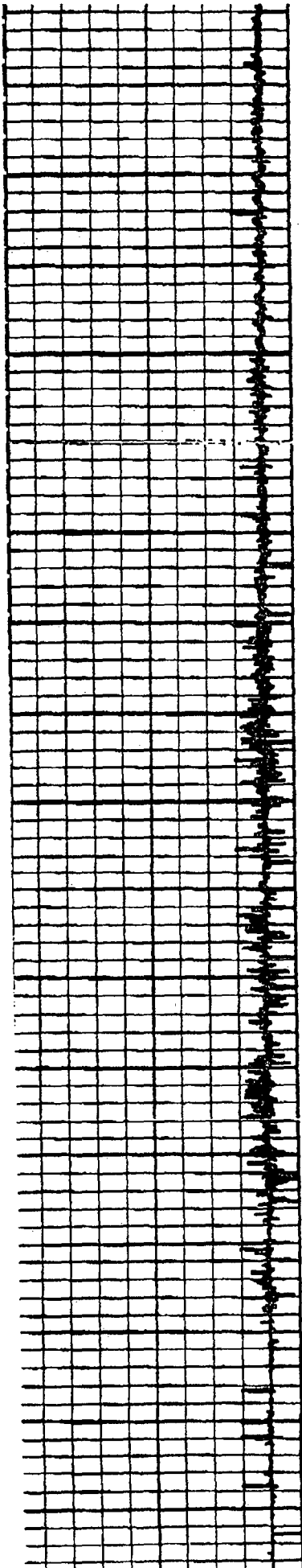
TEMPERATURE
10.00 DEGREE C 110.00
DELTA TEMPERATURE
-10.0 DEGREE C 10.0

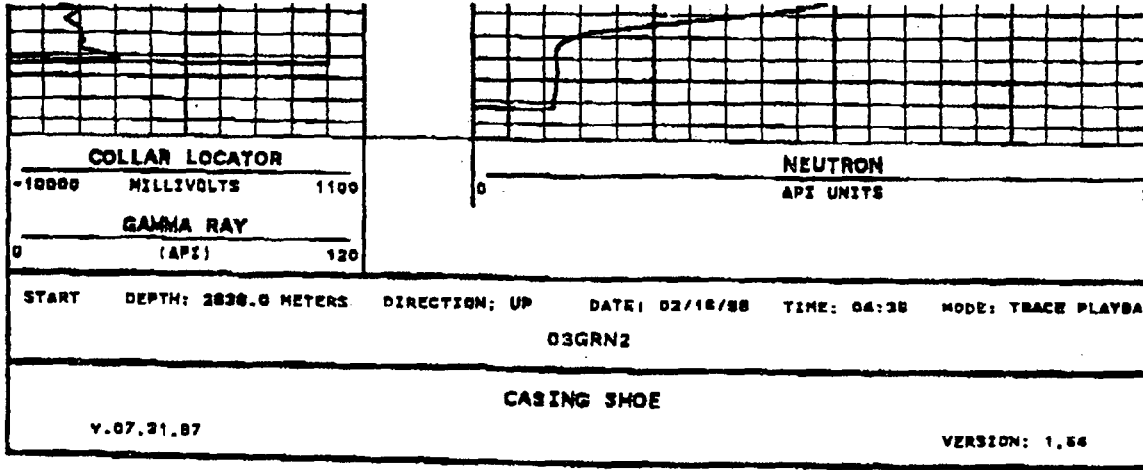
FINISH DEPTH: 2639.0 METERS DIRECTION: DOWN DATE: 02/18/98 TIME: 18:52 MODE: TRACK PLAYBACK
OSTEM1

TEMP

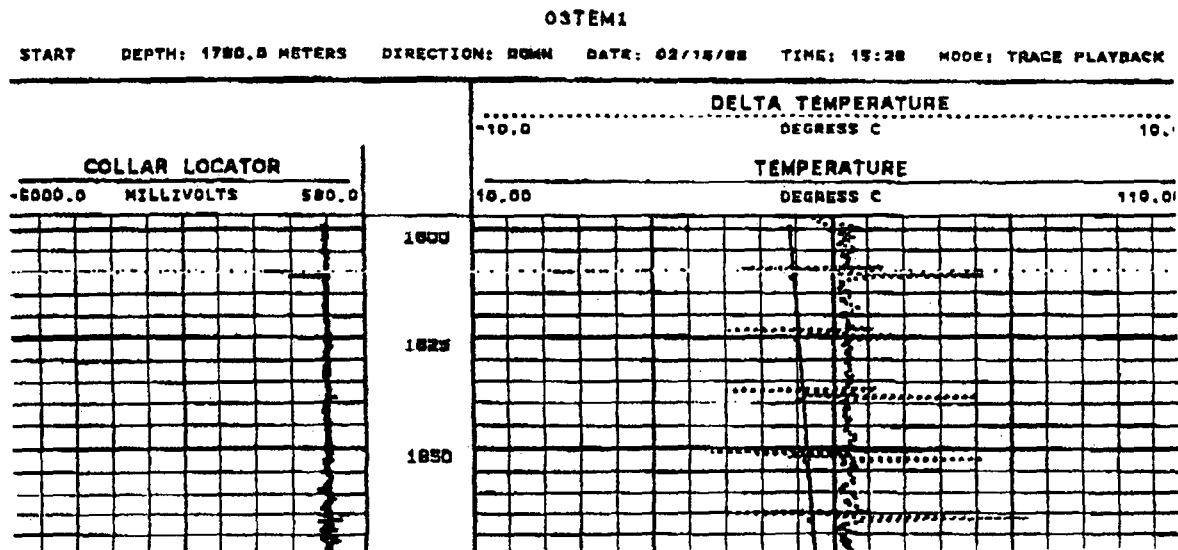
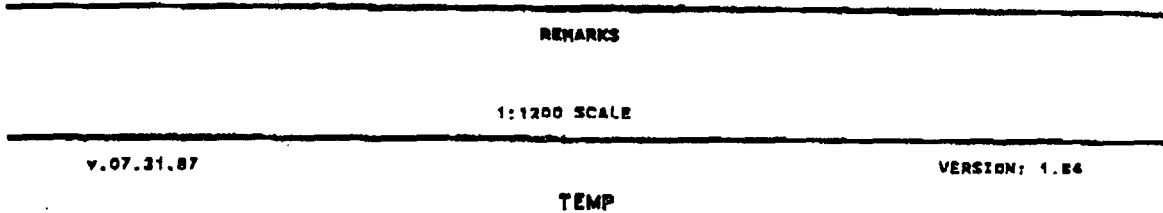
V.07.31.97

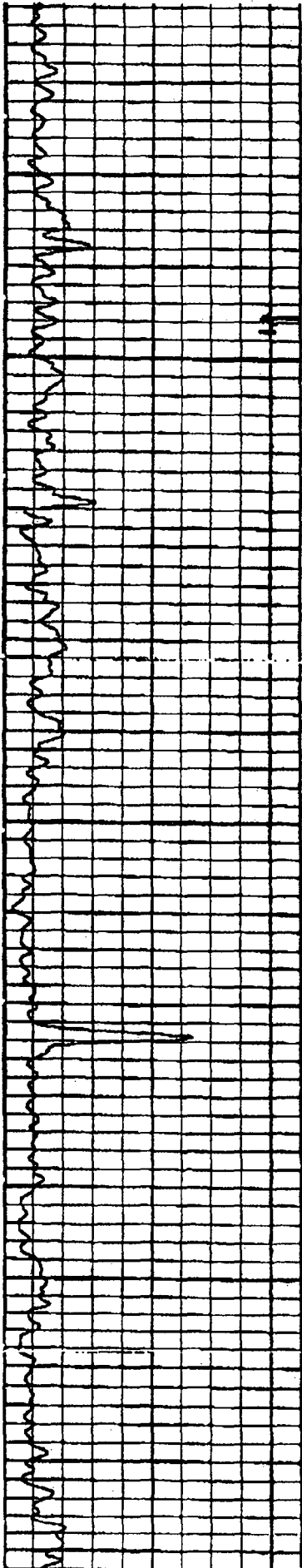
VERSION: 1.84





+9.9 ?

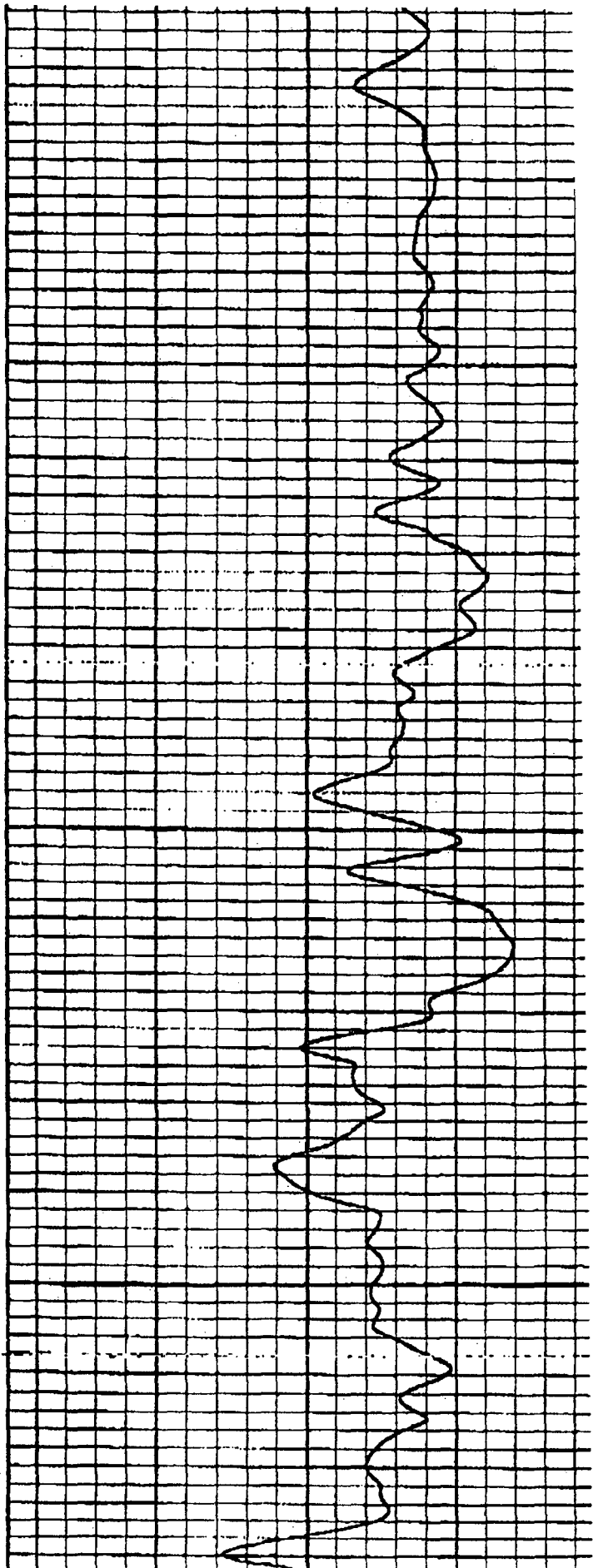




2575

2600

5292



PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT**FOR 24 HR PERIOD ENDING **98-02-16-08:00**

Yr - Mon - Day - Time

WELL NAME **PARAMOUNT et al ARROWHEAD**LOCATION **N65**Day **33**Depth **2925**Metres last 24 hr **0**

HRS OB

Activity at report time **RUN IN HOLE FOR CLEAN OUT TRIP****DRILLING MUD PROPERTIES AT SHAKER/SUCTION/PIT**

Wt _____ Vis _____ WL _____ Gels _____ Solids _____ PV _____ YP _____ pH _____
 Oil _____ % Sand _____ S _____ Cake _____ PPMCL **0** PPMCa **0**

BIT RECORD

BIT NO.	SIZE mm	MAKE & TYPE	SER. NO.	BIT		DEPTH OUT m	m DRLD TODAY	CUM m. DRLD	Rot hrs TODAY	CUM. Rot hr	m/hr	Dull Cond.		
				WT	RPM							T	B	G
2	155	HZS84F	702078	10	50	2925		78		7	11	4	2	1
3RR	155	HZS84F	702078		CLEAN	OUT	TRIP					R	N	G

CIRCULATION RECORD

BIT NO.	JETS - mm			PUMP				ANN. VEL.		JET VEL.	HHP	SURF. PRESS. kPa
	1	2	3	STROKE	SPM	LINER	m ³ /MIN	DP	DC			
3RR	OPEN	OPEN	OPEN	43 M3 NITROGEN								

DEVIATION SURVEYS**MUD & CHEMICALS ADDED**

° at m ° at m
 ° at m ° at m
 ° at m ° at m
 ° at m ° at m

SAFE COAT - 8
 ZINC CARB-5

BOTTOM HOLE ASSEMBLY**TIME ANALYSIS**

TOOL	ID mm	OD mm	LENGTH m	WEIGHT daN	OPERATION	TODAY	CUM.
					1. Drilling		
BIT		156	0.15		2. Trips	4.00	
1-N.B. SHOCK SUB		121	1.83		3. Rig Service		
2-D.C.		121	18.6	1915	4. Deviation Surveys		
					5. Ream & Cond. Hole		
6 D.C.		121	56.01	5993	6. Mix & Cond. Mud		
1 JARS		121	3.87		7. Circulation		
1 FLOAT SUB		120	0.61		8. Rig Repair WILLIAMS HED.		
13 D.C.		121	120.5	13014	9. Run Casing & Cement		
					10.PRESS TEST		
					11. Logging	4.75	
	TOTOL		201.5	20922	12. UNPLUG ENTST FLOW LINE		
					13. AIR DRY HOLE		
					14. DISPLACE HOLE TO N2		

COSTS

DAILY \$39,696
 CUMMULATIVE \$2,547,962
 GR ELEV. 567.9M K.B. 574.6

SUPERVISOR **ROD MacEachern/KEVIN CAMPBELL**
 PH. 1-403-210-2951

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT (page 2)**FOR 24 HR PERIOD ENDING **98-02-16-08:00**
Yr - Mon - Day - TimeWELL NAME **PARAMOUNT ET AL ARROWHEAD**LOCATION **N65****OPERATIONS DETAIL:**

08:00-18:30 WELL SHUT IN, WAIT ON LOGGERS, MONITOR CSG PRESSURE

18:30-21:45 BLEED OFF CSG PRESSURE

21:45-00:15 POOH TO RUN LOGS

00:15-01:00 PUT WELL ON VACUUM

01:00-01:45 POOH TO RUN LOGS

01:45-06:30 RIG UP TO LOG & LOG w/COMPUTALOG, BRIDGE OFF @ 2635mKB

06:30-07:15 PUT WELL ON VACUUM

07:15-08:00 RIH FOR CLEAN OUT TRIP

COMPUTALOG RUN LOGS WITH LUBRICATOR HEAD IN UNDERBALANCED WELL.

LOG:HOLE BRIDGED OFF AT 2635M KB. LOGGED FROM 2635 UP TO 2495M

GR-NEU-GRON LOG RAN.

MAX CSG. PRESS WITH WELL SHUT IN WHILE WAITING ON LOGGERS =9400 KPA

WANT LIST:WEATHER: **-12**ROAD: **GOOD WINTER COND.****IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)**

page 28 -

Wellname : PARAMOUNT ET AL ARROWHEAD
 Location : N65
 Date : 02-16-98
 Contact : Paul Collens 290-3605

AM REPORT
 DFS:33

Depth @ 0800hrs: 2925 24 hr Progress: 0
 Rotating hrs: 0
 Present operations: Running in hole with drill string

ROP: m/hr
 Drill fluid: N2 Dens: Visc: Wt: pH:

Surveys:

FORMATION TOPS				KB:574.6M
Formation	Prognosis	Sample	Log	Subsea
Slave Pt	2564m	2520m		
Watt Mtn	--	2565m		
Sulphur Pt	--	2573m		
Nahanni	2564m	2639m		
Headless SH	--	2740m		
Landry (Manetoe)		2768m		
Arnica	--	2834m		
TD		2925m		

SHOW SUMMARY:

Formation	Interval	Gas show/BGC	Lith/por/shows/remarks
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Well shut in at TD - 9400Kpa; Gas sample taken on blow down;

Remarks: Computalog on location at 1500hrs - could not get GR Neutron cased hole log deeper than Sulphur pt / Nahanni contact and fracture zone at 2639m with 3 attempts. Temp log on the way to location; logged out of well 2633m - 2435m (liner shoe at 2529m)

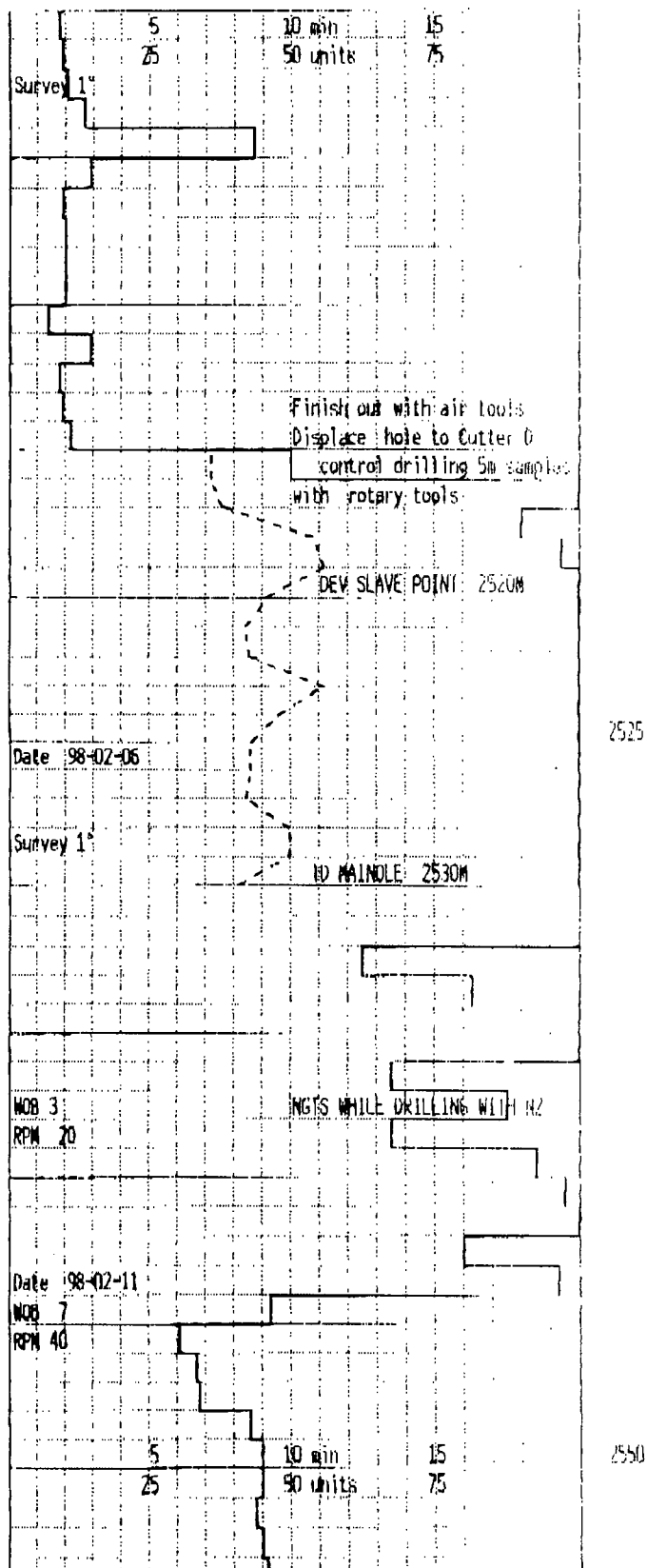
Geologist: D.Ferguson
 Phone: 210-2251

PARAMOUNT et al ARROWHEAD N65
LAT 60 34' LONG 122 57'

HYDROCARBON SHOW SUMMARY

FORMATION	INTERVAL	REMARKS
Sulphur Pt	2578	No samples - probable flare 20' flare for 3min
Sulphur Pt	2595	No samples - probable flare 3.1mmcf/d
"	2595-2635	avg 1.7mmcf/d
Sulphur Pt/ Nahanni	2636	28.65mmcf/d decr to 19mmcf/d decr to 8.5mmcf/d 250l/min 70,000 ppm
Nahanni	2640-2740	14mmcf/d decr steadily 10mmcf/d 150l/min 120,000ppm
Headless	2740-2768	10mmcf/d decr to 8mmcf/d 250l/min 98,000 ppm
Landry	2768-2812	9mmcf/d decr to 8mmcf/d
	2813	8mmcf/d incr to 10.5mmcf/d 170l/min 110,000 ppm
	2825	10mmcf/d 200l/min 130,000ppm
Arnica	2838-2847	12mmcf/d decr to 8mmcf/d 300 l/min 142,000ppm
	2847-2925	steady 8.5mmcf/d 300 - 500 l/min 130,000ppm

N 65 Serial



SH-blk, brn ip, fi - sfis, sl calc, scat pyr
thru;

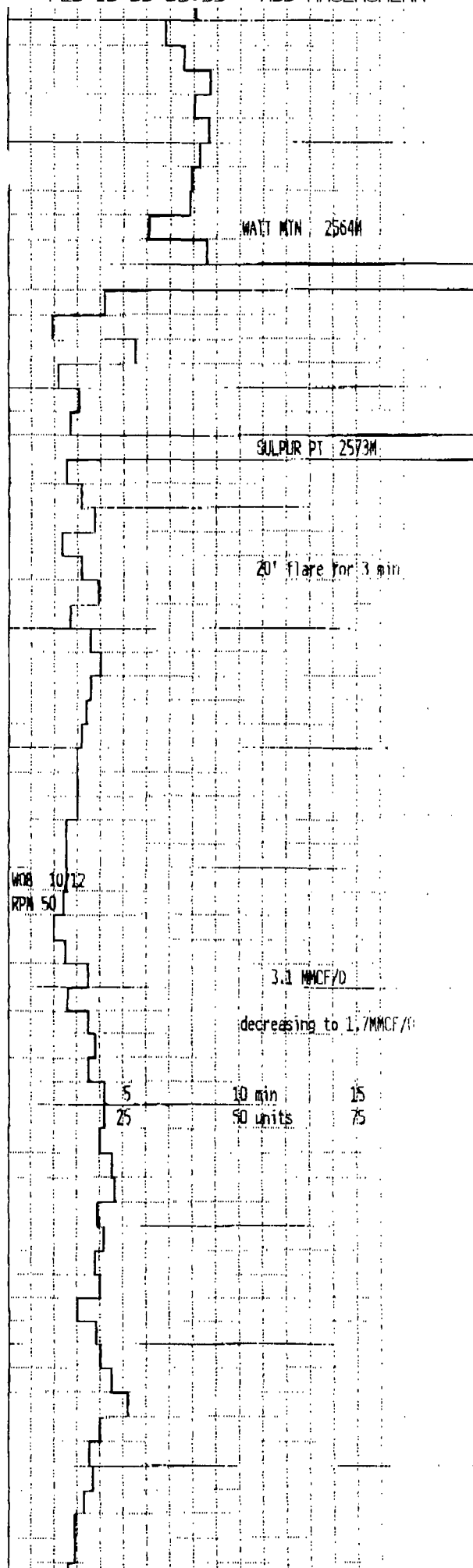
SH-blk, brn ip, fi - sfis, mod calc, scat
pyr thru;

SH-blk, brn ip, mod calc str, grdg to arg LS
ip, scat pyr; LS-ll gy, brn, dk gy ip, mot
ip, frag ip / an clc and trns ca frc fill -
euhedral xls ip, NVS, MVP, tr sks ip, scat
arg lam, scat dol str, ooc silty;
LS-dk gy, brn, lt gy ip, mot ip, scat clc ca
frc fill - euhedral xls ip, NVS, MVP, tr sks
ip;

LS-m - dk gy, brn, lt gy ip, mot ip, scat clc
ca frc fill - euhedral xls ip, NVS, MVP;

NS-No sample returns while drilling with N2;

NS-No sample returns while drilling with N2;



25/5

2600

NS: No sample returns while drilling with N2;

NS: No sample returns while drilling with N2;

2625

Date: 98-02-12

28.6 MMCF/D decr to

19 MMCF/D

19 MMCF/D Decr to

8.5 MMCF/D

NAHANNI 2639M

2501/min 70,000 ppm

WOB 10/12

RPM 50

5

10 min

15

25

50 units

75

2650

2675

NS-No sample returns while drilling with N2;

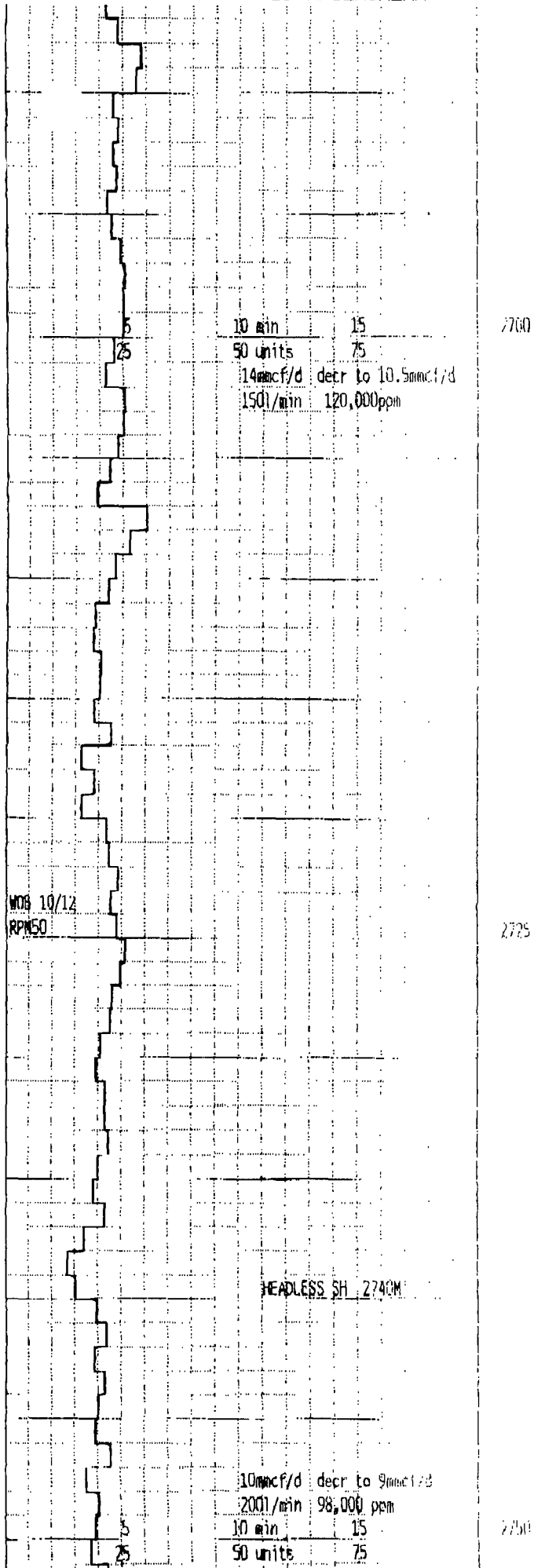
LS-lt gy, m gy brn, occ mot ip, scat clr and
wh ca frc fill - tr euهدral xls ip, NVS,
NVP, scat pyr ip; LS-lt gy, m gy brn, occ mot
ip, scat clr and wh ca frc fill - tr euهدral
xls ip, NVS, NVP, scat pyr ip;

LS-m - dk gy brn, scat clr ca frc fill -
euهدral xls ip, NVS, NVP;

NS-No sample returns while drilling with N2;

LS-m - dk gy brn, tr clr, trns ca frc fill -
euهدral xls ip, NVS, NVP;

NS-No sample returns while drilling with N2;



LS-m - dk gy brn, tr clr, trns ca frc fill -
euhedral xls ip, NVS, NVP;

LS-m - dk gy brn, tr clr, trns ca frc fill -
euhedral xls ip, NVS, NVP, tr pyr vn ip, rr
dol frc fill isp; LS-m - dk gy brn, scat wh
ca frc fill - euhedral xls ip, rr dol frc
fill ip, NVS, NVP, scat pyr vn;

LS-m - dk gy brn, tr clr, trns ca frc fill -
euhedral xls ip, NVS, NVP, tr pyr vn ip, rr
dol frc fill isp; LS-m - dk gy brn, scat wh
ca frc fill - euhedral xls ip, rr dol frc
fill ip, NVS, NVP, scat pyr vn;

LS-m - dk gy brn, occ lt brn ip, tr wh - trns
ca frc fill - euhedral xls ip, NVS, NVP, rr
dol frc fill isp;

WOB 10
RPM 50

LANDRY 2768M
(MANETOL: ?)

9mm f/11 decr to 8.2 mm f/8
170 l/min 110,000 ppm

2775

5

10 min
50 units

15

75

2800

LS-m - dk gy brn, lt gy ip, scat wh ca frc
fill - euhedral xls ip, rr dol frc fill ip,
NVS, NVP, scat pyr vn isp;

LS-m - dk gy brn, lt gy ip, scat wh ca frc
fill - euhedral xls ip, rr dol frc fill ip,
NVS, NVP, scat pyr vn isp; DOL-wh, not lt gy
ip, NVS, NVP, tr dol frc fill;

LS-m - dk gy brn, lt gy ip, scat wh ca frc
fill - euhedral xls ip, rr dol frc fill ip,
NVS, NVP, scat pyr vn isp; DOL-wh, not lt gy
ip, NVS, NVP, tr dol frc fill;

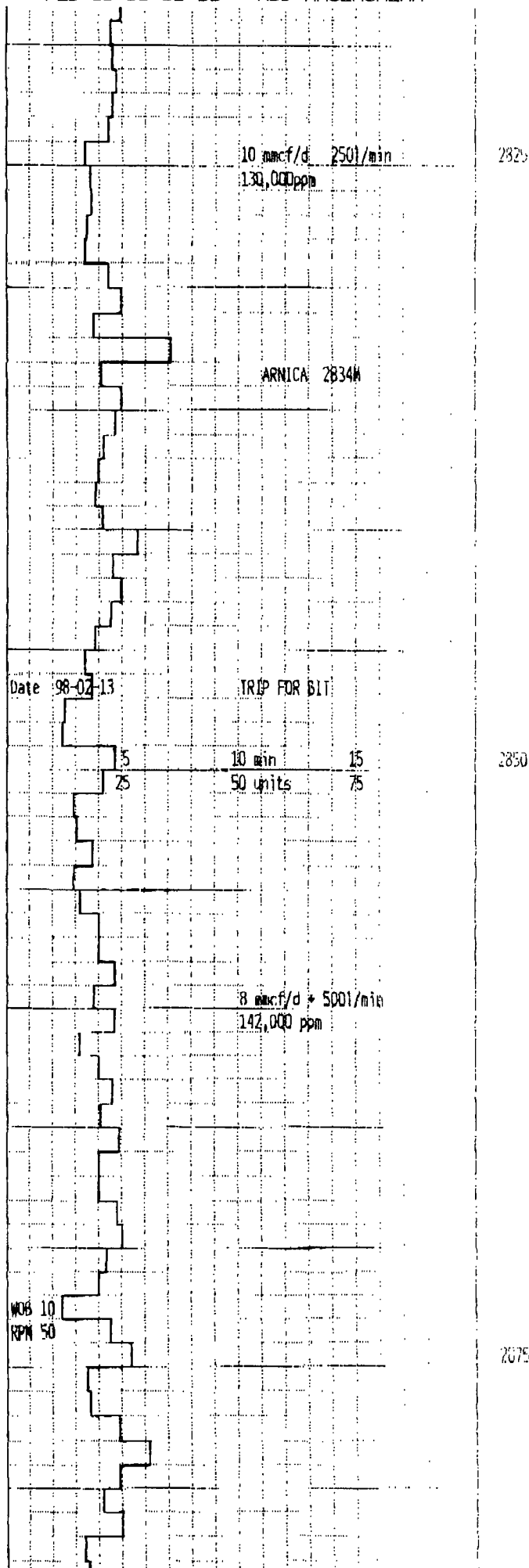
LS-m - dk gy brn, lt gy ip, scat wh dol frc
fill - euhedral xls ip, NVS, NVP; DOL-lt gy -
m gy, NVS, tr iron stn, NVP, bcng sl arg ip,
scat dol frc fill, scat pyr, dis;

LS-m - dk gy brn, dk gy - blk ip, scat wh ca
and dol frc fill - euhedral xls ip, scat iron
stn, NVS, NVP; DOL-lt gy - m gy, NVS, tr iron
stn, NVP, bcng sl arg ip, scat dol frc fill,
scat pyr, dis;

LS-m - dk gy brn, tr wh ca and dol frc fill -
euhedral xls ip, scat iron stn, NVS, NVP;

DOL-m gy - lt gy ip, NVS, tr iron stn, NVP,
bcng sl arg ip, scat wh dol frc fill, scat
pyr, dis;

LS-m - dk gy brn, tr wh ca and dol frc fill -
euhedral xls ip, scat iron stn, NVS, NVP;
DOL-lt gy - m gy ip, NVS, tr iron stn, NVP,



DOL-11 gy, m gy ip, NVS, tr iron stn, NVP,

com wh dol frc fill, scat pyr, dis; DOL-wh, strms, NVS, NVP, L dol frc fill;

DOL-11 gy, NVS, com iron stn, NVP, com wh dol frc fill, scat pyr, ip, dis;

DOL-11 gy, wh, NVS, abnt iron stn, NVP, scat wh dol frc fill, L wh ca frc fill ip;

DOL-wh, strms, NVS com iron stn, NVP, tr dol frc fill;

DOL-11 gy, wh, NVS, abnt iron stn, NVP, scat wh dol frc fill, L wh ca frc fill ip; SM-dk gy, blk ip, blk, L calc, sl dol;

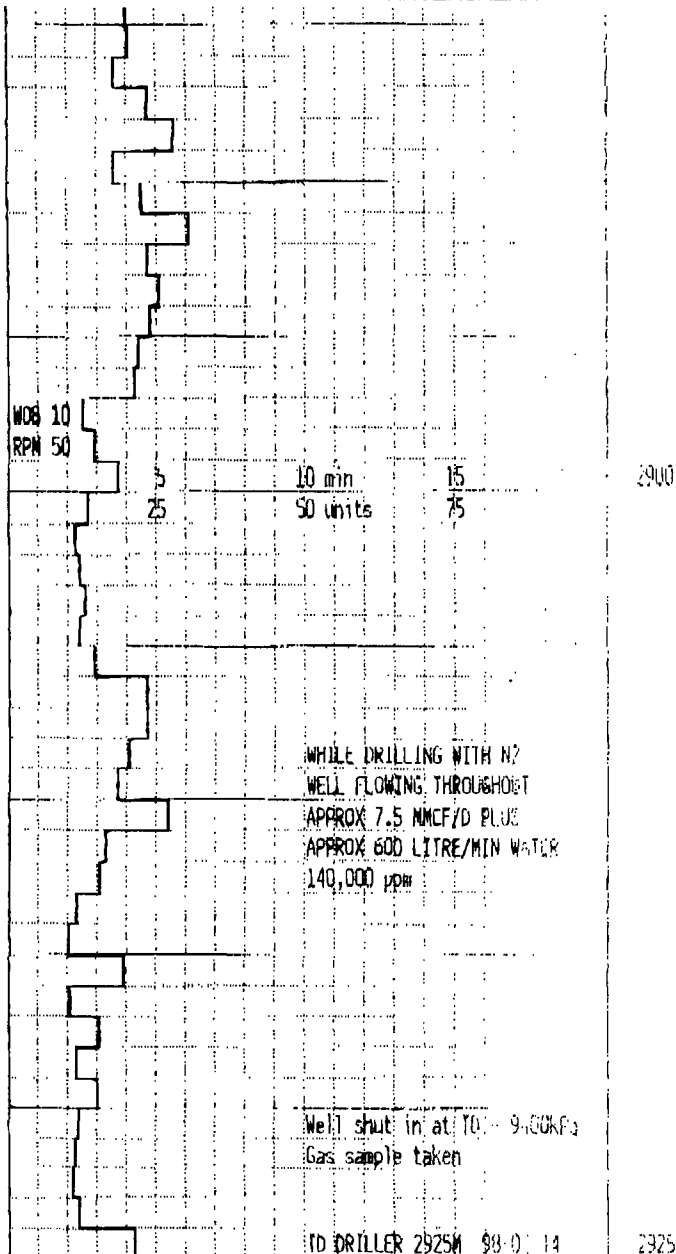
DOL-11 gy, wh, NVS, abnt iron stn, NVP, scat wh dol frc fill, L wh ca frc fill ip;

DOL-11 gy, wh, occ m gy ip, NVS, abnt iron stn, scat tn ibd L, NVP, scat wh dol frc fill, L wh ca frc fill ip; DOL-wh, strms, NVS, com iron stn, NVP, tr dol frc fill; LS-m gy - dk gy ip, NVS, NVP;

DOL-11 gy, wh, occ m gy ip, NVS, abnt iron stn, scat tn ibd L, NVP, tr wh dol frc fill ip, sl calc str ip, LS-m gy - dk gy ip, occ lt gy ip, NVS, NV;

DOL-11 gy, wh, occ m gy ip, NVS, abnt iron stn, scat tn ibd L, NVP, tr wh dol frc fill ip, sl calc str ip; DOL-wh, strms, NVS, com iron stn, NVP, frc fill ip;

DOL-11 gy, wh, occ m gy ip, NVS, abnt iron stn, scat tn ibd L, NVP, tr wh dol frc fill ip, sl calc str ip; DOL-dk gy, blk ip, NVS, NV, tr wh dol frc fill ip;



DOL lt. gy, wh, ool m gy ip, NVS, abnt iron
stn, NVP, lr wh dol frc fill ip; DOL-dk gy,
blk ip, NVS, NVP, lr wh dol frc fill ip;

DOL-gy, brn, ool m gy ip, NVS, abnt iron stn,
NVP, lr wh dol frc fill ip;

DOL-gy, brn, ool m gy ip, NVS, com iron stn,
NVP, lr wh dol frc fill ip;

DOL lt. gy, brn, ool m gy ip, NVS, scat iron
stn, scat styl, NVP, lr wh dol frc fill ip;
DOL dk gy, blk ip, NVS, NVP;

2925

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT**FOR 24 HR PERIOD ENDING **98-02-15-08:00**

Yr - Mon - Day - Time

WELL NAME **PARAMOUNT et al ARROWHEAD**LOCATION **N65**Day **32**Depth **2925**Metres last 24 hr **78**HRS OB **,7**Activity at report time **WAIT ON LOGGERS - WELL SHUT IN****DRILLING MUD PROPERTIES AT SHAKER/SUCTION/PIT**

Wt _____ Vis _____ WL _____ Gels _____ Solids _____ PV _____ YP _____ pH _____
 Oil _____ % Sand _____ S _____ Cake _____ PPMCL **0** PPMCa **0**

BIT RECORD

BIT NO.	SIZE mm	MAKE & TYPE	SER. NO.	BIT		DEPTH OUT m	m DRLD TODAY	CUM m. DRLD	Rot hrs TODAY	CUM. Rot hr	m/hr	Dull Cond.		
				WT	RPM							T	B	G
2	155.4	HZS84F	702078	,10	50		78	78	7.00	7.00	11.00	R	N	G

CIRCULATION RECORD

BIT NO.	JETS - mm			PUMP				ANN. VEL.		JET VEL.	HHP	SURF. PRESS. kPa
	1	2	3	STROKE	SPM	LINER	m ³ /MIN	DP	DC			
2	18	18	18	43 M3 NITROGEN								

DEVIATION SURVEYS**MUD & CHEMICALS ADDED**

_____ ° at _____ m	_____ ° at _____ m	VIS PLUS - 5	X CIDE - 2
_____ ° at _____ m	_____ ° at _____ m	VIS COM - 6	CAUSTIC - 4
_____ ° at _____ m	_____ ° at _____ m	RHODOPOL - 4	SAFE COTE - 7
_____ ° at _____ m	_____ ° at _____ m	ZINC CARB - 6	UNI FOAM - 5

BOTTOM HOLE ASSEMBLY**TIME ANALYSIS**

TOOL	ID mm	OD mm	LENGTH m	WEIGHT daN	OPERATION		TODAY	CUM.
BIT		156	0.15		1. Drilling		7.00	
1-N.B. SHOCK SUB		121	1.83		2. Trips		2.50	
2-D.C.		121	18.6	1915	3. Rig Service		0.25	
					4. Deviation Surveys			
6 D.C.		121	56.01	5993	5. Ream & Cond. Hole		2.00	
1 JARS		121	3.87		6. Mix & Cond. Mud			
1 FLOAT SUB		120	0.61		7. Circulation		0.50	
13 D.C.		121	120.5	13014	8. Rig Repair WILLIAMS HED.			
					9. Run Casing & Cement			
					10. PRESS TEST			
					11. Logging			
TOTAL			201.5	20922	12. UNPLUG ENTST FLOW LINE			
					13. AIR DRY HOLE			
					14. DISPLACE HOLE TO N2			
					15. RIG UP UNDERBALA EQPT.			
					16. Drilling Out			
					17. B.O.P. DRILL			
					18. SHUT IN MONITOR WELL			
					19. SLIP & CUT DRL'G. LINE			
					20. KILL WELL			
					21. WAIT ON LOGGERS		11.25	
					TOTAL		24	

COSTS

DAILY \$57,993

CUMMULATIVE \$2,508,266

GR ELEV. 567.9M K.B. 574.6

SUPERVISOR **ROD MacEACHERN/KEVIN CAMPBELL**
 PH. 1-403-210-2951

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT (page 2)**FOR 24 HR PERIOD ENDING **98-02-15-08:00**
Yr - Mon - Day - TimeWELL NAME **PARAMOUNT ET AL ARROWHEAD**LOCATION **N65****OPERATIONS DETAIL:**

08:00-08:30 SLIP AND CUT DRILLING LINE

08:30-09:30 RIH TO 2801mKB

09:30-11:30 REAM TO BOTTOM fr 2801mKB - 2847mKB (5.5m OF UNDER GUAGE HOLE)

11:30-18:30 DRILL 156mm HOLE fr 2855mKB - 2925mKB

18:30-19:00 CIRC, INCREASE IN DP PRESSURE / INCREASE IN FLUID RETURNS

19:00-20:30 POOH fr 2925mKB - 2483mKB (INTO CASING)

20:30-20:45 RIG SERVICE; F/T UPPER PIPE RAMS (3 SEC)

20:45-08:00 SHUT IN WELL AND WAIT ON LOGGERS

PUMPED 10m3 INHIBITOR DOWN ANNULUS AND DOWN DRILL PIPE AT 24:00hrs AND AT 06:00hrs.

SECOND MAN CAME IN ON 98-02-13 AS PER NEB POLICY.

DID YOU HAVE A PARTICULAR TRUCKING COMPANY IN MIND TO MOVE RIG, OR SHOULD WE GET SOME FIELD BIDS?

TRANSFER

ROLLER REAMER S/N:CR1712-03 444mm, PROPANE PIG, 4 BOXES OF NEW REAMER REPAIR KITS (BLADES, PINS, ETC...)

WANT LIST:WEATHER: **-10**ROAD: **GOOD WINTER COND.****IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)**

TRANSFER TO ARROWHEAD O15: 1 - 444.5 MM BIT SN:687007, 8 JTS 339.7mm 81.1kg/m

J-55 ST&C LTV NET = 109.52m, GROSS = 110.32m, ROLLER REAMER S/N:10047 311mm,

ROLLER REAMER S/N:10050 311mm, SHOCK SUB S/N: DJ6 675-40-V 171mm, ROLLER

REAMER S/N:10763 444mm, ROLLER REAMER S/N: 08347-3 219.1mm, cont up top...

Wellname : PARAMOUNT ET AL ARROWHEAD
 cation : N65
 ate : 02-15-98
 Contact : Paul Collens 290-3605

AM REPORT

DFS: 32

Depth @ 08:00 hrs: 2925m Progress last 24 hrs: 78 m
 Rotating hrs:

Present operations: Wait on loggers

ROP: .m/hr

Drill fluid: Dens: Vis: WL: pH:

SURVEYS

FORMATION TOPS			KB: 574.6m
Formation	Prognosis	Sample	Subsea
Slave Pt	2564m	2520m	
Watt Mtn	--	2565m	
Sulphur Pt	--	2573m	
Nahanni	2564m	2639m	
Headless SH	--	2740m	
Landry (Manetoc)		2768m	
Arnica	--	2834m	
TD		2925m	

SHOW SUMMARY:

Formation	Interval	gas show/BOG	Lith/por/shows/remarks
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Refer to attached striplog and gas flow charts

REMARKS: Pull up into casing; shut well in and WO Loggers;
 Computalog is scheduled to arrive with cased hole GR - Neutron
 this afternoon.

Geologist: D. Ferguson

Cell: 1-403-210-0371

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT**FOR 24 HR PERIOD ENDING **98-02-14-8:00**
Yr - Mon - Day - TimeWELL NAME **PARAMOUNT et al ARROWHEAD**LOCATION **N65**Day **31**Depth **2847**Metres last 24 hr **0**

HRS OB

Activity at report time **RUN IN TO UNDERBALANCE N2 DRILL 156 HOLE.****DRILLING MUD PROPERTIES AT SHAKER/SUCTION/PIT**

Wt _____ Vis _____ WL _____ Gels _____ Solids _____ PV _____ YP _____ pH _____
 Oil _____ % Sand _____ S _____ Cake _____ PPMCL **0** PPMCa **0**

BIT RECORD

BIT NO.	SIZE mm	MAKE & TYPE	SER. NO.	BIT		DEPTH OUT m	m DRLD TODAY	CUM m. DRLD	Rot hrs TODAY	CUM. Rot hr	m/hr	Dull Cond.		
				WT	RPM							T	B	G
1	155.4	SECHZS84F	709977	10/12	50		211	317	18.25	33.25	6.75	6	8	1
2	155	HZS84F	702078											

CIRCULATION RECORD

BIT NO.	JETS - mm			PUMP				ANN. VEL.		JET VEL.	HHP	SURF. PRESS. kPa		
	1	2	3	STROKE	SPM	LINER	m ³ /MIN	DP	DC					
1	20	20	20	43 M3 NITROGEN										

DEVIATION SURVEYS**MUD & CHEMICALS ADDED**

° at m	° at m	SAF COTE-13	VIS COM 10
° at m	° at m	ZINC CARB-2	UNI FOAM 10
° at m	° at m	CAUSTIC 10	
° at m	° at m	VIS + 14	

BOTTOM HOLE ASSEMBLY**TIME ANALYSIS**

TOOL	ID mm	OD mm	LENGTH m	WEIGHT daN	OPERATION	TODAY	CUM.
BIT		156	0.15		1. Drilling		
1-N.B. SHOCK SUB		121	1.83		2. Trips	8.50	
2-D.C.		121	18.6	1915	3. Rig Service	0.25	
6 D.C.		121	56.01	5993	4. Deviation Surveys		
1 JARS		121	3.87		5. Ream & Cond. Hole		
1 FLOAT SUB		120	0.61		6. Mix & Cond. Mud		
13 D.C.		121	120.5	13014	7. Circulation	0.75	
					8. Rig Repair WILLIAMS HED.	1.75	
					9. Run Casing & Cement		
					10. PRESS TEST		
					11. Logging		
					12. UNPLUG ENTST FLOW LINE		
					13. AIR DRY HOLE		
					14. DISPLACE HOLE TO N2	3.00	
					15. RIG UP UNDERBALA EQPT.		
					16. Drilling Out		
					17. B.O.P. DRILL		
					18. SHUT IN MONITOR WELL	2.50	
					19. SLIP & CUT DRL'G. LINE		
					20. KILL WELL	6.75	
					21. SAFETY MEET	0.50	
					TOTAL	24	

COSTS

DAILY \$80,429
CUMMULATIVE \$244,787
 GR ELEV. 567.9M K.B. 574.6
SUPERVISOR ROD MacEACHERN
 PH. 1-403-210-2951

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT (page 2)**FOR 24 HR PERIOD ENDING **98-02-14-08:00**
Yr - Mon - Day - TimeWELL NAME **PARAMOUNT ET AL ARROWHEAD**LOCATION **N65****OPERATIONS DETAIL:**

08:00-09:30 CIRC

09:30-10:30 HOIST IN TO 177MM, CSG.

10:30-13:00 SHUT IN WELL LET STAB. MONITOR PRESS.

13:00-13:30 SAFETY MEETING MEETING

13:30-16:30 WELL KILL OPERATIONS,

16:30-19:00 HOIST.

19:00-22:45 SHUT IN WELL RE-ESTABLISH KILL OPERATIONS.

22:45-23:45 HOIST ,CHANGE BIT LAY DOWN R3.

23:45-24:00 RIG SERV.

00:00-01:45 RUN IN THE HOLE.

01:45-04:45 DISPLACE HOLE TO N2

04:45-05:00 RUN IN THE HOLE

05:00-06:45 REPLACE RUBBER IN WILLIAMS ROTATING HEAD

06:45-08:00 RUN IN THE HOLE.SLIP & CUT.

HOIST TO REPLACE BIT ,ATTEMPTED TO KILL WELL USEING FORMATION FLUID,
WELL WENT ON VAC, TRIPPED, & CHANGED BIT WITH WELL ON VAC. LAID R3 DOWN
PINS ,LOOSE.

RUN IN TO 1500M, WELL UNLOAD ,GAINED ALL FORMATION FLUID BACK THAT WAS USED
TO TRIP.RUN IN TO 1600M, CHANGED RUBBER IN WILLIAMS ROTATION HEAD
RUN IN .

WANT LIST:WEATHER: **-12**ROAD: **GOOD WINTER COND.****IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)**

Wellname : PARAMOUNT ET AL. ARROWHEAD
 Location : N65
 Date : 02-14-98
 Contact : Paul Collens 290-3605

AM REPORT

DFS: 31

Depth @ 08:00 hrs: 2847m Progress last 24 hrs: 0 m
 Rotating hrs: 0

Present operations: RTH w/ New bit

ROP: .m/hr

Drill fluid: N2 Dens: Vis: Wt: pH:

SURVEYS

FORMATION TOPS

KB: 574.6m

Formation	Prognosis	Sample	Subsea
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Slave Pt	2564m	2520m	
Wall Mtn	--	2565m	
Sulphur Pt.	--	2573m	
Nahanni	2564m	2639m	
Headless SH	--	2740m	
Landry (Manetoe)		2768m	
Arnica	--	2834m	

SHOW SUMMARY:

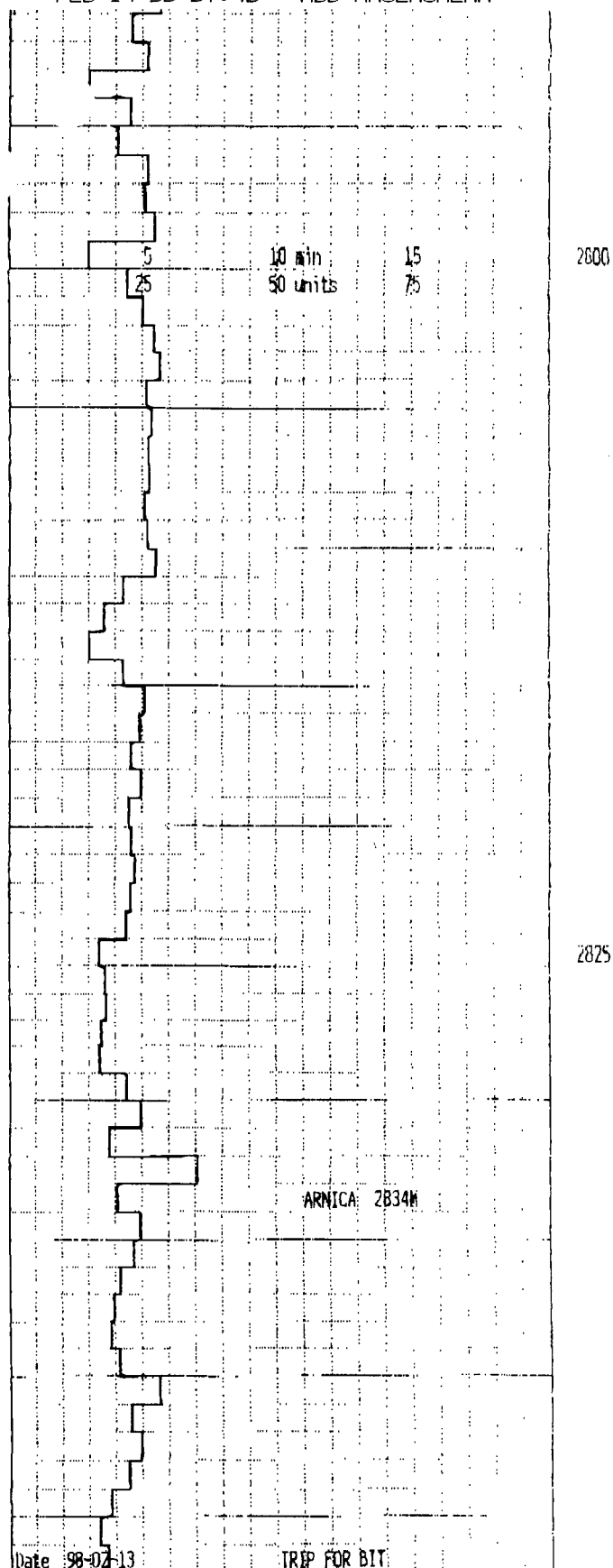
Formation	Interval	gas show/DCG	Lith/por/shows/remarks
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refer to attached striplog and
 gas flow charts

REMARKS: Btm hole water-salinity 142,000 ppm.
 " " gas H₂S 10 ppm.

Geologist: D. Ferguson

Cell: 1-403-210-2951



fill - euhedral xls ip, NVS, NVP; DOL-lt gy -
m gy, NVS, tr iron stn, NVP, bcng sl arg ip,
scat dol frc fill, scat pyr, dis;

LS-m - dk gy brn, dk gy - blk ip, scat wh ca
and dol frc fill - euhedral xls ip, scat iron
stn, NVS, NVP; DOL-lt gy - m gy, NVS, tr iron
stn, NVP, bcng sl arg ip, scat dol frc fill,
scat pyr, dis;
LS-m - dk gy brn, tr wh ca and dol frc fill -
euhedral xls ip, scat iron stn, NVS, NVP;

DOL-m gy - lt gy ip, NVS, tr iron stn, NVP,
occ sl arg ip, scat wh dol frc fill, scat
pyr, dis;

LS-m - dk gy brn, tr wh ca and dol frc fill -
euhedral xls ip, scat iron stn, NVS, NVP;
DOL-lt gy, m gy ip, NVS, tr iron stn, NVP,
scat wh dol frc fill, scat pyr, dis;

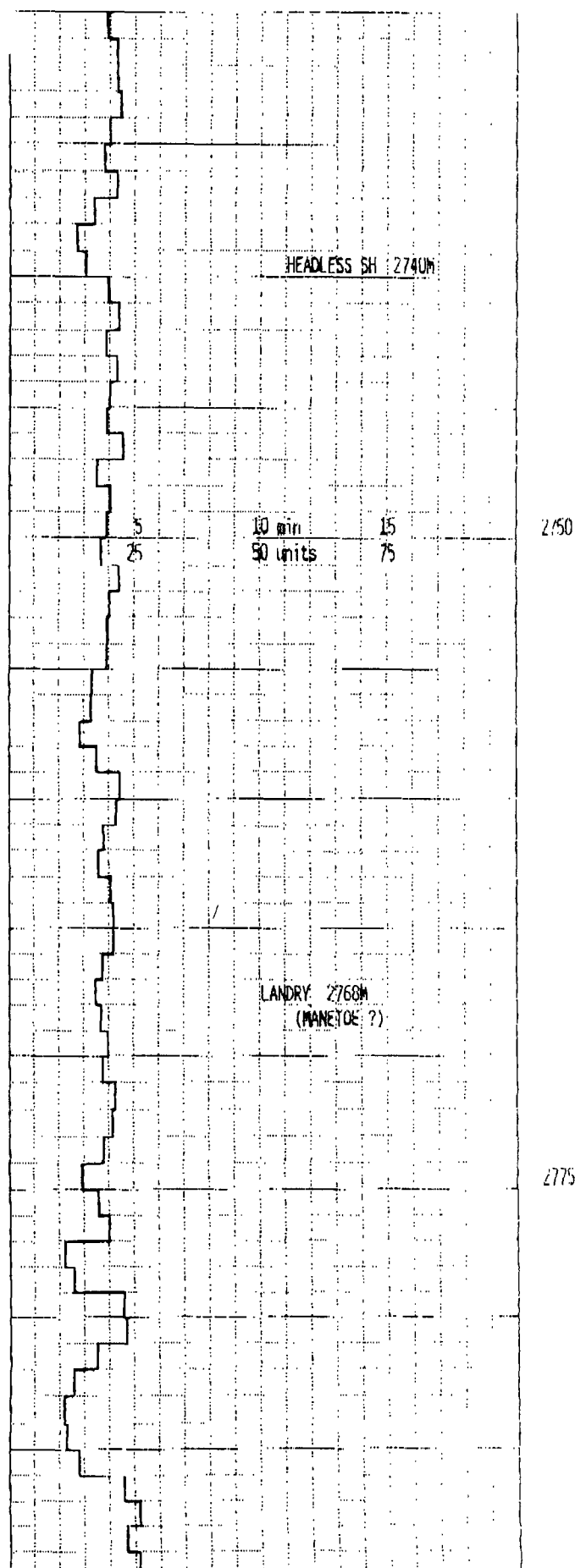
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com wh dol frc fill, scat pyr, dis; DOL-wh,
strns, NVS, NVP, tr dol frc fill;

DOL-lt gy, NVS, com iron str, NVP, com wh dol
frc fill, scat pyr ip, dis;

DOL-lt gy, wh, NVS, abnt iron str, NVP, scat
wh dol frc fill, tr wh ca frc fill ip;
DOL-wh, strns, NVS, com iron stn, NVP, tr dol
frc fill;

DOL-lt gy, wh, NVS, abnt iron stn, NVP, scat
wh dol frc fill, tr wh ca frc fill ip; SH-dk
gy, blk ip, blk, sl calc, sl dol;

DOL-lt gy, wh, NVS, abnt iron stn, NVP, scat
wh dol frc fill, tr wh ca frc fill ip;



LS-m - dk gy brn, occ lt brn ip, tr wh - trms
ca frc fill - euهدral xls ip, NVS, NVP, rr
dol frc fill isp;

LS-m - dk gy brn, lt gy ip, scat wh ca frc
fill - euهدral xls ip, rr dol frc fill ip,
NVS, NVP, scat pyr vn isp;

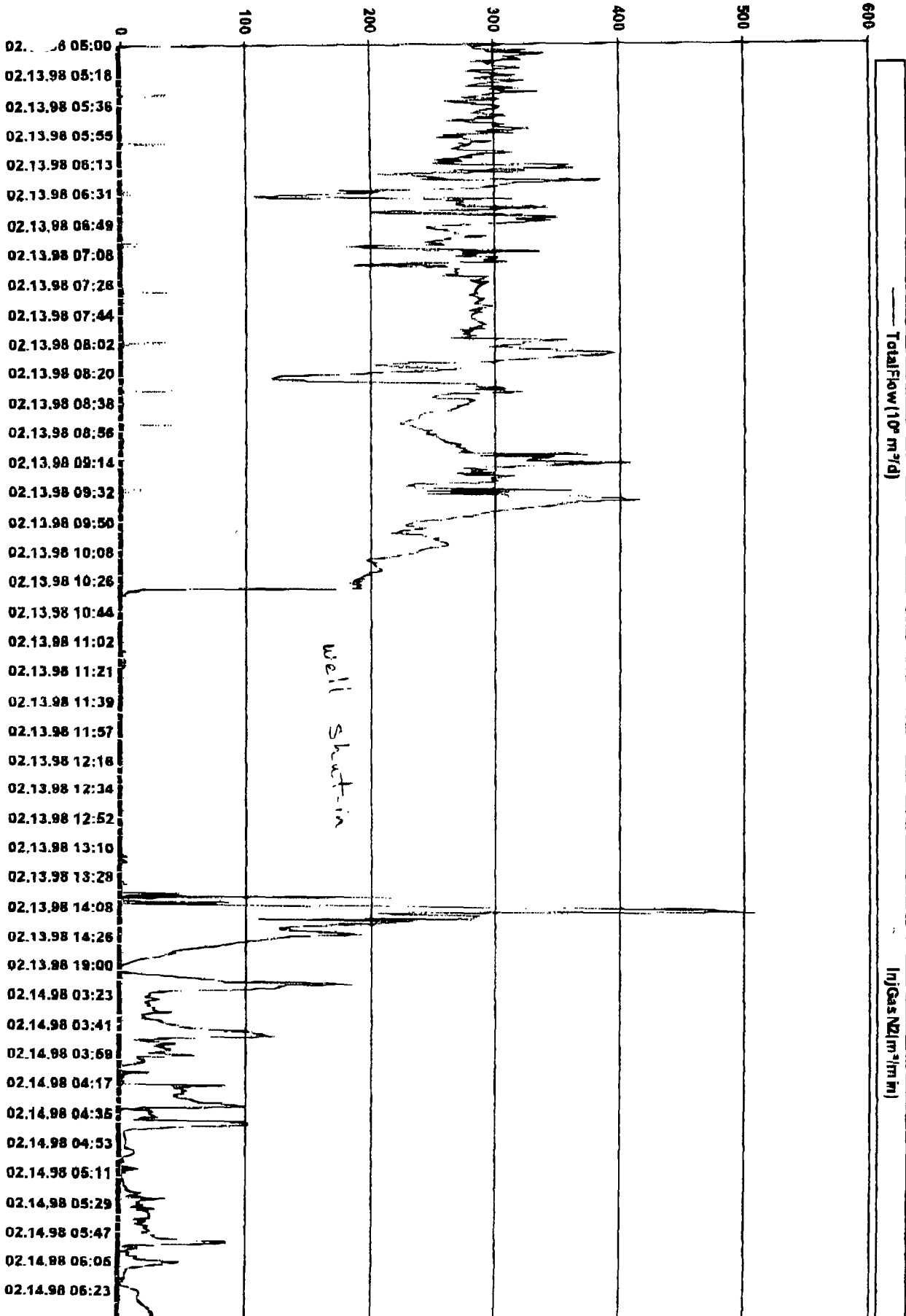
LS-m - dk gy brn, lt gy ip, scat wh ca frc
fill - euهدral xls ip, rr dol frc fill ip,
NVS, NVP, scat pyr vn isp; DOL-wh, mot lt gy
ip, NVS, NVP, tr dol frc fill;

LS-m - dk gy brn, lt gy ip, scat wh ca frc
fill - euهدral xls ip, rr dol frc fill ip,
NVS, NVP, scat pyr vn isp; DOL-wh, mot lt gy
ip, NVS, NVP, tr dol frc fill;

Test Date(s): From: To:
Company: Paramount Resources
Location: el al Arrowhead N65
Company Rep: Rod MacEachern
Formation: Nahanni

ENERGY SYSTEMS LTD.

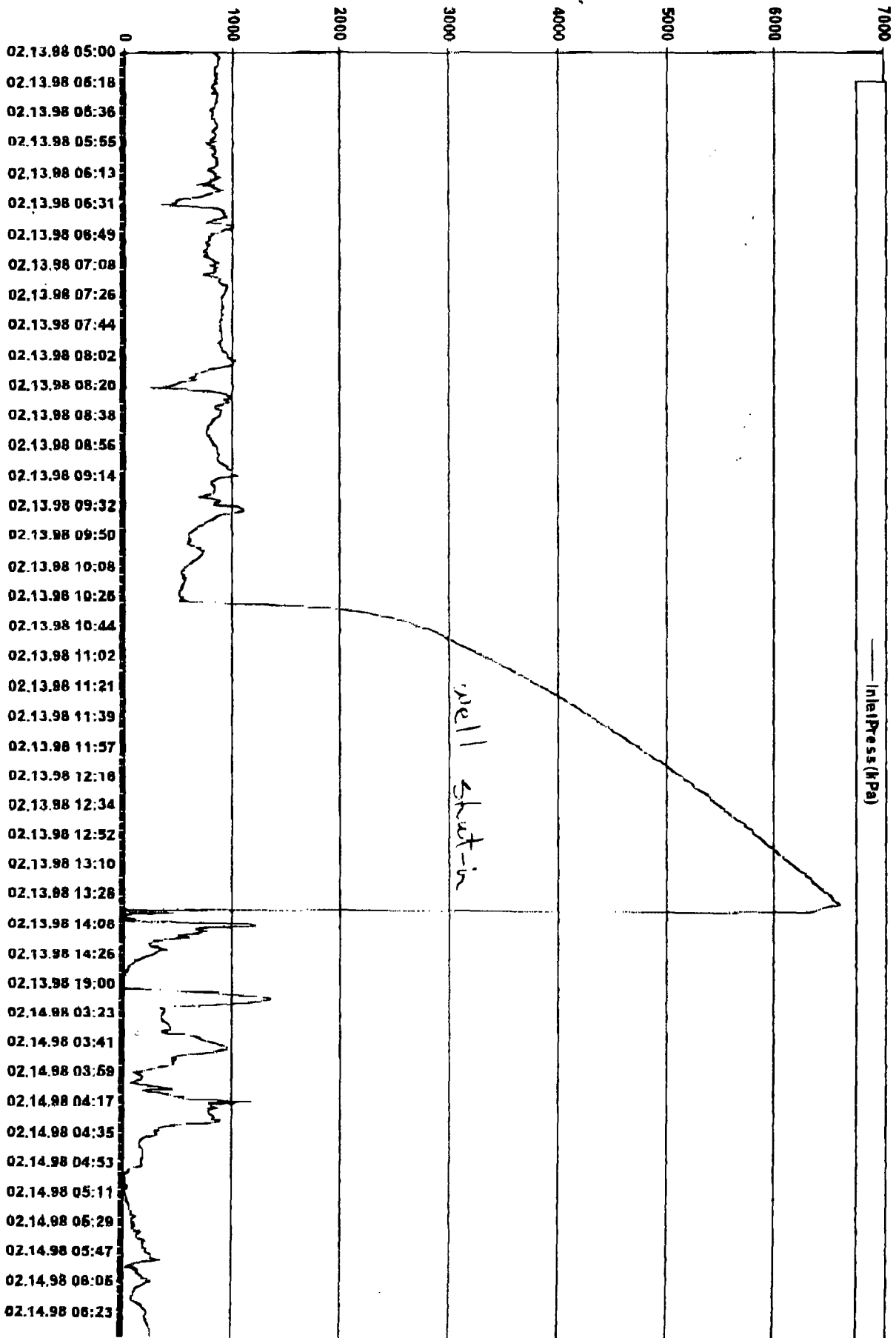
Job No.: 3611
Unit No: Gemini 3
Test Operator: L Turnbull / T Fox
Operation: Underbalanced Drilling
Gas Sent To: Flare



Test Date(s): From: To:
Company: Paramount Resources
Location: et al Arrowhead N65
Company Rep: Rod Maceachern
Formation: Nahrath

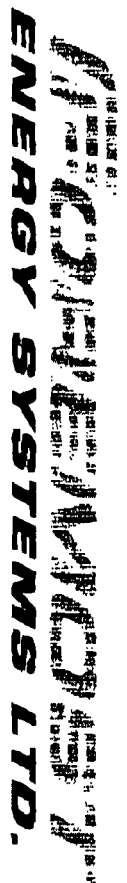
ENERGY SYSTEMS LTD.

Job No.: 3611
Unit No: Gemini 3
Test Operator: L Turnbull / T Fox
Operation: Underbalanced Drilling
Gas Sent To: Flare



Test Date(s):
Company: Paramount Resources
Location: et al Arrowhead N65
Company Rep: Rod Maceachern
Formation: Nahanni

To:



Job No.: 3611
Unit No: Gemini 3
Test Operator: L Turnbull / T Fox
Operation: Underbalanced Drilling
Gas Sent To: Flare

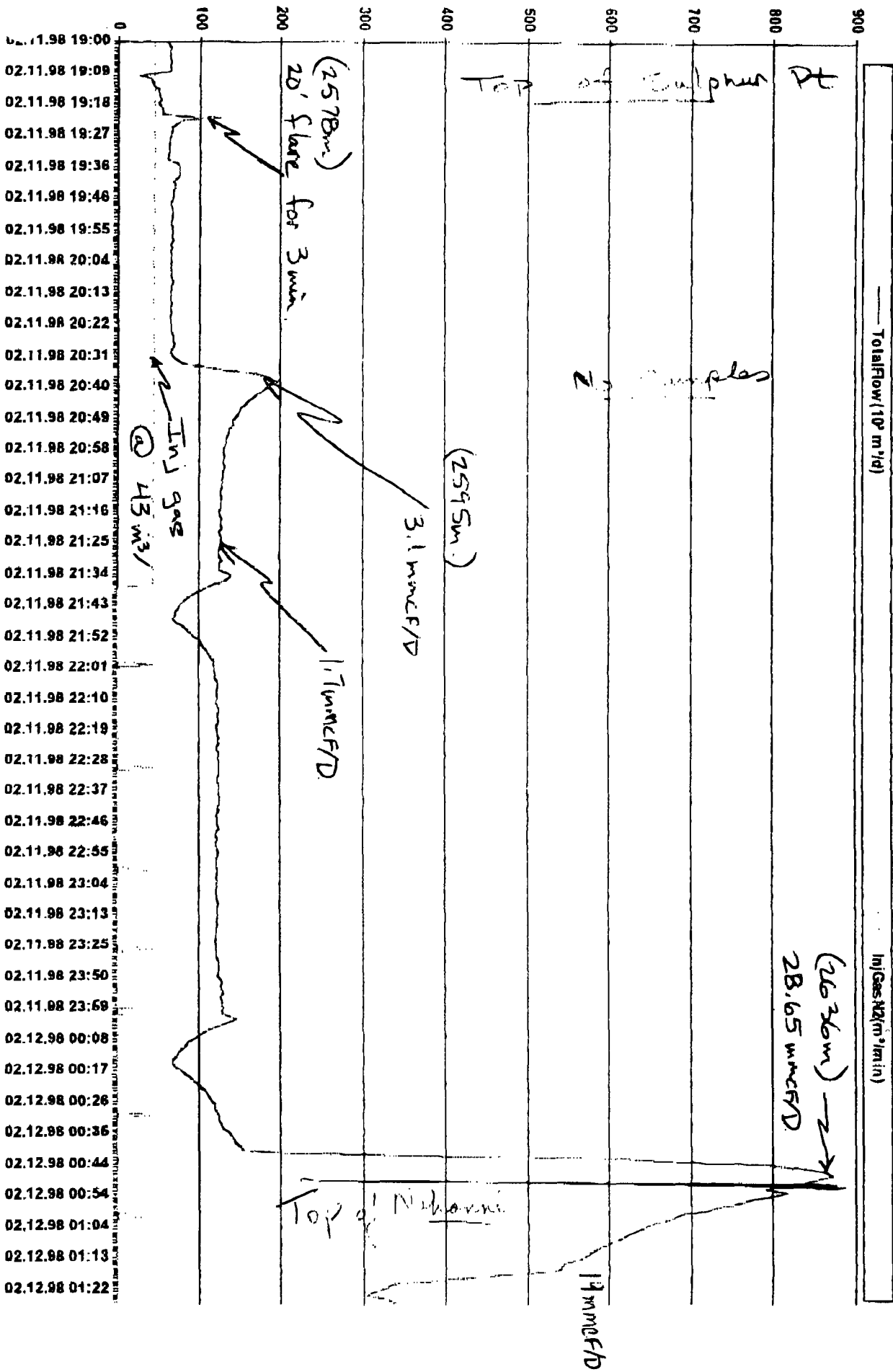
Water Cum (m³)

0	50	100	150	200	250	300
02.13.98 05:00						
02.13.98 05:18						
02.13.98 05:36						
02.13.98 06:55						
02.13.98 06:13						
02.13.98 06:31						
02.13.98 08:49						
02.13.98 07:08						
02.13.98 07:26						
02.13.98 07:44						
02.13.98 08:02						
02.13.98 08:20						
02.13.98 08:38						
02.13.98 08:56						
02.13.98 09:14						
02.13.98 09:32						
02.13.98 09:50						
02.13.98 10:08						
02.13.98 10:26						
02.13.98 10:44						
02.13.98 11:02						
02.13.98 11:21						
02.13.98 11:39						
02.13.98 11:57						
02.13.98 12:16						
02.13.98 12:34						
02.13.98 12:52						
02.13.98 13:10						
02.13.98 13:28						
02.13.98 14:08						
02.13.98 14:26						
02.13.98 19:00						
02.14.98 03:23						
02.14.98 03:41						
02.14.98 03:59						
02.14.98 04:17						
02.14.98 04:36						
02.14.98 04:53						
02.14.98 06:11						
02.14.98 05:29						
02.14.98 06:47						
02.14.98 08:08						
02.14.98 06:23						

Test Date(s): From: To:
 Company: Paramount Resources
 Location: et al Arrowhead NGS
 Company Rep: Rod Maceachern
 Formation: Nahrani

ENERGY SYSTEMS LTD.

Job No.: 3611
 Unit No: Gemini 3
 Test Operator: L Turnbull / T For
 Operation: Underbalanced Drilling
 Gas Sent To: Flare

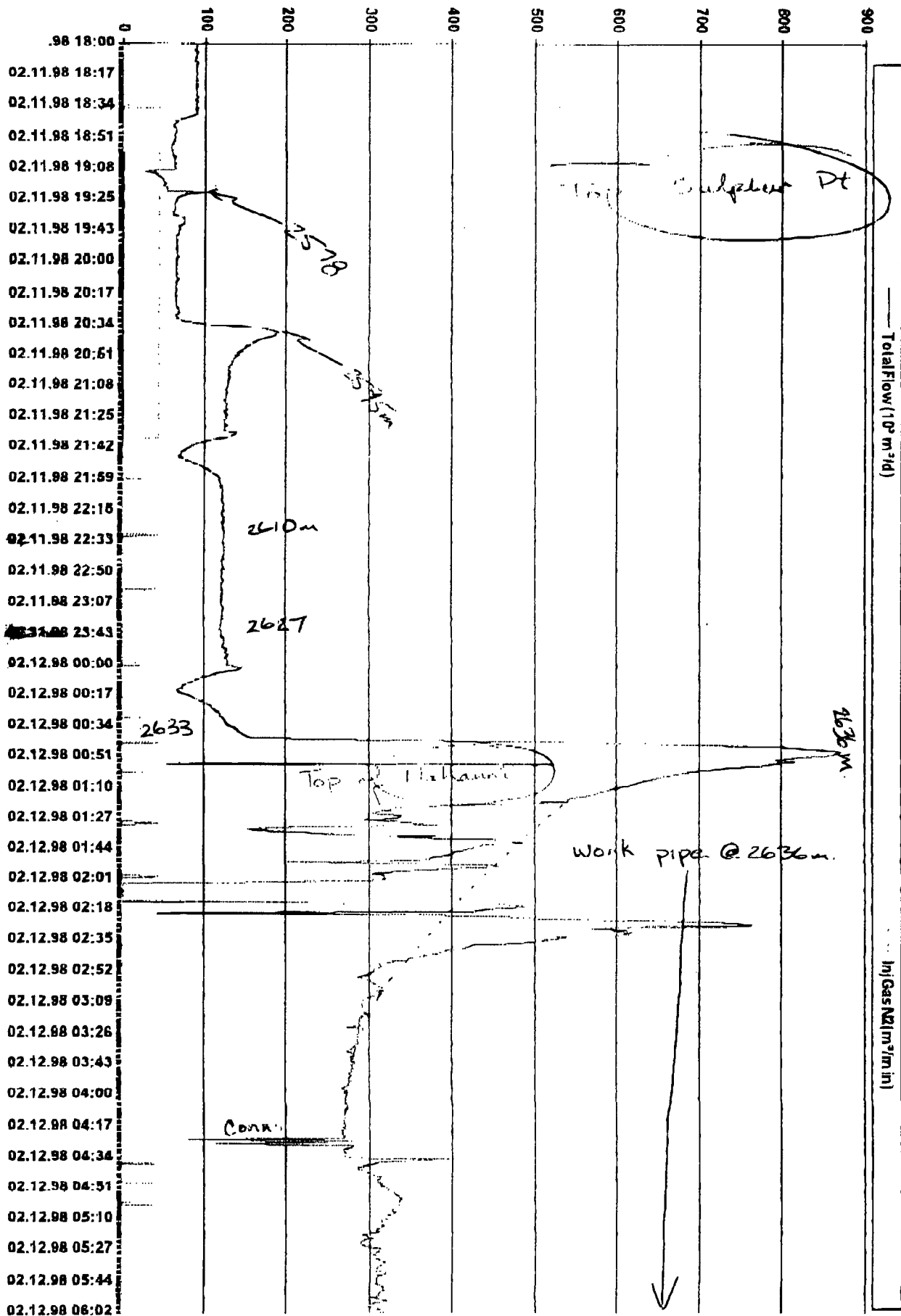


(2)

Test Date(s): From: To:
 Company: Paramount Resources
 Location: et al Arrowhead N65
 Company Rep: Rod MacEachern
 Formation: Nahanni

ENERGY SYSTEMS LTD.

Job No.: 3611
 Unit No.: Gemini 3
 Test Operator: L Turnbull / T Fox
 Operation: Underbalanced Drilling
 Gas Sent To: Flare

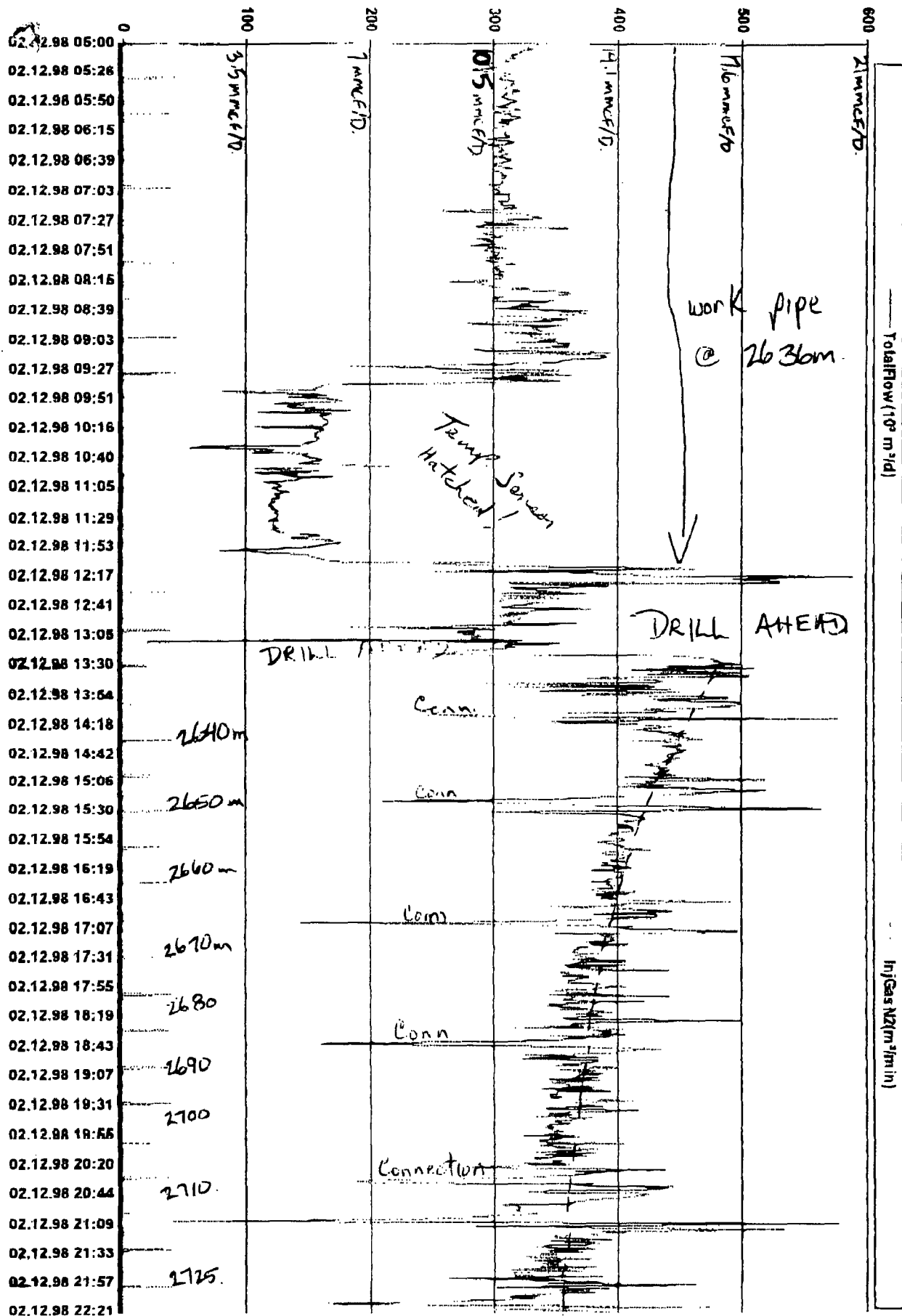


(13)

Test Details: From: To:
 Company: Paramount Resources
 Location: et al Arrowhead N65
 Company Rep: Rod MacEachern
 Formation: Nahanni

ENERGY SYSTEMS LTD.

Job No.: 3611
 Unit No: Gemini 3
 Test Operator: L Turnbull / T Fox
 Operation: Underbalanced Drilling
 Gas Sent To: Flare



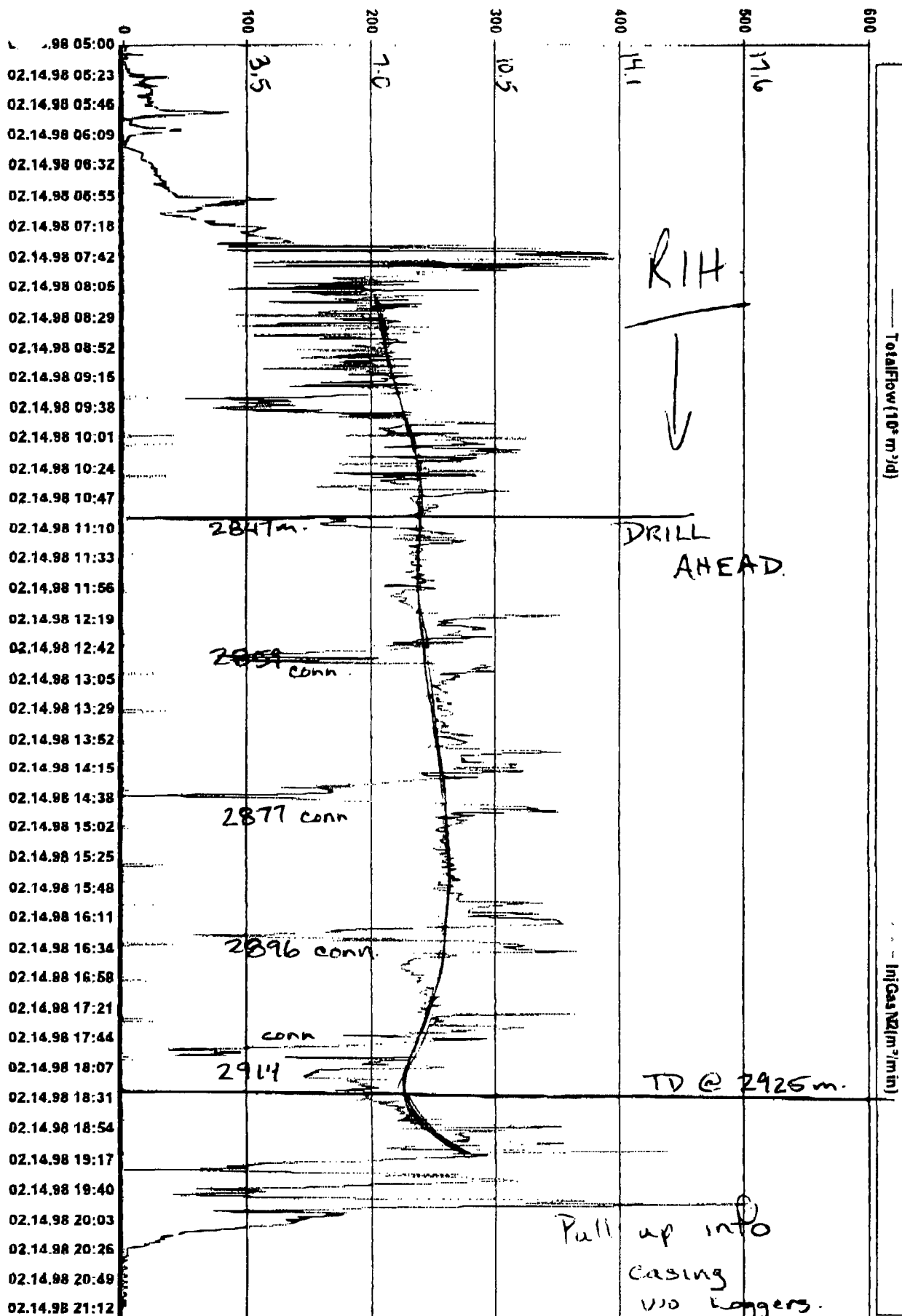
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Test Date(s):
 Company: Paramount Resources
 Location: et al Arrowhead NG5
 Company Rep: Rod MacEachern
 Formation: Nahanni

To:

ENERGY SYSTEMS LTD.

Job No.: 3611
 Unit No.: Gemini 3
 Test Operator: L Turnbull / T Fox
 Operation: Underbalanced Drilling
 Gas Sent To: Flare

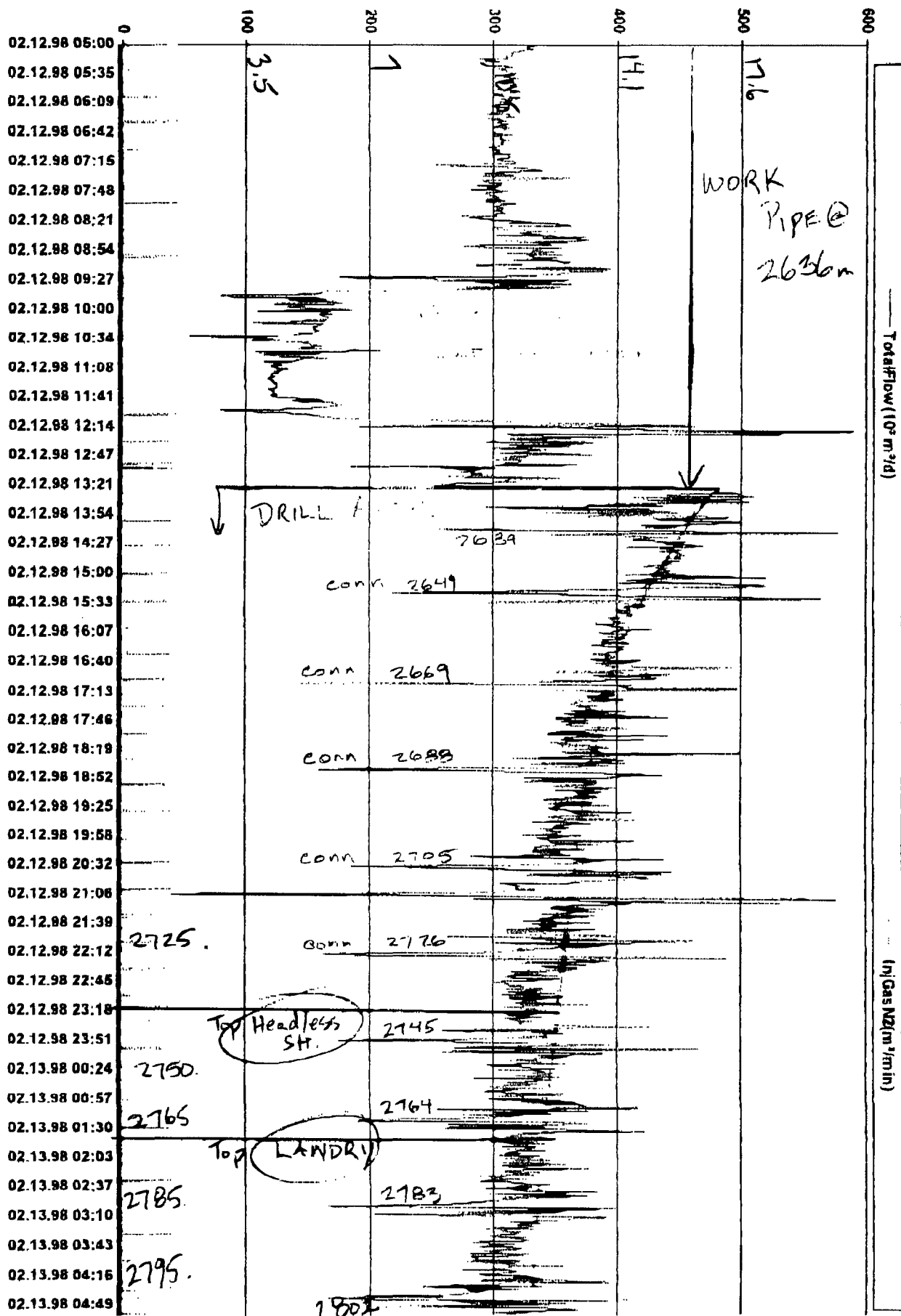


28.174
(13)

Test Date(s): From: To:
 Company: Paramount Resources
 Location: et al Arrowhead N65
 Company Rep: Rod MacEachern
 Formation: Nahanni

ENERGY SYSTEMS LTD.

Job No.: 3611
 Unit No.: Gemini 3
 Test Operator: L Turnbull / J Fox
 Operation: Underbalanced Drilling
 Gas Sent To: Flare



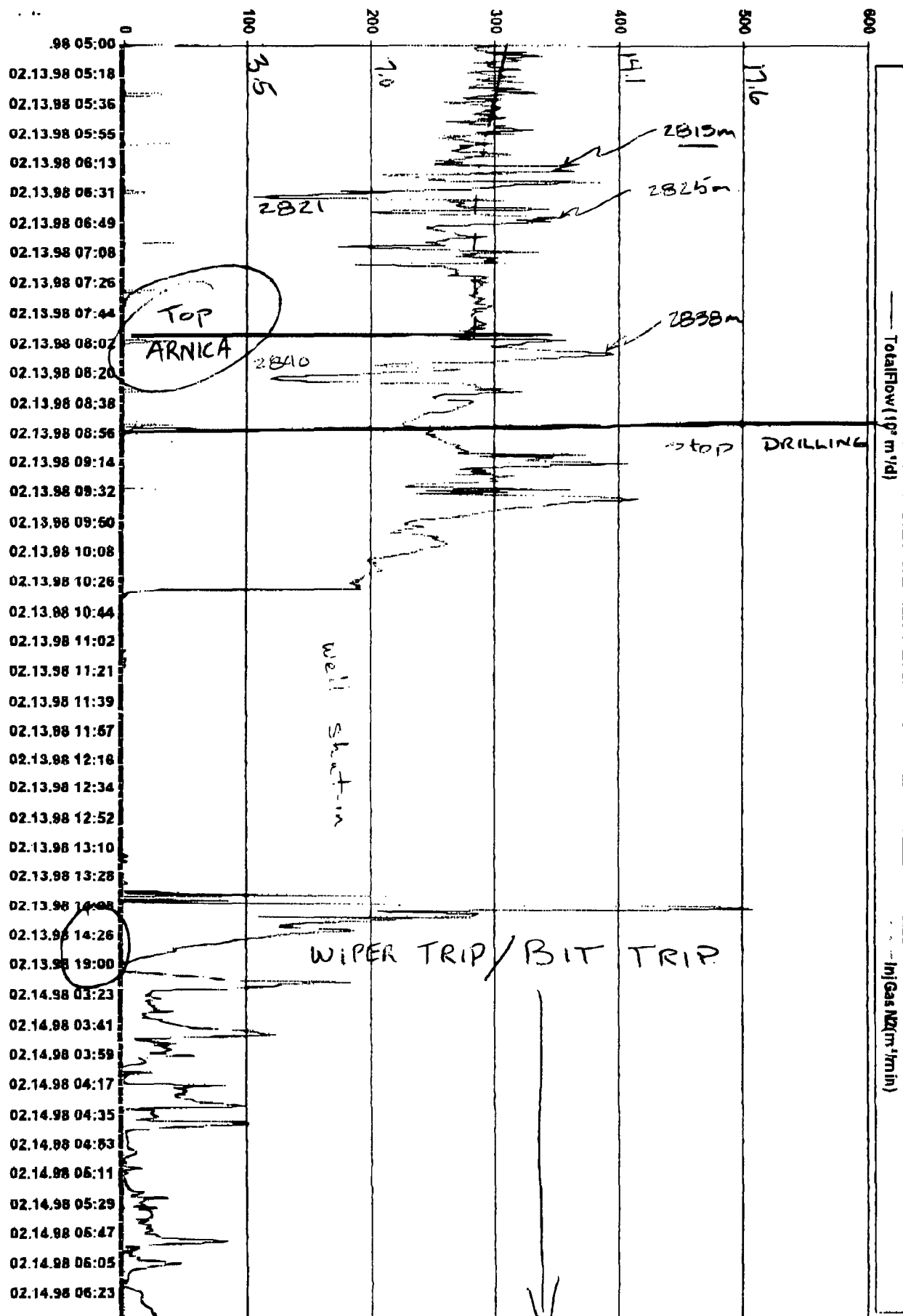
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Test Date(s):
 Company: Paramount Resources
 Location: el al Arrowhead N65
 Company Rep: Rod MacEachern
 Formation: Netherai

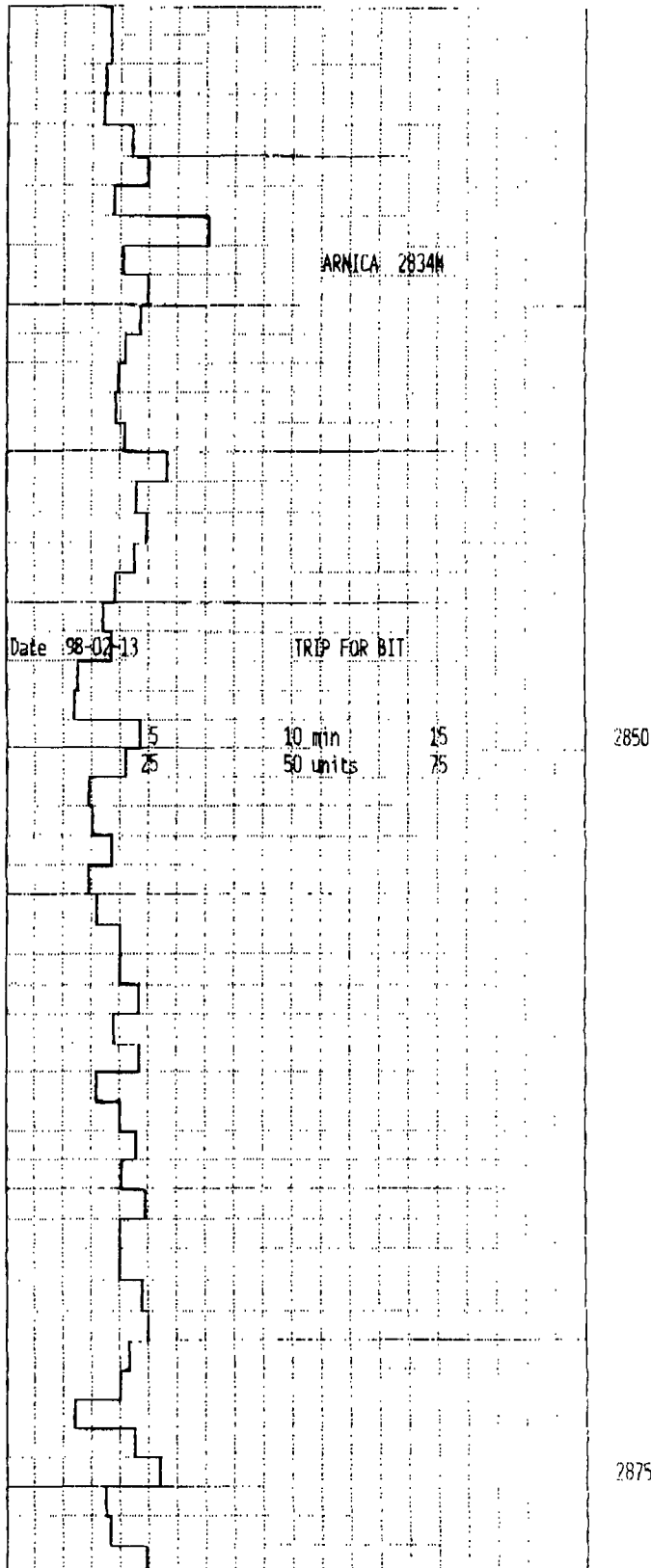
From:
 To:

ENERGY SYSTEMS LTD.

Job No.: 3611
 Unit No: Gemini 3
 Test Operator: L Turnbull / T Fox
 Operation: Underbalanced Drilling
 Gas Sent To: Flare



Attn: Paul Collens.



DOL-lt gy, NVS, com iron stn, NVP, com wh dol frc fill, scat py ip, dis;

DOL-lt gy, wh, NVS, abnt iron stn, NVP, scat wh dol frc fill, wh ca frc fill ip;

DOL-wh, strns, NVS, com iron stn, NVP, tr dol frc fill;

DOL-lt gy, wh, NVS, abnt iron stn, NVP, scat wh dol frc fill, wh ca frc fill ip; SH-dk gy, blk ip, blk, sl calc, sl dol;

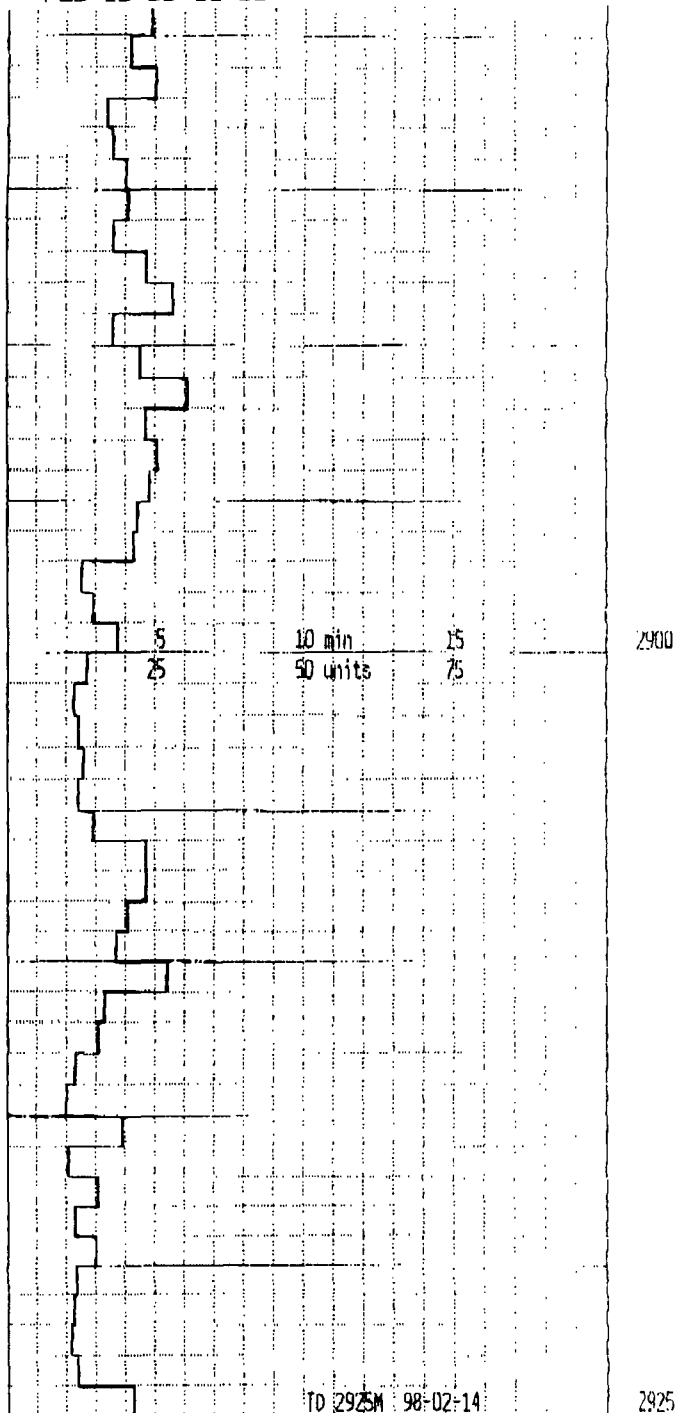
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DOL-lt gy, wh, occ m gy ip, NVS, abnt iron stn, scat tn ibd LS, NVP, scat wh dol frc fill, tr wh ca frc fill ip; DOL-wh, strns, NVS, com iron stn, NVP, tr dol frc fill; LS-m gy - dk gy ip, NVS, NVP;

DOL-lt gy, wh, occ m gy ip, NVS, abnt iron stn, scat tn ibd LS, NVP, tr wh dol frc fill ip, sl calc str ip; LS-m gy - dk gy ip, occ lt gy ip, NVS, NVP;

DOL-lt gy, wh, occ m gy ip, NVS, abnt iron stn, scat tn ibd LS, NVP, tr wh dol frc fill ip, sl calc str ip; DOL-wh, strns, NVS, com iron stn, NVP, frc fill ip;

DOL-lt gy, wh, occ m gy ip, NVS, abnt iron stn, scat tn ibd LS, NVP, tr wh dol frc fill ip, sl calc str ip; DOL-dk gy, blk ip, NVS,



DOL-lt gy, wh, occ m gy ip, NVS, abnt iron stn, NVP, tr wh dol frc fill ip; DOL-dk gy, blk ip, NVS, NVP, tr wh dol frc fill ip;

DOL-gy, brn, occ m gy ip, NVS, abnt iron stn, NVP, tr wh dol fr fill ip;

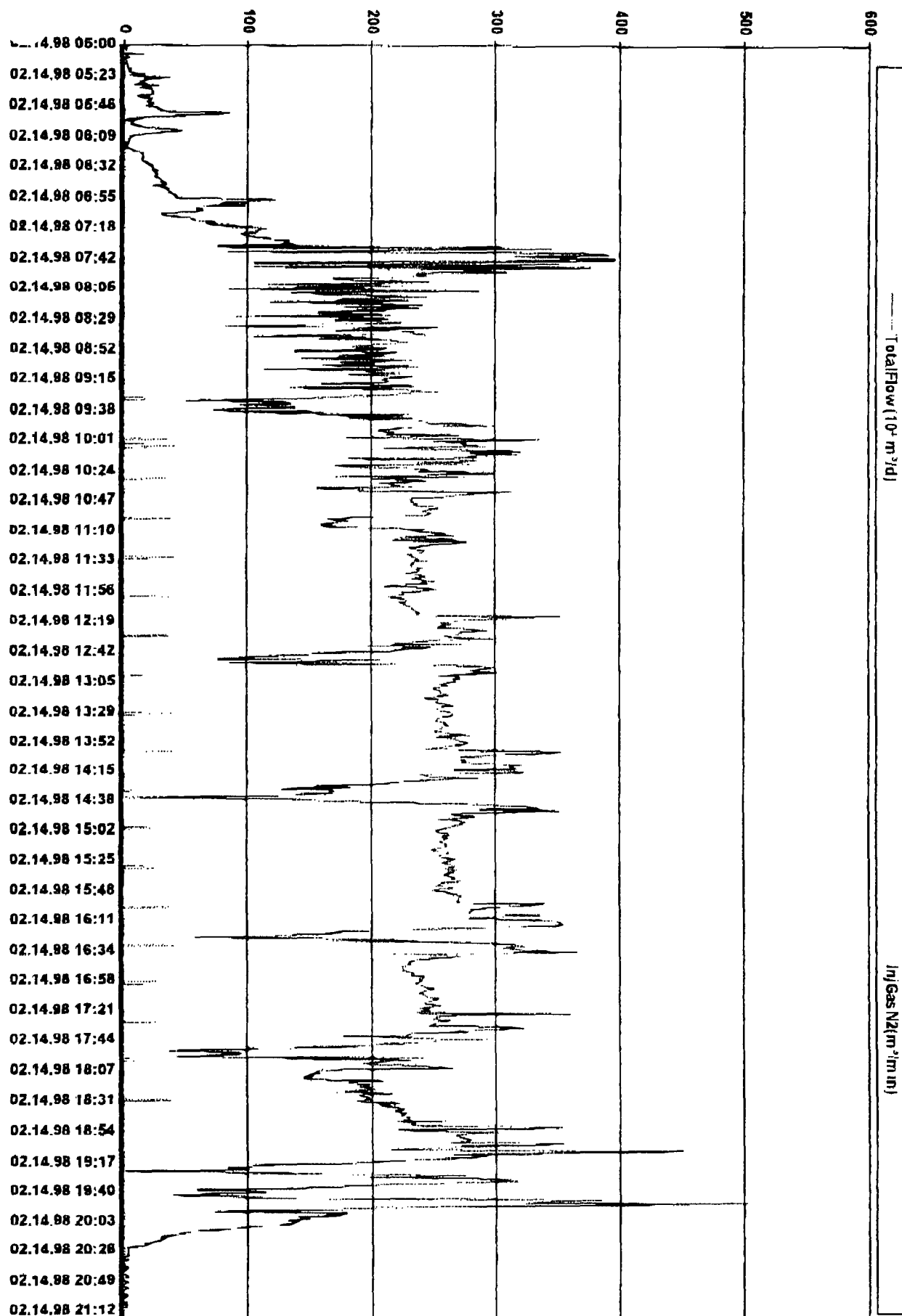
DOL-gy, brn, occ m gy ip, NVS, com iron stn, NVP, rr wh dol frc fill ip;

DOL-lt gy, brn, occ m gy ip, NVS, scat iron stn, scat styl, NVP, rr wh dol frc fill ip; DOL-dk gy, blk ip, NVS, NVP;

Test Date(s): From: To:
Company: Paramount Resources
Location: et al Arrowhead NG5
Company Rep: Rod Maceachern
Formation: Mahanli

ENERGY SYSTEMS LTD.

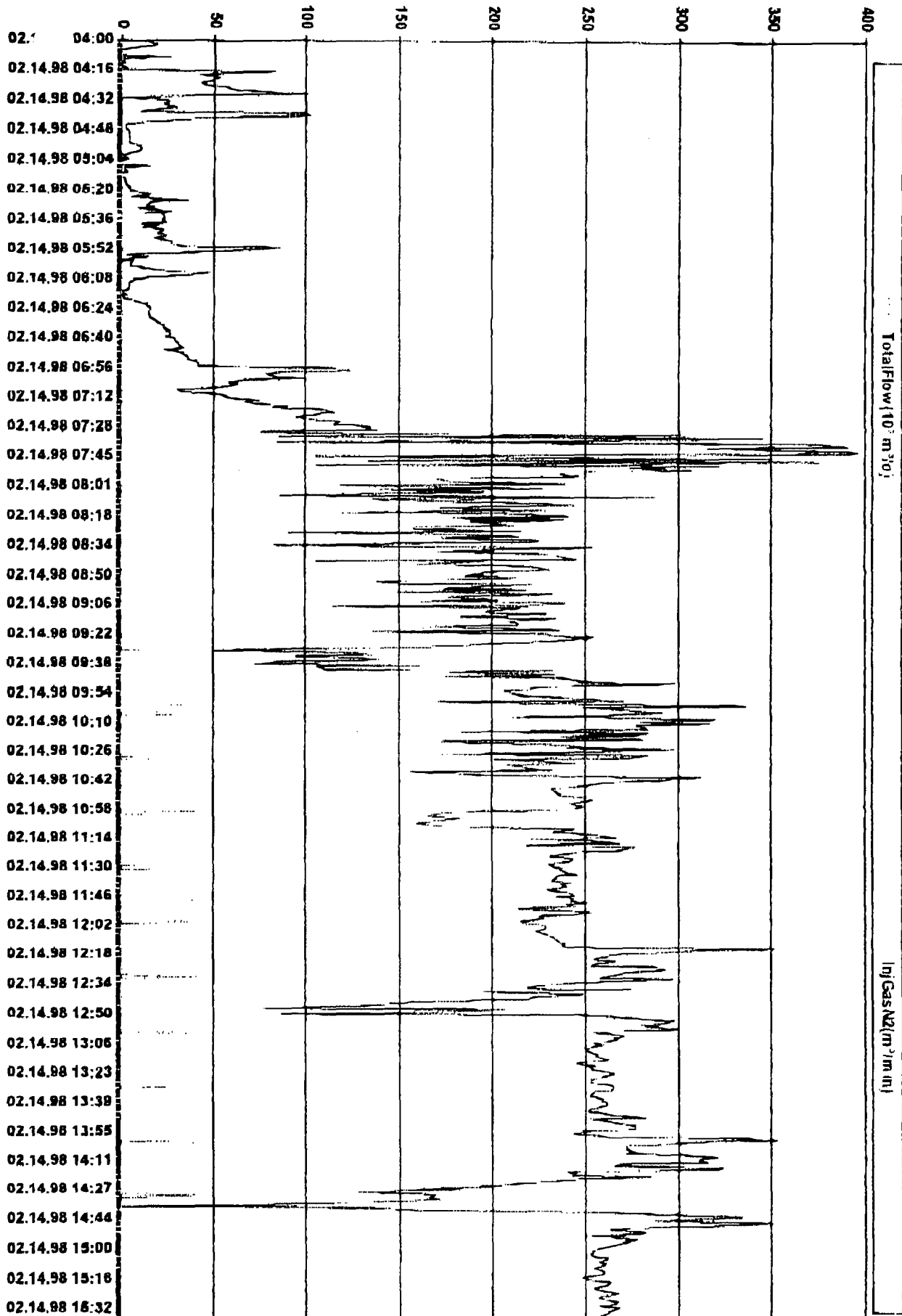
Job No.: 3611
Unit No: Gemini 3
Test Operator: L Turnbull / T Fox
Operation: Underbalanced Drilling
Gas Sent To: Flare



Test Date(s): From: To:
Company: Paramount Resources
Location: et al Arrowhead N65
Company Rep: Rod MacEachern
Formation: Netherhill

ENERGY SYSTEMS LTD.

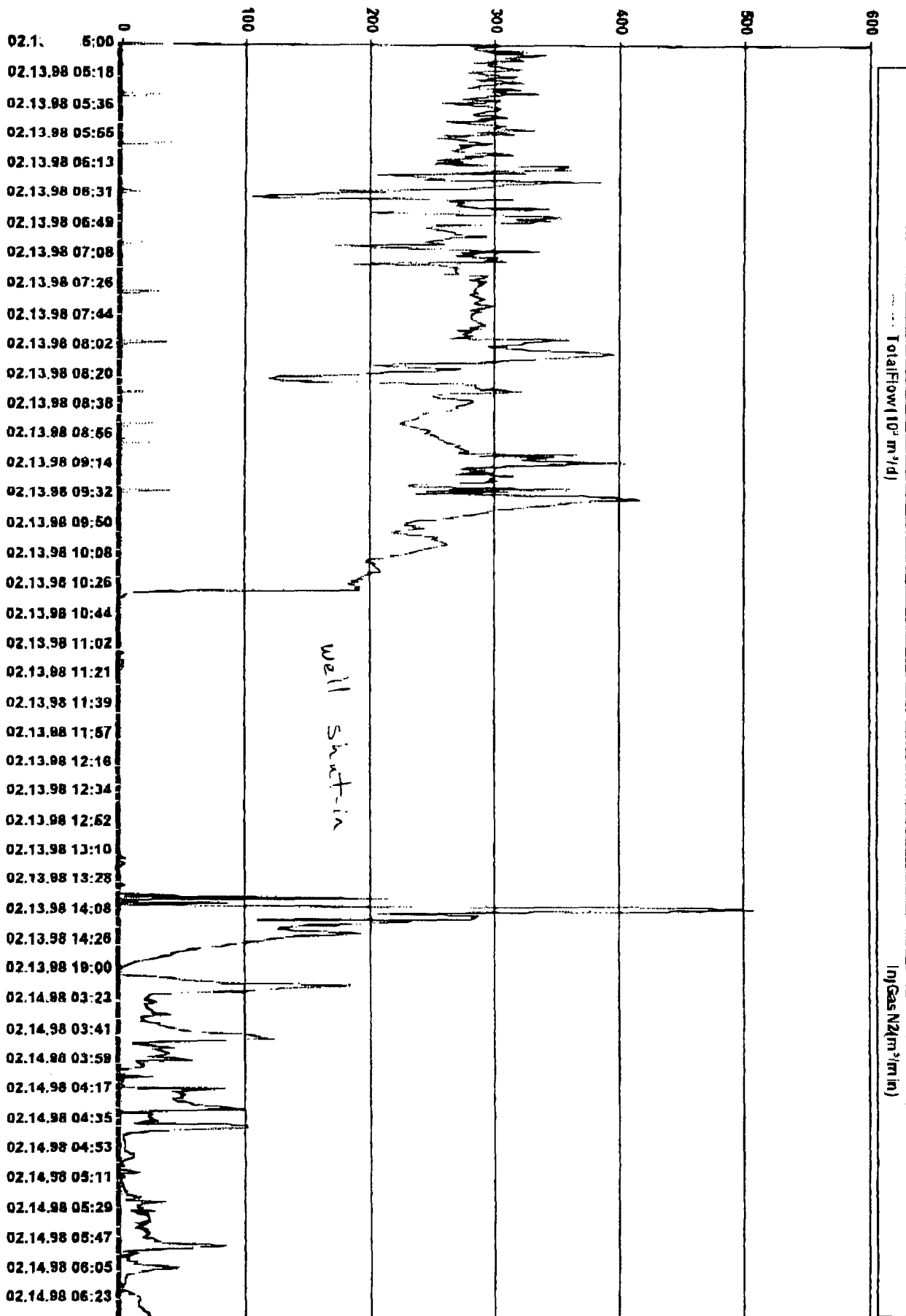
Job No.: 3611
Unit No: Gemini 3
Test Operator: L Turnbull / T Fox
Operation: Underbalanced Drilling
Gas Sent To: Flare



Test Date(s):
 Company: Paratour Resources
 Location: et al Arrowhead NG
 Company Rep: Rod MacEachern
 Formation: Nahanni

ENERGY SYSTEMS LTD.

Job No.: 3611
 Unit No.: Gemini 3
 Test Operator: L Turnbull / T Fox
 Operation: Underbalanced Drilling
 Gas Sent To: Flare



Gas Sent To: Flare

Date	Time	Drill	Inlet	Prod	GAS PRODUCTION			OIL PRODUCTION		WATER PRODUCTION		INJECT	RATE	OPTION A	OPTION B	
		Depth	Press	Hours	HPSep_Flow	LPGas_Flow	Total_Flow	Cumm_Gas	Rate	Cumm.	Rate	Cumm.	Gas/N2	Date Liq.	Net Gas	Gain/Loss
		m	kPa		10 ³ m ³ /d	10 ³ m ³ /d	10 ³ m ³ /d	10 ³ m ³ /d	m ³ /d	m ³	m ³	m ³	m ³ /min	m ³ /min	10 ³ m ³ /d	m ³
02/14/98	05:30		77.52	70.46	8.48		8.48	570.55				281.26	0.00	0.00	8.48	7.30
TOTAL FLUID PUMPED DOWN HOLE TO KILL WELL = 102.00 m ³																
02/14/98	06:00		163.65	70.95	5.01		5.01	571.04				281.26	0.00	0.00	5.01	3.38
FLOW LINE TEMPERATURE = 46°C																
02/14/98	06:30		241.17	71.41	19.02		19.02	571.31				281.26	0.00	0.00	19.02	7.21
FLOW LINE TEMPERATURE = 48°C																
02/14/98	07:00		542.64	71.91	81.30	2.52	83.82	572.18				281.26	0.00	0.00	83.82	7.62
FLOW LINE TEMPERATURE = 53°C																
02/14/98	07:30		869.95	72.41	76.45		76.45	573.93				281.26	0.00	0.00	76.45	9.65
TOTAL KILL FLUID RECOVERED																
02/14/98	08:00		844.11	72.88	226.24		226.24	578.98			19.12	300.38	0.00	0.00	226.24	
FLOW LINE TEMPERATURE = 71°C																
02/14/98	08:30		792.43	73.38	172.35		172.35	582.67			15.18	315.56	0.00	0.00	172.35	
FLOW LINE TEMPERATURE = 68°C																
02/14/98	09:00		904.40	73.88	232.00		232.00	586.75			13.56	329.12	0.00	0.00	232.00	
FLOW LINE TEMPERATURE = 65°C																
02/14/98	09:30		594.32	74.38	136.34		136.34	590.94			12.22	341.34	41.00	0.00	136.34	
START N ₂ @ 41m ³ /min																
02/14/98	10:00		1050.83	74.88	249.66		249.66	594.80			9.64	350.98	41.00	0.00	190.62	
FLOW LINE TEMPERATURE = 64°C																
02/14/98	10:05		913.02	74.96	291.58		291.58	595.79					41.00	0.03		
FOAM ON LINE @ 80L/min																
02/14/98	10:30		818.27	75.37	201.03		201.03	600.18			15.9	366.86	41.00	0.03	141.99	
02/14/98	10:40		887.18	75.53	221.34	90.65	311.99	601.70								
CONNECTION																
02/14/98	11:00		594.32	75.87	179.36		179.36	605.05			6.42	373.30	41.00	0.08	123.32	
FLOW LINE TEMPERATURE = 62°C / SALINITY = 140 000ppm / FFS = 10ppm																
02/14/98	11:21		844.11	76.22	248.13		248.13	608.25								
GAS COMPOSITION CHANGE / NON-BURNABLE GAS TO SURFACE / TAKE TWO HIGH PRESSURE SAMPLES																
02/14/98	11:22		826.88	76.23	238.00	2.54	240.54	608.42								
GA MPLES - #22057 + #12367																
02/14/98	11:23	2847.00	826.88	76.25	230.88		230.88	608.58								
START DRILLING																

Formation: Mahanni

Gas Sent To: Flare

Date	Time	Drill	Inlet	Prod	GAS PRODUCTION				OIL PRODUCTION		WATER PRODUCTION		INJECT	RATE	OPTION A	OPTION B
		Depth	Press	Hours	HPSep_Flow	LPGas_Flow	Total_Flow	Cumm_Gas	Rate	Cumm.	Rate	Cumm.	Gas/N2	Date Liq.	Net Gas	Gain/Loss
		m	kPa		10 ³ m ³ /d	10 ³ m ³ /d	10 ³ m ³ /d	10 ³ m ³ /d	m ³ /d	m ³	m ³	m ³	m ³ /min	m ³ /min	10 ³ m ³ /d	m ³
02/14/98	15:53	2895.00	938.86	80.72	269.42		269.42	655.07								
2895m SAMPLE TAKEN																
02/14/98	16:00	2896.00	947.47	80.83	268.36	37.86	306.22	656.49		10.74	495.21	41.00	0.08	247.18		
FLOW LINE TEMPERATURE = 72°C / SALINITY = 135 000ppm / CONNECTION																
02/14/98	16:24	2900.00	482.35	81.22	56.62	2.34	58.96	660.84								
2900m SAMPLE TAKEN																
02/14/98	16:30	2903.00	1093.90	81.33	318.29		318.29	661.81		15.19	510.40	41.00	0.08	259.25		
FLOW LINE TEMPERATURE = 74°C / SALINITY = 140 000ppm																
02/14/98	16:38		938.86	81.46	244.40		244.40	663.45								
2905m SAMPLE TAKEN																
02/14/98	17:00	2910.00	921.63	81.81	235.79		235.79	666.90		15.12	525.52	41.00	0.08	176.75		
FLOW LINE TEMPERATURE = 76°C / 2910m SAMPLE TAKEN / SALINITY = 140 000ppm																
02/14/98	17:14	2915.00	938.86	82.03	248.92		248.92	669.28								
2915m SAMPLE TAKEN																
02/14/98	17:26		878.56	82.23	223.06	48.32	271.38	671.47								
CONNECTION																
02/14/98	17:30	2915.00	938.86	82.30	262.62		262.62	672.18		12.12	537.64	41.00	0.08	203.58		
FLOW LINE TEMPERATURE = 75°C / SALINITY = 138 000ppm																
02/14/98	17:52	2920.00	361.76	82.67	35.73	2.11	37.85	675.60								
2920m SAMPLE TAKEN																
02/14/98	18:00	2921.00	1102.51	82.80	232.63		232.63	676.34		8.36	556.00	41.00	0.08	173.59		
FLOW LINE TEMPERATURE = 80°C / SALINITY = 130 000ppm																
02/14/98	18:13	2925.00	895.79	83.02	146.75		146.75	677.92								
2925m SAMPLE TAKEN / PULL OFF BOTTOM AND CIRCULATE																
02/14/98	18:30	2925.00	930.24	83.29	199.79		199.79	680.16		17.25	573.25	41.00	0.08	140.75		
FLOW LINE TEMPERATURE = 84°C / SALINITY = 142 000ppm / 2925m T.D. WELL																
02/14/98	18:45		1033.60	83.54	224.09		224.09	682.43				0.00	0.00			
SHUT DOWN N° AND FOAM INJECTION / PULL 16 STANDS																
02/14/98	19:00		1128.35	83.79	279.64		279.64	685.22		15.12	588.37	0.00	0.00	220.60		
FLOW LINE TEMPERATURE = 94°C / SALINITY = 140 000ppm																
02/14/98	19:30		895.79	84.29	277.40		277.40	689.88		8.7	597.07	0.00	0.00	277.40		
FLOW LINE TEMPERATURE = 71°C																
02/14/98	20:00		775.20	84.78	138.46	2.99	141.45	694.32		6.2	603.27	0.00	0.00	141.45		
FLOW LINE TEMPERATURE = 60°C / SALINITY = 138 000ppm / TDS = 0 ppm																

Formation: Nananni



Date	Time	Drill	Inlet	Prod	GAS PRODUCTION				Oil Production	Water Production	INJECT	RATE	OPTION A	OPTION B		
					HPSep_Flow	LPGas_Flow	Total_Flow	Cumm_Gas								
															Rate	Cumm.
		Depth	Press	Hours	10 ³ m ³ /d	10 ³ m ³ /d	10 ³ m ³ /d	10 ³ m ³ /d	m ³ /d	m ³	m ³	m ³	m ³ /min	m ³ /min	10 ³ m ³ /d	m ³
02/14/98	20:01		749.36	84.80	149.47		149.47	694.43								
TAKE TWO HIGH PRESSURE GAS SAMPLES #18114 ~ #12075 - 68°C - 780 kPa																
02/14/98	20:02		740.75	84.82	131.46		131.46	694.52								
TAKE TWO HIGH PRESSURE FLUID #21741 + #21692 - 68°C - 770 kPa																
02/14/98	20:03		766.59	84.83	141.17		141.17	694.62								
TAKE TWO STOCK FLUID SAMPLES / ALL SAMPLES TO BE DELIVERED TO AGAT LAB'S																
02/14/98	20:24		413.44	85.18		3.01	3.01	695.45			603.27					
SHUT IN WELL @ B.C.P.s / RIG RECORD SHUT IN PRESSURE'S																
02/14/98	20:25		404.83	85.18		3.01	3.01	695.45								
DAILY CUMM BURNABLE GAS = 105.37 10 ³ m ³																
02/14/98	20:26		396.22	85.18		3.02	3.02	695.45								
DAILY CUMM FLUID = 322.31 m ³																
02/14/98	20:27		387.60	85.18		3.00	3.00	695.45								
CUMM BURNABLE GAS TO DATE = 437.47 10 ³ m ³																
02/14/98	20:28		378.99	85.18		3.00	3.00	695.46								
CUMM FLUID PRODUCED TO DATE = 603.27m ³																

v.07.31.97

VERSION: 1.84

CASING SHOE

03GRN2

FINISH DEPTH: 2493.4 METERS DIRECTION: UP DATE: 02/16/98 TIME: 04:50 MODE: TRACE PLAYBACK

GAMMA RAY

(API)

120

COLLAR LOCATOR

1000

MILLIVOLTS

110

NEUTRON

API UNITS

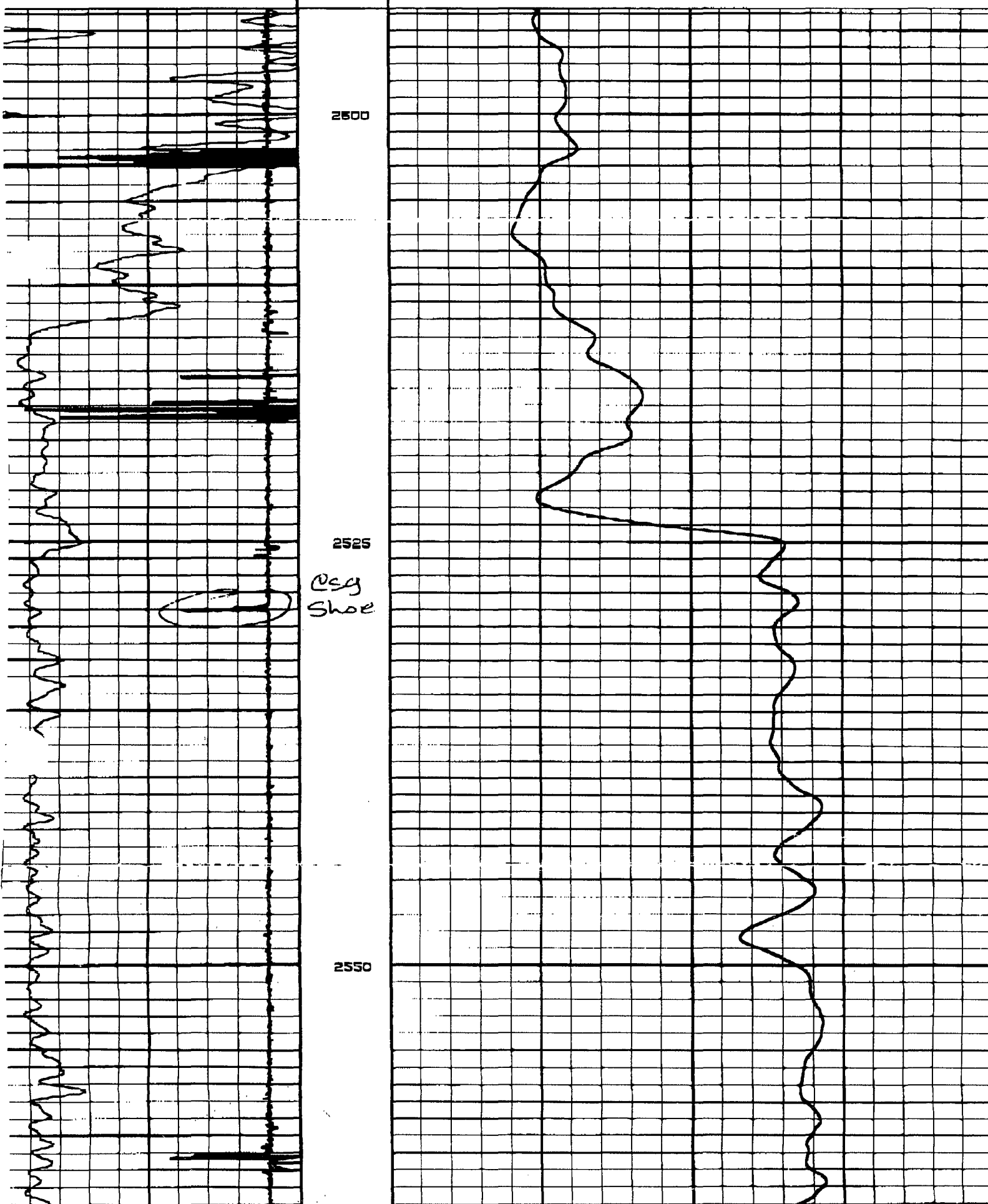
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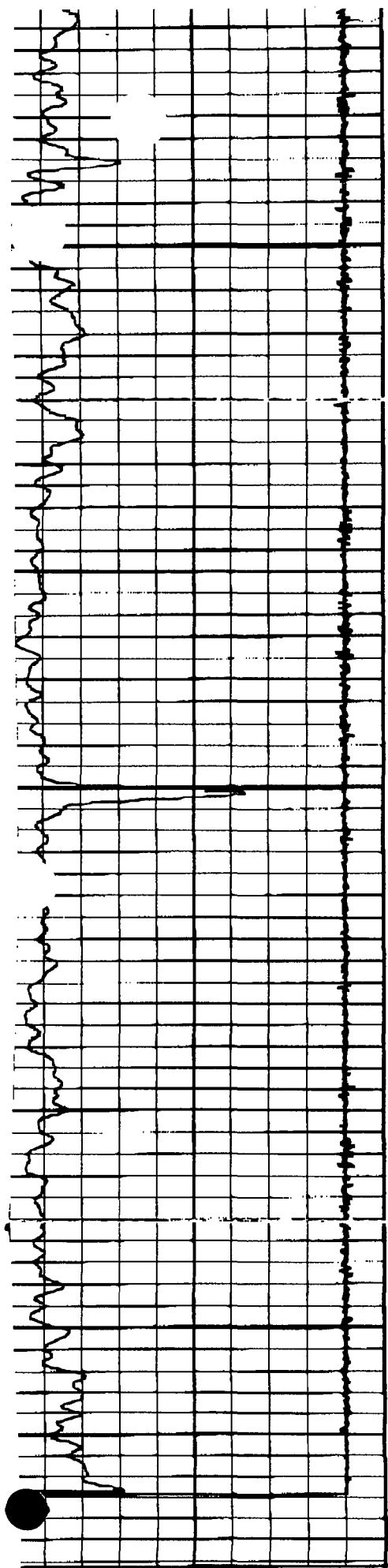
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2525

Csg
Shoe

2550



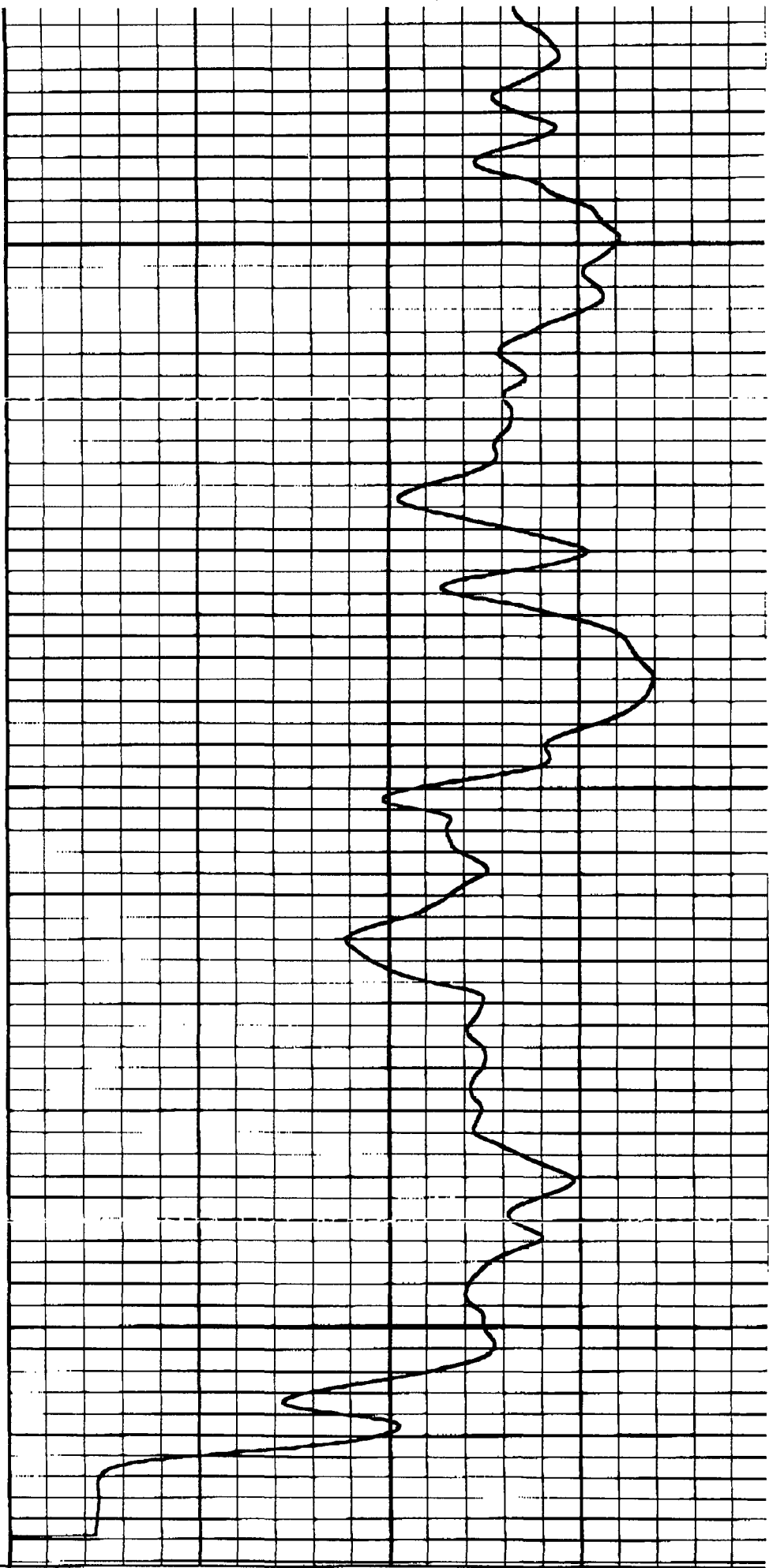


COLLAR LOCATOR
1000 MILLIVOLTS 110
GAMMA RAY
(API) 120

2575

2600

2625



NEUTRON
API UNITS

2500

START DEPTH: 2630.0 METERS DIRECTION: UP DATE: 02/18/88 TIME: 04:35 MODE: TRACE PLAYBACK
03GRN2

CASING SHOE

v.07.31.97

VERSION: 1.54

- 1.6

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT**FOR 24 HR PERIOD ENDING **98-02-13-8:00**

Yr - Mon - Day - Time

WELL NAME **PARAMOUNT et al ARROWHEAD**LOCATION **N65**Day **30**Depth **2847**Metres last 24 hr **211**HRS OB **18.25**Activity at report time **FOAM UNDERBALANCE DRILL 156MM HOLE****DRILLING MUD PROPERTIES AT GILAKERDUCTION/TIT**

Wt _____ Via _____ WL _____ Gels _____ Solids _____ PV _____ VP _____ pH _____
 Oil _____ % Sand _____ S Cake _____ PPMCL 0 PPMCa 0

BIT RECORD

BIT NO.	SIZE mm	MAKE & TYPE	SER. NO.	BIT		DEPTH OUT m	m DRLD TODAY	CUM m. DRLD	Rot hrs TODAY	CUM. Rot hr	m/hr	Dull Cond.		
				WT	RPM							T	B	G
1	155.4	SECHZS84F	709977	10/12	50		211	106	18.25	33.25	6.75	R	N	G

CIRCULATION RECORD

BIT NO.	JETS - mm			PUMP				ANN. VEL.		JET VEL.	HHP	SURF. PRESS. kPa
	1	2	3	STROKE	SPM	LJNER	m'/MIN	DP	DC			
1	20	20	20	43 M3	NITROGEN							4530

DEVIATION SURVEYS**MUD & CHEMICALS ADDED**

° at _____ m	° at _____ m	SAWDUST 50	CAUSTIC -6
° at _____ m	° at _____ m	SAFE COTE -12 PAILS	VISCONE -1 SK.
° at _____ m	° at _____ m	EXCIDE 2	ZINK CARB-3
° at _____ m	° at _____ m	VIS + 16 SACK.	VIS CON- 3

BOTTOM HOLE ASSEMBLY**TIME ANALYSIS**

TOOL	ID	OD	LENGTH	WEIGHT	OPERATION		TODAY	CUM.
	mm	mm	m	daN				
BIT		156	0.15		1. Drilling		18.25	
1-N.B. SHOCK SUB		121	1.83		2. Trips			
2-D.C.		121	18.6	1915	3. Rig Service		0.50	
1-R3		156	1.25		4. Deviation Surveys			
6 D.C.		121	56.01	5993	5. Ream & Cond. Hole			
1 JARS		121	3.87		6. Mix & Cond. Mud			
1 FLOAT SUB		120	0.61		7. Circulation		5.00	
13 D.C.		121	120.5	13014	8. Rig Repair			
					9. Run Casing & Cement			
					10.PRESS TEST			
					11. Logging			
	TOTOL		202.8	20922	12. UNPLUG ENTST FLOW LINE			
					13. AIR DRY HOLE			
					14. DISPLACE HOLE TO FOAM			
					15. RIG UP UNDERBALA EQPT.			
COSTS					16. Drilling Out			
DAILY	\$69,750				17. B.O.P. DRILL			
CUMMULATIVE	\$2,384,814				18.RIG OUT LAY DOWN TRUCK			
GR ELEV.567.9M	K.B.574.6				19. SLIP & CUT DRL'G. LINE			
					20. LAYDOWN & PICK UP PIPE			
SUPERVISOR	ROD MacEACHERN				21. SAFETY MEET		0.25	
PH.1-403-210-2951					TOTAL		24	

COSTS

DAILY \$69,750
 CUMMULATIVE \$2,384,814
 GR ELEV. 567.9M K.B. 574.6

SUPERVISOR **ROD MacEACHERN**
 PH. 1-403-210-2951

DRL-RPT.30A

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT (page 2)**FOR 24 HR PERIOD ENDING **98-02-13-08:00**
Yr - Mon - Day - TimeWELL NAME **PARAMOUNT ET AL ARROWHEAD**LOCATION **N65****OPERATIONS DETAIL:**

08:00-11:00 CIRC FOAM , MONITOR WELL,

11:00-11:15 RIG SERV.

11:15-11:30 SAFETY MEETING W FIRE MASTER.

11:30-12:00 CIRC FOAM.

12:00-12:30 DRILL 156 MM, WITH FOAM AND N2 FR:2636 TO 2639M.

12:30-14:00 CIRC OUT GAS, CLEAN UP HOLE.

14:00-23:45 DRILL 156 MM HOLE, W/FOAM & N2. FM:2639 TO 2748M KB.

23:45-24:00 RIG SERV.

00:00-08:00 DRILL 156 MM, HOLE

FLAIR =11.8 MCF PR/DAY STABILIZED

SALT WATER =FROM 98-02-12-05:00 TO 98-02-12, 21:09. 148M3

H2S= 55000 P.P.M.**WANT LIST:**WEATHER: **0**ROAD: **GOOD WINTER COND.****IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)**

Wellname : PARAMOUNT ET AL ARROWHEAD
 Location : N65
 Date : 02-13-98
 Contact : Paul Collens 290-3609

AM REPORT

DFS: 30

Depth @ 08:00 hrs: 2847m Progress last 24 hrs: 211 m
 Rotating hrs: 18.25

Present operations: drill ahead with N2

ROP: 15-18m/hr

Drill Fluid: N2 Dens: Vis: Wt: pH:

SURVEYS

FORMATION TOPS

Formation	Prognosis	Sample	LR:574.6m Subsea
Slave Pt	2564m	2520m	
Watt Mtn	--	2565m	
Sulphur Pt	--	2573m	
Nahanni	2564m	2639m	
Headless SH	--	2740m	
Manetoe DOL	2564m	2768m	

SHOW SUMMARY:

Formation	Interval	gas show/BOG	Lith/pol/shows/remarks
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Poor Sample returns begin at 2640m

Good sample returns begin at 2700m

Remarks: refer to attached striplog and gas flow charts

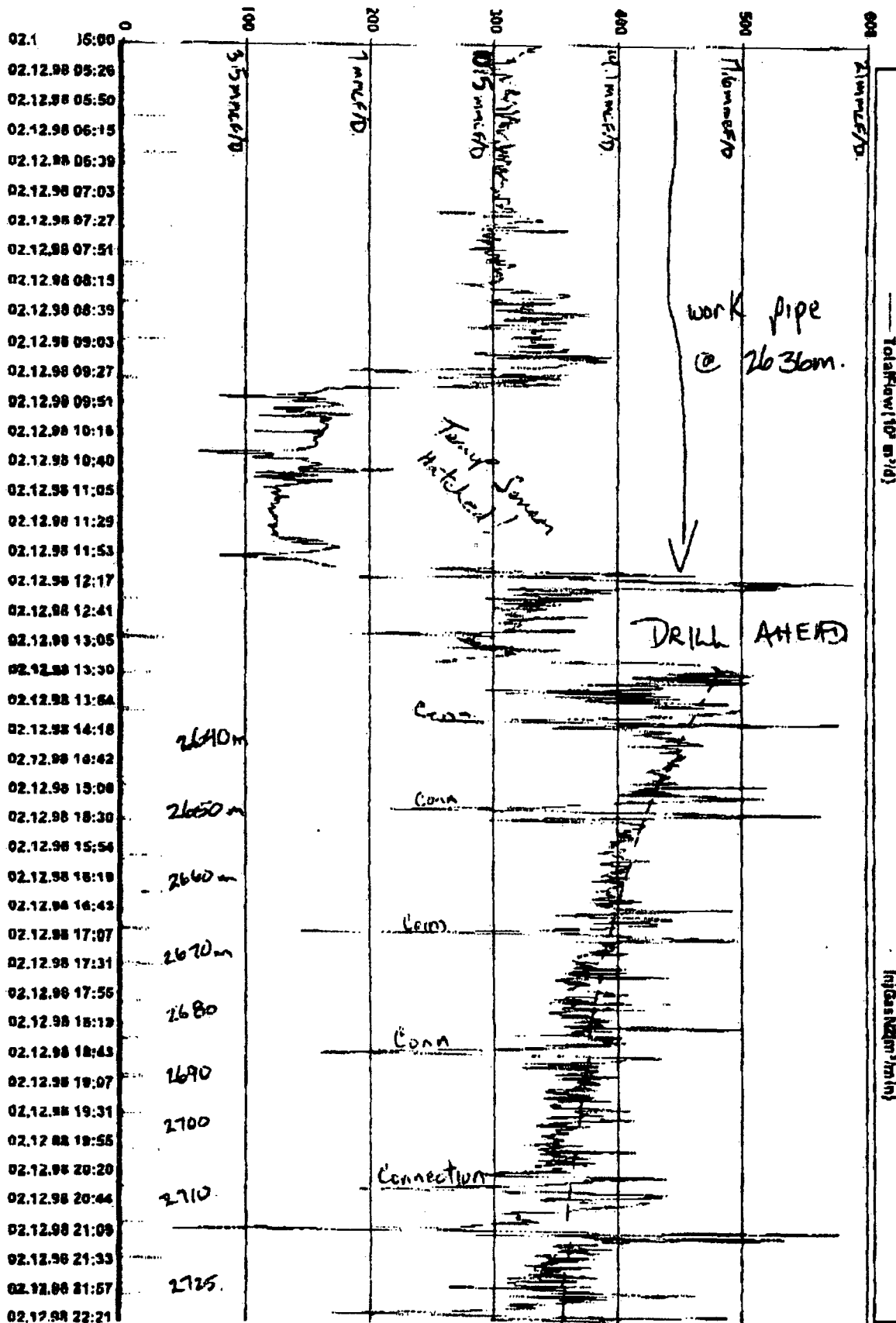
Geologist: D. Ferguson

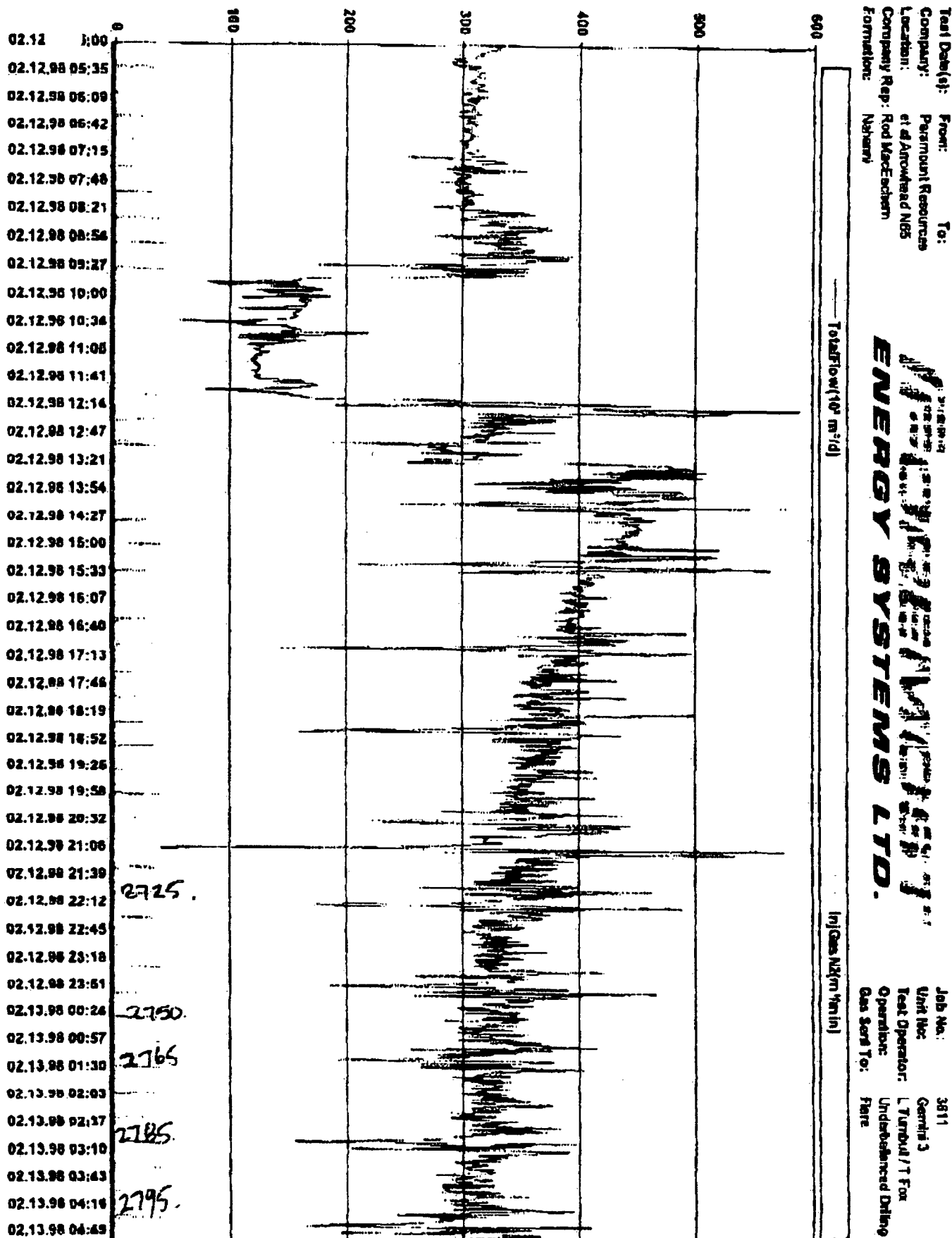
Cell: 1-403-210-2951

Test Details: From: To:
 Company: Paramount Resources
 Location: at Arroyohead NIS
 Company Rep: Rod MacEachern
 Formation: Nabawi

ENERGY SYSTEMS LTD.

Job No.: 3611
 Well No.: Gentry 3
 Test Operator: L. Turbide / T. For
 Operations: Underbalanced Drilling
 Gas Sent To: Flare





Today's: 13-Feb-98 Page: 12 of 12

Test Date(s): From: To:

Company: Paramount Resources

Location: et al Arrowhead N65

Company Rep: Rod MacEachern

Formation: Nahanni

PARAMOUNT RESOURCES ENERGY SYSTEMS LTD.

UnderBalanced-Drilling Report

Job No.: 3811

Unit No: Gemini 3

Test Operator: L Tumbull / Y Fox

Operation: Underbalanced Drilling

Gas Sent To: Flare

Date	Time	Drill Depth m	Inlet Press kPa	Prod Hour	GAS PRODUCTION			OIL PRODUCTION		WATER PRODUCTION		INJECT Rate m³/min	RATE Date Liq. m³/min	OPTION A Net Gas 10³ m³/d	OPTION B Gain/Loss m³
					HPSep_Flow 10³ m³/d	LPGas_Flow 10³ m³/d	Total_Flow 10³ m³/d	Cum_Gas 10³ m³/d	Rate m³/d	Cum. m³	Rate m³	Cum. m³			
02/13/98	00:13		973.31	56.46	332.72	2.34	335.06	438.70							
SAMPLE AT 2750 METERS															
02/13/98	00:24		930.24	56.64	328.50	2.18	330.68	441.20							
SAMPLE AT 2755 METERS															
02/13/98	00:30	2756.00	973.31	56.74	314.26	2.30	316.56	442.58			3.92	186.80	40.00	256.96	
FLOW LINE TEMPERATURE = 65°C															
02/13/98	00:44		956.08	56.96	339.12	2.21	341.33	445.73							
SAMPLE AT 2760 METERS															
02/13/98	01:00	2763.00	947.47	57.24	361.27	4.56	365.83	449.90			3.08	189.68	40.00	308.23	
FLOW LINE TEMPERATURE = 66°C / CONNECTION / SALINITY = 110,000ppm / H2S = 22ppm															
02/13/98	01:24		973.31	57.63	362.61	14.00	376.61	454.58							
SAMPLE AT 2765 METERS															
02/13/98	01:30	2767.00	930.24	57.73	260.07		260.07	455.85			5.15	195.03	40.00	262.47	
FLOW LINE TEMPERATURE = 61°C															
02/13/98	01:42		930.24	57.93	288.38	2.15	290.53	458.65							
SAMPLE AT 2770 METERS															
02/13/98	02:00	2775.00	921.63	58.23	290.32	8.43	298.75	462.64			6.71	201.74	40.00	241.45	
FLOW LINE TEMPERATURE = 63°C / SALINITY = 98,000ppm / H2S = 12ppm															
02/13/98	02:25		904.40	58.64	283.74	2.16	285.90	468.06							
SAMPLE AT 2780 METERS															
02/13/98	02:30	2781.00	887.18	58.73	305.02	4.18	309.20	469.13			4.84	206.68	40.00	251.58	
FLOW LINE TEMPERATURE = 64°C															
02/13/98	02:39		921.63	58.88	316.01	6.53	320.54	471.13							
CONNECTION															
02/13/98	03:00	2785.00	809.86	59.23	268.64		268.64	475.60			2.9	209.58	40.00	209.04	
FLOW LINE TEMPERATURE = 64°C / SAMPLE AT 2785 / SALINITY = 110,000ppm / H2S = 10ppm															
02/13/98	03:23		878.56	59.60	298.51	2.10	300.61	480.81							
SAMPLE AT 2780 METERS															
02/13/98	03:30	2791.00	878.56	59.72	311.65		311.65	482.33			7.47	217.05	40.00	254.05	
FLOW LINE TEMPERATURE = 64°C / SHIP 33m³ OFF LOCATION															
02/13/98	03:50		844.11	60.05	299.69	2.09	301.78	486.62							
SAMPLE AT 2795 METERS															
02/13/98	04:00	2798.00	879.58	60.22	276.67	1.98	278.64	488.70			1.89	219.94	40.00	218.94	
FLOW LINE TEMPERATURE = 64°C / SALINITY = 114,000ppm / H2S = 10ppm															

Today's: 13-Feb-98 Page: 17 of 12

Test Date(s): From: To:

Company: Paramount Resources

Location: et al Arrowhead N65

Company Rep: Rod MacEachern

Formation: Nahanni

PARAMOUNT ENERGY SYSTEMS LTD.

UnderBalanced-Drilling Report

Job No: 3611

Unit No: Gemini 3

Test Operator: L Tumbul / T Fox

Operation: Underbalanced Drilling

Gas Sent To: Flare

Date	Time	Drill	Inlet	Prod	GAS PRODUCTION				OIL PRODUCTION		WATER PRODUCTION		INJECT	RATE	OPTION A	OPTION B	
		Depth	Press	Hours	HPSep_Flow	LP Gas_Flow	Total_Flow	Cum Gas	Rate	Cum Oil	Rate	Cum Oil	Gas/N2	Date Liq	Net Gas	Gain/Loss	
		m	kPa		10 ³ m ³ /d	10 ³ m ³ /d	10 ³ m ³ /d	10 ³ m ³ /d	m ³ /d	m ³	m ³	m ³	m ³ /min	m ³ /min	10 ³ m ³ /d	m ³	
02/12/98	20:00	2705.00	1059.44	52.29	340.50	2.34	342.84	379.49				4.34	1389.58	40.00	0.10	285.24	
2705m SAMPLE TAKEN																	
02/12/98	20:12		1033.60	52.48	336.22	2.22	340.44	382.22									
MAKE CONNECTION																	
02/12/98	20:30	2707.00	818.27	52.78	338.63	1.29	339.92	386.63				3.53	113.11	40.00	0.10	282.32	
02/12/98	20:46		956.08	53.08	384.61		384.61	391.10									
2710m SAMPLE TAKEN																	
02/12/98	21:00	2713.00	895.79	53.27	311.03	2.14	313.17	393.86				4.5	147.61	40.00	0.10	255.57	
02/12/98	21:05	2715.00	534.03	53.35	216.09		216.09	394.61									
2715m SAMPLE TAKEN																	
02/12/98	21:27	2720.00	1042.22	53.72	351.37	2.34	353.71	400.12									
2720m SAMPLE TAKEN																	
02/12/98	21:30	2720.00	1024.99	53.77	373.70	6.62	380.52	400.85				-2.8	144.81	40.00	0.10	322.92	
02/12/98	21:48	2725.00	1042.22	54.05	305.47	4.75	310.22	405.36									
2725m SAMPLE TAKEN																	
02/12/98	22:00	2725.00	1024.99	54.26	409.11	18.60	419.71	408.12				.15	144.97	40.00	0.10	362.11	
FLOW LINE TEMPERATURE = 74°C / SALINITY = 120 000ppm / H ₂ S = 150ppm																	
02/12/98	22:28	2730.00	990.54	54.73	334.33	4.53	338.86	414.67									
2730m SAMPLE TAKEN																	
02/12/98	22:30	2730.00	990.54	54.76	358.32	4.33	362.66	415.17				5.93	150.80	40.00	0.10	241.70	
02/12/98	22:49	2735.00	981.82	55.08	323.95		323.95	419.50									
2735m SAMPLE TAKEN																	
02/12/98	23:00		990.54	55.26	306.10		306.10	421.99				11.81	162.71	40.00	0.10	185.14	
FLOW LINE TEMPERATURE = 74°C / SALINITY = 108 000ppm / H ₂ S = 200ppm																	
02/12/98	23:07		947.47	55.37	318.36	2.61	320.97	423.60									
SAMPLE AT 2740 METERS																	
02/12/98	23:30	2745.00	990.54	55.75	316.32	1.88	318.20	428.88				.12	165.36	40.00	0.10	260.60	
FLOW LINE TEMPERATURE = 74°C / CONNECTION / SAMPLE AT 2745 METERS																	
02/12/98	1:00	2748.00	1068.06	56.25	329.85	2.11	331.96	435.48				17.52	152.88	40.00		274.36	
FLOW LINE TEMPERATURE = 60°C / SALINITY = 112,000ppm / H ₂ S = 20 ppm																	

Today's: 13-Feb-98 Page: 10 of 12

Test Date(s): From: To:

Company: Paramount Resources

Location: et al Arrowhead N85

Company Rep: Rod MacEachern

Formation: Nahanni

PARAMOUNT RESOURCES

ENERGY SYSTEMS LTD.

UnderBalanced-Drilling Report

Job No.: 3611

Unit No: Gemini 3

Test Operator: L Turnbull / T Fox

Operation: Underbalanced Drilling

Gas Sent To: Flare

Date	Time	Drill Depth m	Inlet Press kPa	Prod Hours	GAS PRODUCTION				OIL PRODUCTION		WATER PRODUCTION		INJECT Gas/N2 m³/min	RATE Date/Liq m³/min	OPTION A Net Gas 10³ m³/d		OPTION B Gain/Loss m³	
					HPSep_Flow 10³ m³/d	LP Gas_Flow 10³ m³/d	Total_Flow 10³ m³/d	Cumulative_Gas 10³ m³/d	Rate m³/d	Cumulative m³	Rate m³	Cumulative m³						
02/12/98	15:30	2653.00	1248.94	47.83	295.55		295.55	308.89			8.63	107.05	40.00	0.10	237.83			
02/12/98	15:40		1283.39	47.89	384.38	4.94	389.32	311.73										
SAMPLE 2655m TAKEN																		
02/12/98	16:00	2657.00	1274.78	48.33	406.11		406.11	317.30			2.14	108.19	40.00	0.10	348.51			
FLOW LINE TEMPERATURE = 74°C																		
02/12/98	16:25		1257.55	48.75	395.04	2.52	397.56	323.95										
SAMPLE 2660m TAKEN																		
02/12/98	16:30	2660.00	1240.32	49.02	388.54	2.47	391.00	325.30			2.85	112.04	40.00	0.10	333.40			
FLOW LINE TEMPERATURE = 76°C																		
02/12/98	16:45		1223.10	49.07	365.11	66.25	431.36	329.50										
SAMPLE 2665m SAMPLE MISSED / BY-PASS NP TO MAKE CONNECTION																		
02/12/98	17:00	2669.00	878.56	49.32	353.61	2.31	355.93	333.70			5.98	119.02	40.00	0.10	268.33			
FLOW LINE TEMPERATURE = 65°C																		
02/12/98	17:05		1274.78	49.42	401.69		401.69	334.96										
SAMPLE 2670m TAKEN																		
02/12/98	17:30	2675.00	1223.10	49.51	368.23	5.07	373.30	341.44			1.89	119.31	40.00	0.10	315.73			
SAMPLE 2675m TAKEN																		
02/12/98	18:00	2683.00	1145.58	50.31	340.23	2.40	342.63	349.22			3.45	123.43	40.00	0.10	285.63			
02/12/98	18:20		1162.80	50.84	348.64	9.01	355.65	354.39										
MAKE CONNECTION																		
02/12/98	18:30	2687.00	1076.67	50.81	376.67		376.67	357.07			2.4	125.80	40.00	0.10	319.07			
FLOW LINE TEMPERATURE = 76°C																		
02/12/98	18:55		1154.19	51.22	383.54		383.54	361.17										
NO SAMPLE FOR 2690m / SAMPLE CATCHER OUT OF SERVICE																		
02/12/98	19:00	2692.00	1093.80	51.30	386.89	2.42	389.31	364.47			6.88	132.68	40.00	0.10	341.71			
FLOW LINE TEMPERATURE = 76°C																		
02/12/98	19:10		1111.12	51.47	380.28	2.37	382.65	367.07										
2695m SAMPLE TAKEN																		
02/12/98	19:30	2698.00	1085.28	51.80	359.46	9.16	368.62	372.11			2.56	135.24	40.00	0.10	311.02			
02/12/98	19:37		1085.28	51.92	379.03	2.31	381.34	373.90										
2700m SAMPLE TAKEN																		

Today's: 13-Feb-98 Page: 9 of 12

Test Date(s): From: To:

Company: Paramount Resources

Location: et al Arrowhead N85

Company Rep: Rod MacEachern

Formation: Nahanni

PARAMOUNT ENERGY SYSTEMS LTD.

Underbalanced-Drilling Report

Job No.: 3611

Unit No: Gemini 3

Test Operator: L Turnbull / T Fox

Operation: Underbalanced Drilling

Gas Sent To: Flare

Date	Time	Drill	Inlet	Prod	GAS PRODUCTION			OIL PRODUCTION		WATER PRODUCTION		INJECT	RATE	OPTION A		OPTION B
					HPSep_Flow	LPGas_Flow	Total_Flow	Cumm_Gas	Rate	Cumm.	Rate	Cumm.	Gas/N2	Date Lq	Net Gas	Gain/Loss
		Depth	Press	Hours	10 ³ m ³ /d	10 ³ m ³ /d	10 ³ m ³ /d	10 ³ m ³ /d	m ³ /d	m ³	m ³	m ³	m ³ /min	m ³ /min	10 ³ m ³ /d	m ³
02/12/98	10:43		844.11	43.09	144.65	3.36	148.21	245.01								
N° TOO BY-PASS																
02/12/98	11:00	2636.80	802.94	43.38	124.63		124.63	246.73			1.36	66.19				
NET GAS 124.63 10 ³ m ³ /d / SALINITY 100 000 ppm																
02/12/98	11:30	2636.90	577.10	43.87	123.81	2.21	126.02	249.24			2.56	68.75				
NET GAS 123.81 10 ³ m ³ /d																
02/12/98	11:35		577.10	43.95	122.87		122.87	249.67								
BROUGHT N° BACK ON LINE @ 45m ³ /min																
02/12/98	12:00	2636.90	869.95	44.37	152.13		152.13	252.11			3.85	72.60	44.00	0.12	88.77	
START DRILLING																
02/12/98	12:05		1360.91	44.45	294.84	2.86	297.70	252.78								
PULL OFF BOTTOM TO CIRCULATE HOLE.																
02/12/98	12:30	2636.90	2239.48	44.86	289.14	4.52	293.66	259.41			7.7	82.30	44.00	0.12	230.36	
FLOW TEMPERATURE 50 DEGREES CELCIUS																
02/12/98	12:33		2161.96	44.91	301.47	4.75	306.21	260.13					3.00			
N° TOO BY-PASS																
02/12/98	12:55		1886.33	45.28	356.15	6.94	366.39	265.09					42.30			
N° TOO BACK ON LINE @ 40m ³ /min																
02/12/98	13:00	2636.90	1731.29	45.36	278.41	3.69	282.11	266.04			3.16	63.48	42.00	0.10	224.51	
02/12/98	13:20		1472.89	45.68	237.72	14.36	252.08	269.91								
TEMPERATURE METER MALFUNCTION / SWITCH TO MANUAL TEMPERATURE																
02/12/98	13:21		1533.16	45.69	442.86	2.98	445.82	270.22								
02/12/98	13:30	2636.90	1490.11	45.84	440.00		440.00	273.15			4.12	87.60	40.00	0.10	362.40	
HPS = 50ppm																
02/12/98	14:00	2639.00	1461.50	46.34	497.36	2.94	500.30	282.15			2.2	39.80	40.00	0.10	442.70	
FLOW LINE TEMPERATURE = 71°C / CONTINUE DRILLING / HPS = 10ppm																
02/12/98	14:30	2645.00	1447.05	46.83	428.45	5.74	434.19	291.06			.65	30.65	40.00	0.10	376.59	
FLOW LINE TEMPERATURE = 77°C / SAMPLE 2645m TAKEN																
02/12/98	15:00	2648.00	1308.23	47.33	370.65	34.27	404.92	300.23			7.77	68.42	40.00	0.10	347.32	
02/12/98	15:20		1050.63	47.68	269.68	9.51	279.37	306.16								
SA - 2650 m TAKEN																

Today's: 13-Feb-98 Page: 8 of 12
 Test Date(s): From: To:
 Company: Paramount Resources
 Location: et al Arrowhead N65
 Company Rep: Rod MacEachern
 Formation: Nahanni

PARAMOUNT RESOURCES ENERGY SYSTEMS LTD. UnderBalanced-Drilling Report

Job No.: 3611
 Unit No.: Gemini 3
 Test Operator: L Turnbull / T Fox
 Operation: Underbalanced Drilling
 Gas Sent To: Flare

Date	Time	Drill	Inlet	Prod	GAS PRODUCTION			OIL PRODUCTION		WATER PRODUCTION		INJECT	RATE	OPTION A		OPTION B
					HP Sep. Flow	LP Gas Flow	Total Flow	Cumm. Gas	Rate	Cumm.	Rate	Cumm.	Gas/N2	Date Liq.	Net Gas	Gain/Loss
		Depth	Pres.	Hours	10 ³ m ³ /d	10 ³ m ³ /d	10 ³ m ³ /d	10 ³ m ³ /d	m ³ /d	m ³	m ³	m ³	m ³ /min	m ³ /min	10 ³ m ³ /d	m ³
02/12/98	05:30	2636.91	828.88	37.93	302.57	2.50	305.07	184.71			3.4	15.93	45.00	0.12		7.00
NET GAS 240.27 10 ³ m ³ /d																
02/12/98	06:00	2636.91	844.11	38.44	509.95	3.05	513.00	191.20			6.16	22.09	45.00	0.12		
NET GAS 248.20 10 ³ m ³ /d / SALINITY = 84 300ppm																
02/12/98	06:30	2636.91	818.27	38.92	305.85		305.85	197.41			3.77	25.86	45.00	0.12		
NET GAS 241.05 10 ³ m ³ /d / GOOD SAMPLE IN SAMPLE CATCHER																
02/12/98	07:00	2636.91	818.27	39.42	303.86		303.86	203.78			3.77	29.63	45.00	0.12		
NET GAS 239.06 10 ³ m ³ /d / SALINITY = 80 000ppm																
02/12/98	07:30	2636.91	869.85	39.92	287.68		287.68	210.20			2.01	31.64	45.00	0.12		
NET GAS 222.88 10 ³ m ³ /d																
02/12/98	08:00	2636.91	881.04	40.41	316.10		316.10	216.52			5.92	37.56	45.00	0.12		
NET GAS 251.30 10 ³ m ³ /d																
02/12/98	08:20		844.11	40.74	321.66	3.51	325.17	220.70								
STARTED TRANSFERING FLUID TO RIG TANK / 37.56m ³ PRODUCED TO PIT																
02/12/98	08:30	2636.91	852.72	40.91	305.72		305.72	222.97			4.5	49.36	45.00	0.12		
NET GAS 240.92 10 ³ m ³ /d																
02/12/98	09:00	2636.91	904.40	41.40	330.13		330.13	229.92			5.33	54.36	44.00	0.12		
NET GAS 266.77 10 ³ m ³ /d / DECREASE N ₂ TO 44.00m ³ /min / SALINITY 50 000 ppm																
02/12/98	09:05		878.56	41.48	342.65	4.09	346.74	231.10					0.00	0.12		
BY-PASS N ₂ TO REPAIR LEAK																
02/12/98	09:30	2636.91	878.56	41.90	335.66		335.66	236.77			6.34	80.73	44.00	0.12		
NET GAS 272.30 10 ³ m ³ /d / WELL SLUGGING																
02/12/98	09:55		792.43	42.32	147.40		147.40	240.16								
HIGH PRESSURE GAS SAMPLE TAKEN # 21607 @ 451 kPa																
02/12/98	10:00	2636.90	775.20	42.40	172.11		172.11	240.70			3.05	63.78				
NET GAS 172.11 10 ³ m ³ /d / SALINITY 72 000 ppm																
02/12/98	10:05		826.88	42.47	169.42		169.42	241.13								
HIGH PRESSURE GAS SAMPLE #21842 @ 431 kPa / SALINITY 7.2 %																
02/12/98	10:11		796.59	42.57	166.72		166.72	241.81								
HIGH PRESSURE FLUID SAMPLE TAKEN # 21776 @ 350 kPa																
02/12/98	10:15		663.23	42.63	104.38	2.78	107.16	242.22								
HIGH PRESSURE FLUID SAMPLE TAKEN # 21751 @ 320 kPa																
02/12/98	10:30	2636.90	542.64	42.88	118.42		118.42	243.82			1.05	64.83				
NET 118.42 10 ³ m ³ /d																

Today's: 13-Feb-98 Page: 7 of 12

Test Date(s): From: To:

Company: Paramount Resources

Location: et al Arrowhead N85

Company Rep: Rod MacEachern

Formation: Nahanni

PARAMOUNT RESOURCES **ENERGY SYSTEMS LTD.**

UnderBalanced-Drilling Report

Job No.: 3611

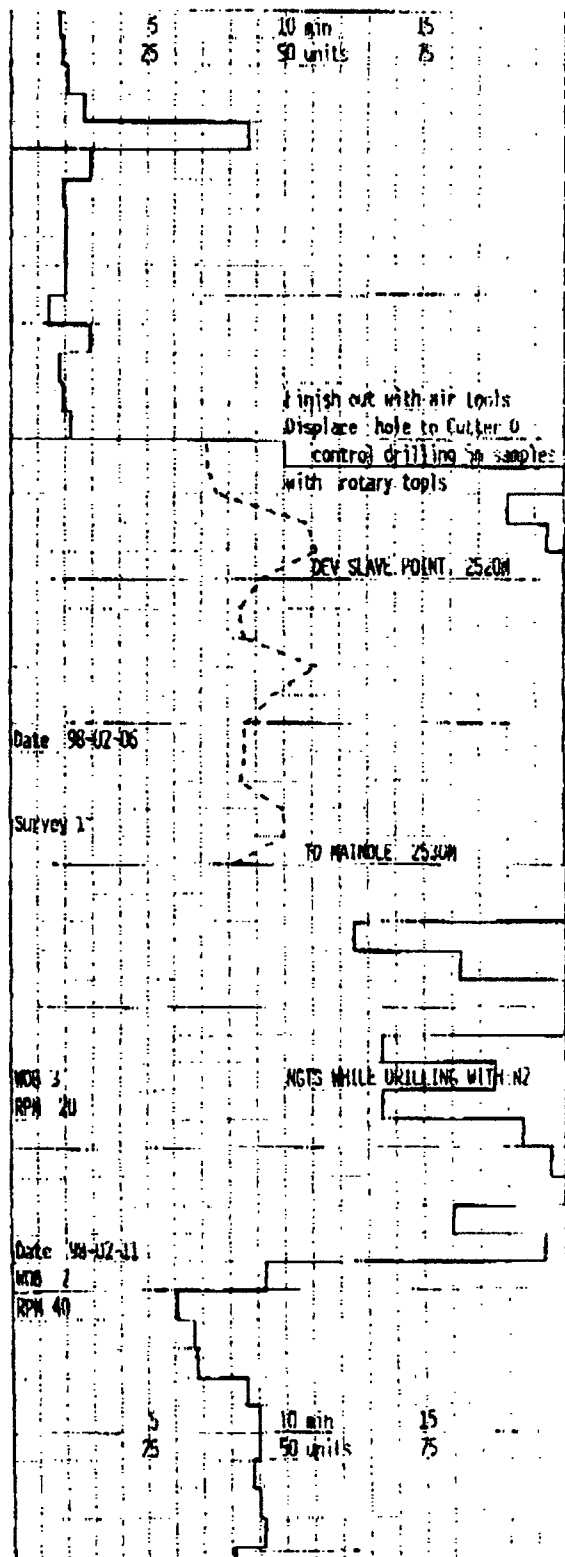
Unit No: Gemini 3

Test Operator: L Turnbull / T Fox

Operation: Underbalanced Drilling

Gas Sent To: Flare

Date / Time	Drill Depth	Inlet Pres. kPa	Prod Hours	GAS PRODUCTION				OIL PRODUCTION		WATER PRODUCTION		INJECT	RATE	OPTION A	OPTION B
				HP Sep. Flow 10 ³ m ³ /d	LP Gas Flow 10 ³ m ³ /d	Total Flow 10 ³ m ³ /d	Cumm. Gas 10 ³ m ³ /d	Rate m ³ /d	Cumm. m ³	Rate m ³	Cumm. m ³				
02/12/98 00:48		1694.94	33.43	865.06	6.19	871.25	117.46								
02/12/98 01:00	2636.91	1507.34	33.63	690.04		690.04	123.43					45.00		625.24	
H2S = 0 ppm															
02/12/98 01:30		826.88	34.12	359.09		359.09	133.30					45.00		294.29	
02/12/98 02:00	2636.91	680.46	34.81	318.02		318.02	140.70					45.00		253.22	
CONTINUE TO FLOW WELL / BLACK SLUDGE IN SAMPLE CATCHER															
02/12/98 02:04			34.68	2.28		2.28	141.26								
PRIMARY FLOW LINE PLUGGED OFF / SWITCH FLOW THROUGH SECONDARY LINE															
02/12/98 02:12		8.51	34.68			0.00	141.27					0.00			
SHUT DOWN N° PUMP															
02/12/98 02:21		34.45	34.79	43.41		43.41	142.89								
PLUGGED OFF AT CHOKE IN RIG'S MANIFOLD SHACK / SWITCH TO FULL 4" FLOW															
02/12/98 02:30	2636.91	1653.77	34.94	595.74		595.74	146.85					0.00		595.74	
FLOW TOO SURFACE / 79 000ppm / HPS = 25 ppm															
02/12/98 03:00	2636.91	801.04	35.44	311.84		311.84	154.84			7.33	7.85	3.00		311.84	
WORKING ON UNPLUGGING PRIMARY FLOW LINE															
02/12/98 03:30	2636.91	706.30	35.93	286.03		286.03	160.96					0.00		296.03	
02/12/98 04:00	2636.91	680.46	36.43	274.39		274.39	166.74			3.5	11.33	0.00		274.39	
02/12/98 04:30	2636.91	680.46	36.93	269.10		269.10	172.17					0.00		269.10	
02/12/98 04:38		783.82	37.07	307.22		307.22	173.82					45.00			
SWITCH FLOW THROUGH PRIMARY FLOW LINE / START N° DOWN HOLE @ 45.00m ³ /min															
02/12/98 04:48		826.88	37.23	311.76		311.76	175.93					45.00	0.12		
START PUMPING FOAM DOWN HOLE @ 0.12m ³ /min															
02/12/98 05:00	2636.91	861.34	37.43	335.64		335.64	178.66			1.2	12.53	45.00	0.12		
HPS READING = 0 ppm / NET GAS 270.84 10 ³ m ³ /d															
02/12/98 05:01		861.34	37.44	335.87		335.87	178.89								
CUMM. BURNABLE GAS TO DATE = 68.00 10 ³ m ³															
02/12/98 05:02		852.72	37.46	332.95		332.95	179.12								
CUMM. WATER PRODUCED TO DATE = 12.53 m ³															



2.25

250

SH-blk, brn ip, fis - sfis, sl calc, scat pyr thru;

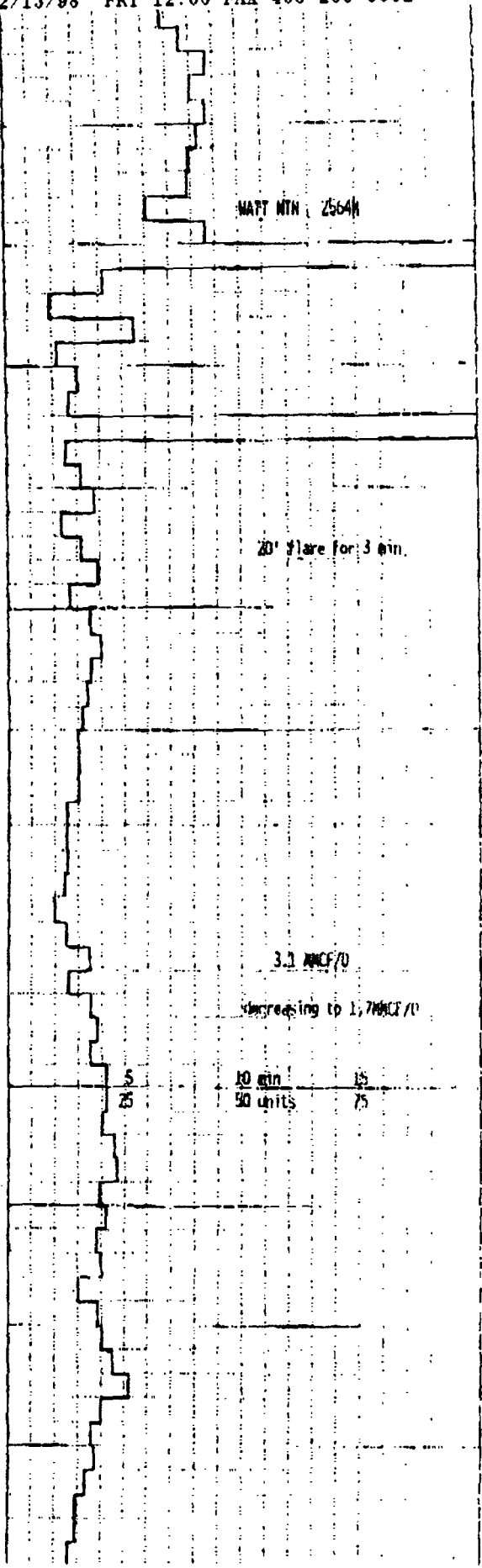
SH-blk, brn ip, fis - sfis, mod calc, scat pyr thru;

SH-blk, brn ip,, mod calc str, grdg to arg LS ip, scat pyr; LS-lt gy, brn, dk gy ip, not ip, frag ip / rr clr and trms ca fre fill - euhedral xls ip, NWS, NVP, tr sks ip, scat arg lam, scat dol str, occ slty; LS-dk gy, brn, lt gy ip, not ip, scat clr ca fre fill - euhedral xls ip, NWS, NVP, tr sks ip;

LS-a - dk gy, brn, lt gy ip, not ip, scat clr ca fre fill - euhedral xls ip, NWS, NVP;

NS-No sample returns while drilling with N2;

NS-No sample returns while drilling with N2;



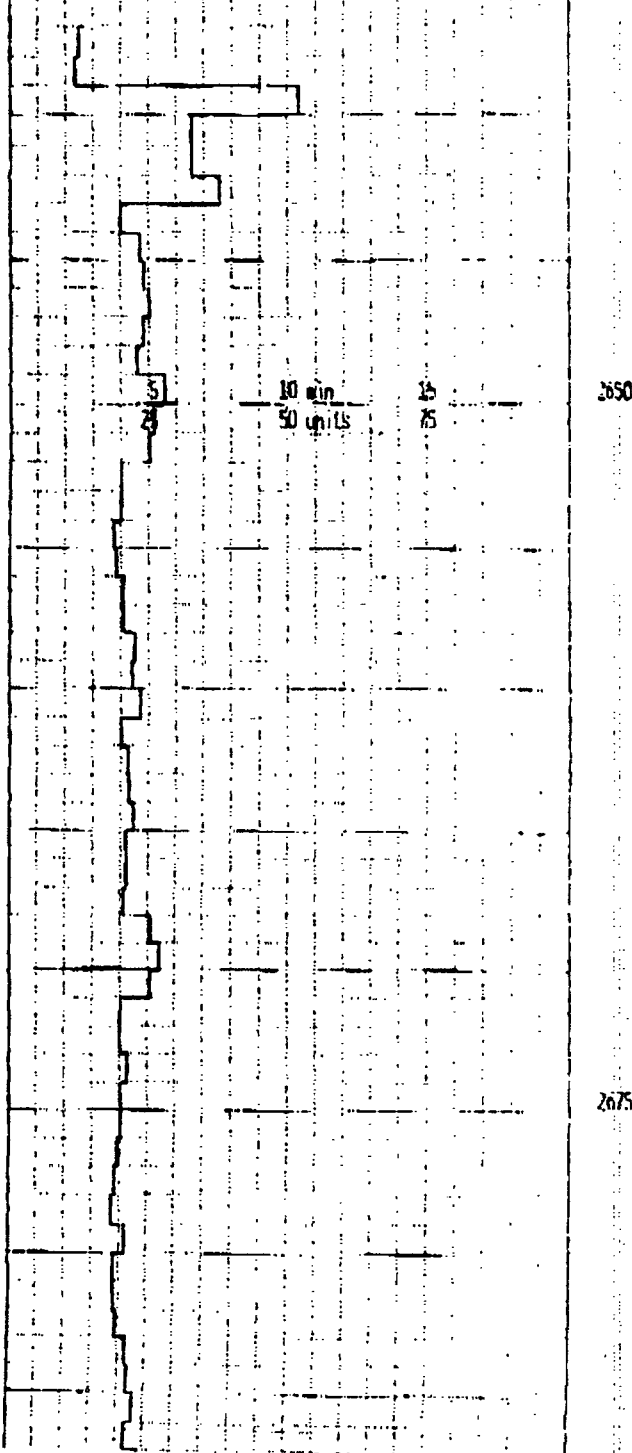
2575

2600

NS-No sample returns while drilling with N2;

NS-No sample returns while drilling with N2;

Date 02-12-98 28.6 MCF/D decr. to 19 MCF/D



NS-No sample returns while drilling with N2;

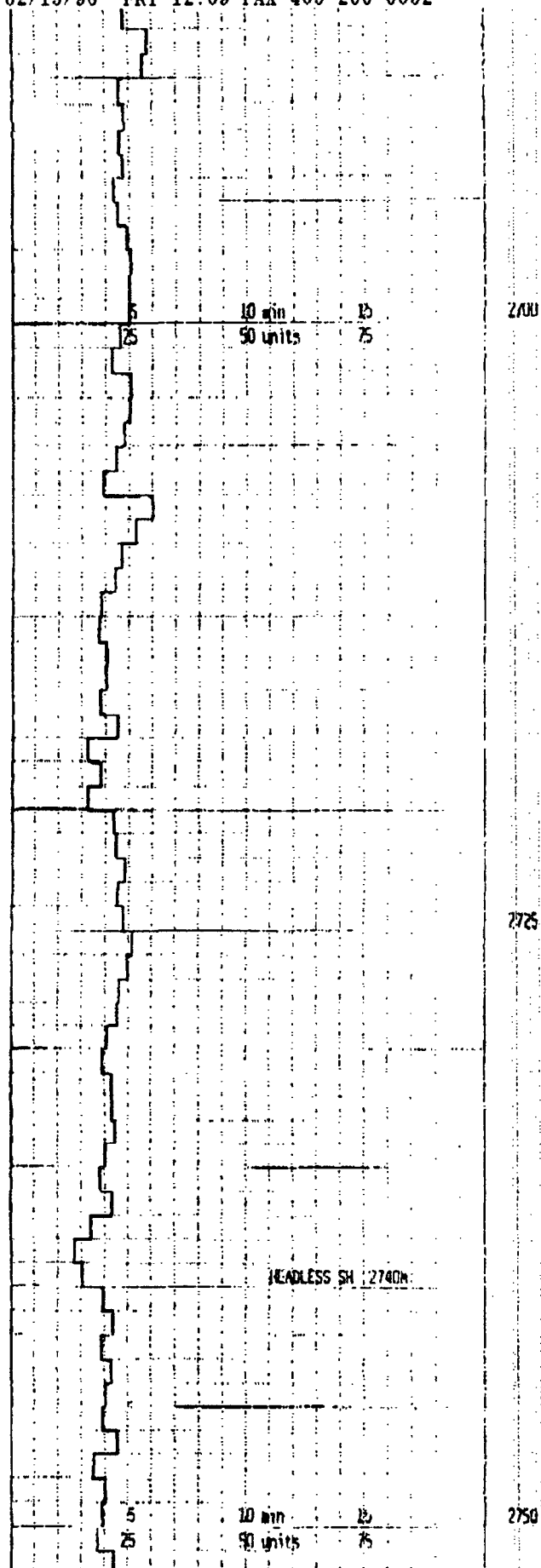
LS-lt gy, a gy brn, occ not ip, scat clr and wh ca frc fill - tr euhedral xls ip, MVS, MVP, scat pyr ip; LS-lt gy, a gy brn, occ not ip, scat clr and wh ca frc fill - tr euhedral xls ip, MVS, MVP, scat pyr ip;

LS-m - dk gy brn, scat clr ca frc fill - euhedral xls ip, MVS, MVP;

NS-No sample returns while drilling with N2;

LS-m - dk gy brn, tr clr, trns ca frc fill - euhedral xls ip, MVS, MVP;

NS-No sample returns while drilling with N2;

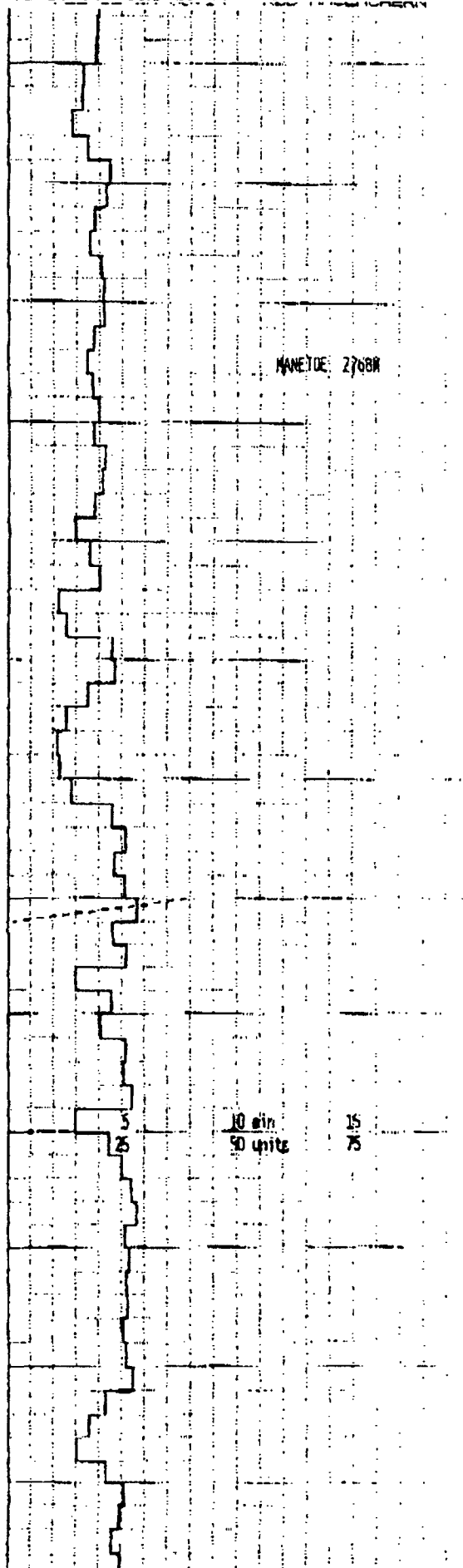


LS-m - dk gy brn, tr clr, trns ca frc fill -
euhedral xls ip, NVS, NVP;

LS-m - dk gy brn, tr clr, trns ca frc fill -
euhedral xls ip, NVS, NVP, tr pyr vn ip, rr
dol frc fill isp; LS-m - dk gy brn, scat wh
ca frc fill - euhedral xls ip, rr dol frc
fill ip, NVS, NVP, scat pyr vn;

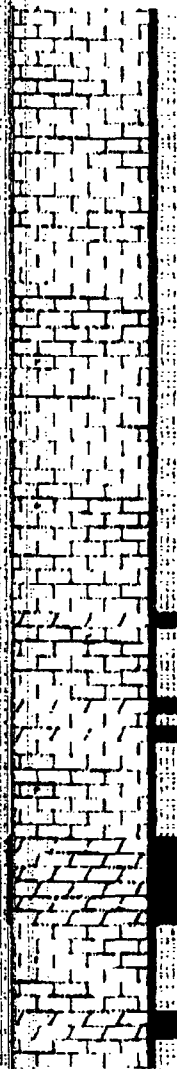
LS-m - dk gy brn, tr clr, trns ca frc fill -
euhedral xls ip, NVS, NVP, tr pyr vn ip, rr
dol frc fill isp; LS-m - dk gy brn, scat wh
ca frc fill - euhedral xls ip, rr dol frc
fill ip, NVS, NVP, scat pyr vn;

LS-m - dk gy brn, occ lt brn ip, tr wh - tm
ca frc fill - euhedral xls ip, NVS, NVP, rr
dol frc fill isp;



2775

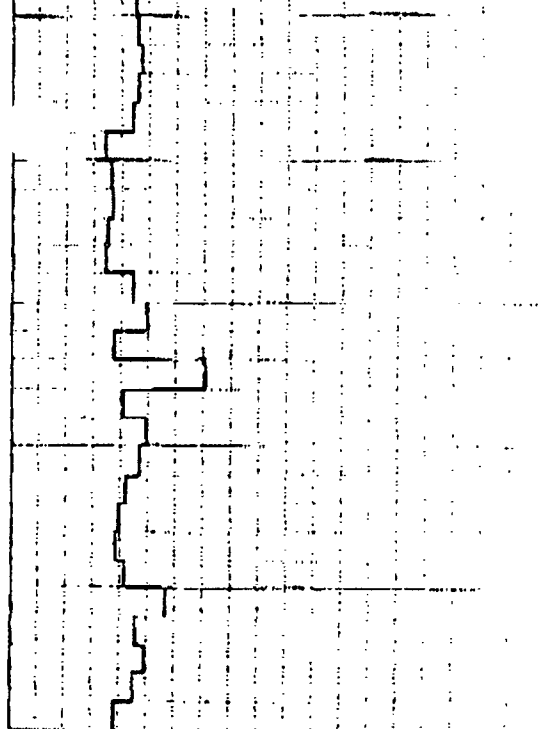
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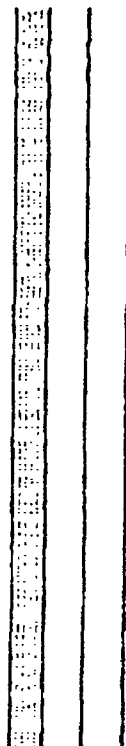
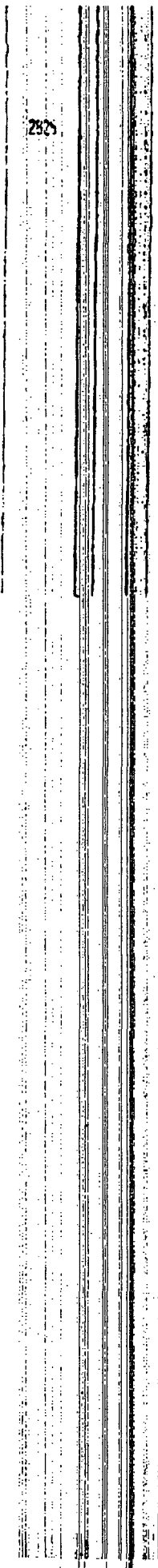
LS-m - dk gy brn, lt gy ip, scat wh ca frc
fill - euhedral xls ip, rr dol frc fill ip,
MVS, MVP, scat pyr vn isp;

LS-m - dk gy brn, lt gy ip, scat wh ca frc
fill - euhedral xls ip, rr dol frc fill ip,
MVS, MVP, scat pyr vn isp; DOL-wh, not lt gy
ip, MVS, MVP, tr dol frc fill;

LS-m - dk gy brn, lt gy ip, scat wh ca frc
fill - euhedral xls ip, rr dol frc fill ip,
MVS, MVP, scat pyr vn isp; DOL-wh, not lt gy
ip, MVS, MVP, tr dol frc fill;



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PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT (page 2)**FOR 24 HR PERIOD ENDING **98-02-12-08:00**

Yr - Mon - Day - Time

WELL NAME **PARAMOUNT ET AL ARROWHEAD**LOCATION **N65****OPERATIONS DETAIL:**

08:00-11:00 25STD.WIPER TRIP.

11:00-11:45 N2 DRILL 156MM, HOLE FR:2553M TO 2560M

11:45-12:00 RIG SERV.

12:00-12:30 N2 DRILL 156 MM HOLE FR:2560 TO 2564M

12:30-14:45 N2 DRILL 1M, CIRC SAMPLE

14:45-16:30 WIPER TRIP TO CSG.

16:30-17:00 DRILL FM: 2568 TO 2572.

17:00-19:30 CIRC WITH AIR, ATTEMP TO CIRC UP SAMPLES.

19:30-23:45 DISPLACE TO N2,& DRILL 216MM HOLE FM:2572 TO 2630M

23:45-24:00 RIG SERV.

00:00-00:45 N2 DRILL 156 MM HOLE.

00:45-04:45 BY PASS TO SPAIR FLOW LINE UN PLUG FLOW LINE TO ENTESTERS.

04:45-08:00 CHANGE MUD OVER TO FOAM MUD SYST. CIRC & COND.

FIRST GAS 2578M: 20 FT FLAIR FOR 3 MINS.

SECOND GAS:2595 3.1MMCF/D

THIRD GAS :2636 28.6 MMCF/D DECR TO 19 MMCF/D DECR TO 8.9MMCF/D STABILIZED
PLUS 85 LITERS SALT WATER PER MIN**WANT LIST:**WEATHER: **-20**ROAD: **GOOD WINTER COND.**IN DETAIL: **MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)**

Wellname : PARAMOUNT ET AL ARROWHEAD
 Location : N65
 Date : 02-12-98
 Contact : Paul Collene 290-3605

AM REPORT
 DFS: 29

Depth @ 0800hrs: 2636m 24 hr Progress: Som
 Rotating hrs:
 Present operations: condition mud for changover to rosm and N2

RUP: m/hr
 Drill fluid: N2 Dens: Visc: WL: pH:

Surveys: N/A

FORMATION TOPS		KB:574.6M	
Formation	Prognosis	Sample	Subsea
SLAVE POINT	2564M	2520M	
WATT MTN	--M	2565M	
HEADLESS	--M	Not penetrated	

SHOW SUMMARY:
 Formation Interval Gas show/BGG Lith/por/shows/remarks

NOTE: NO SAMPLE RETURNS WHILE DRILLING WITH N2

2578M	GTS 20' Floor for 3 min
2595M	GTS 3.1mmcf/d decr to 1.7mmcf/d
2636m	GTS 28.6mmcf/d decr to 19mmcf/d decr to 8mmcf/d plus 85 litres a minute salt water

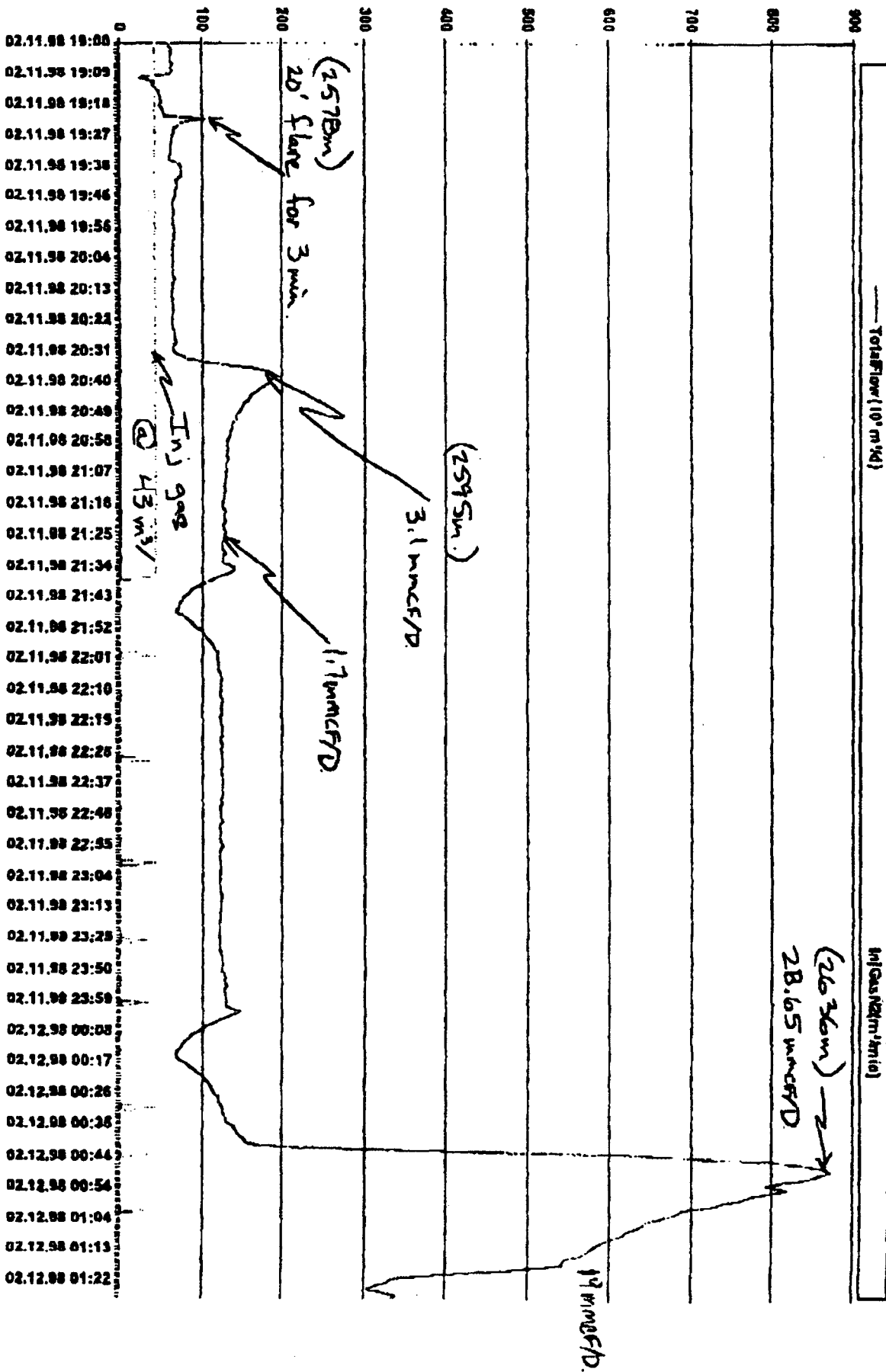
Remarks: refer to attached striplog, gas flow charts

Geologist: D.Ferguson
 Phone: 210-0371

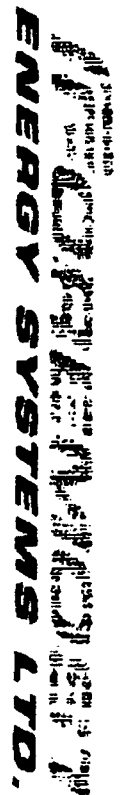
Test Date(s): From To:
 Company: Seaboard Resources
 Location: at Alameda NBS
 Company Rep: Rod MacEichair
 Formation: Vahran

ENERGY SYSTEMS LTD.

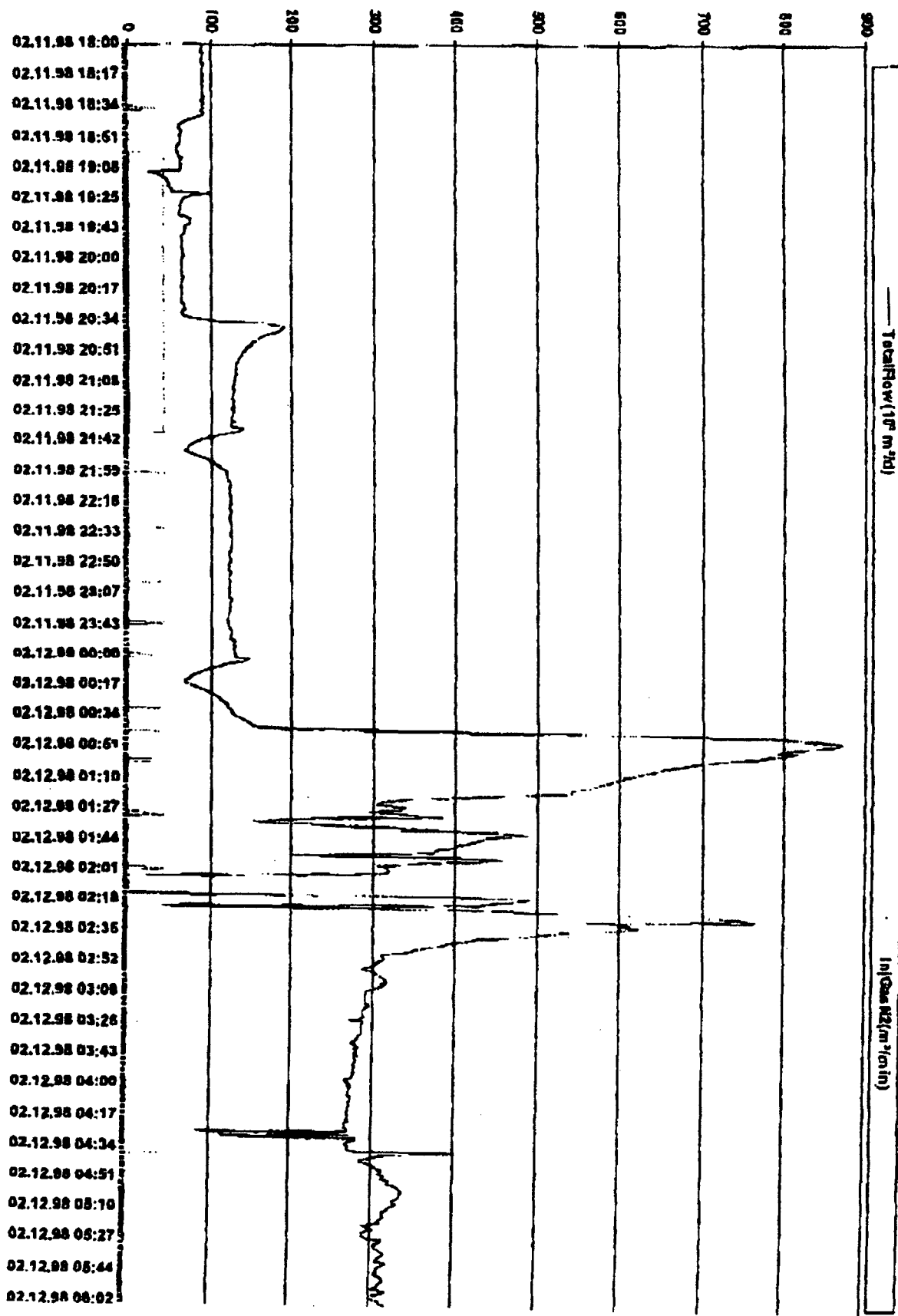
Job No.: 2611
 Unit No.: Gemini 3
 Test Operator: L. Turnbull / T. Fox
 Operation: Underbalanced Drilling
 Gas Sent To: Flare



Test Date(s): From: To:
 Company: Paramount Resources
 Location: et al Arrowhead 465
 Company Acq: Pac MacCormick
 Formation: Netand



Job No.: 3611
 Unit No.: Gemini 3
 Test Operator: L. Turnbull / T. Fox
 Operations: Underbalanced Drilling
 Gas Sent To: F #12



FEB-12-1998 09:39

403 266 6032

94%

P.09

Today's: 12-Feb-98 Page: 3 of 7
 Test Date(s): From: To:
 Company: Paramount Resources
 Location: et al Arrowhead N6S
 Company Rep: Rod MacEachern
 Formation: Nahanni

ENERGY SYSTEMS LTD.

UnderBalanced-Drilling Report

Job No.: 3611
 Unit No: Gemini 3
 Test Operator: L Turnbull / T Fox
 Operation: Underbalanced Drilling
 Gas Sent To: Flare

Date	Time	Drill Depth m	Inlet Press kPa	Prod Flow lit/min	GAS PRODUCTION			OIL PRODUCTION		WATER PRODUCTION		INJECT Gas/N2 m³/min	RATE Date Lq. m³/min	OPTION A Net Gas 10³ m³/d	OPTION B m³
					HP Sep Flow 10³ m³/d	LP Gas Flow 10³ m³/d	Total Flow 10³ m³/d	Cumm. Gas 10³ m³/d	Rate m³/d	Cumm. m³	Rate m³	Cumm. m³			
02/11/98	02:30	2534.00	51.68	15.14	45.08	17.13	62.23	58.54							
02/11/98	02:54		51.68	15.53	44.95	15.34	60.29	59.48							
2535m SAMPLE TAKEN - NO SAMPLE															
02/11/98	03:00	2535.00	77.52	15.63	57.42		57.42	58.72							
02/11/98	03:30	2536.00	94.75	16.12	50.43		60.43	60.90							
02/11/98	04:00	2537.00	94.75	16.62	59.82		59.82	62.24							
02/11/98	04:30	2539.80	103.36	17.12	61.36	1.4	62.78	63.52							
02/11/98	04:37		94.75	17.23	60.73		60.73	63.81							
2540m SAMPLE TAKEN - NO SAMPLE															
02/11/98	05:00	2540.00	94.75	17.62	61.47		61.47	64.79							
02/11/98	06:00	2543.00	43.07	18.61	36.10	4.10	40.20	67.34							
02/11/98	06:26		103.36	18.95	61.51		61.51	67.88							
NO SAMPLE FOR 2545m															
02/11/98	06:30	2545.00	94.75	19.02	61.81		61.81	68.05							
02/11/98	07:00	2547.00	103.36	19.52	59.73		59.73	69.31							
02/11/98	07:15		94.75	19.77	61.41		61.41	69.95							
NO SAMPLE FOR 2550m															
02/11/98	07:30	2553.00	111.97	20.02	66.16		66.16	70.58							
02/11/98	08:00	2553.00	94.75	20.51	59.17		59.17	71.82							
SWITCH NP TOO BY-PASS / START WIPER TRIP TOO INTERMEDIATE CASING.															
02/11/98	10:30	2553.00		20.77			0.00	72.10							
ON BOTTOM / START NP @ 42m³/min / CONTINUE DRILLING															
02/11/98	10:38		25.84	20.86	32.52		32.52	72.16							
NP TOO SURFACE.															

02/12/98 THU 10:24 FAX 403 266 6032

TEL: 14038629677

NEB CALGARY
P.09

FEB-12-1998 09:39

403 266 6032

94%

P.10

Today's: 12-Feb-98 Page: 4 of 7
 Test Date(s): From: To:
 Company: Paramount Resources
 Location: et al Arrowhead N6E
 Company Rep: Rod MacEachern
 Formation: Nahanni

PARAMOUNT RESOURCES ENERGY SYSTEMS LTD. UnderBalanced-Drilling Report

Job No.: 3511
 Unit No: Gemini 3
 Test Operator: L Turnbull / T Fox
 Operation: Underbalanced Drilling
 Gas Sent To: Flare

Date	Time	Drill Depth m	Inlet Press kPa	Prod Hours	GAS PRODUCTION			OIL PRODUCTION		WATER PRODUCTION		INJECT Gas/N2 m ³ /min	RATE Date Lq. m ³ /min	OPTION A Net Gas 10 ³ m ³ /d	OPTION B m ³
					HP Sep Flow 10 ³ m ³ /d	LP Gas Flow 10 ³ m ³ /d	Total Flow 10 ³ m ³ /d	Cumm. Gas 10 ³ m ³ /d	Rate m ³ /d	Cumm. m ³	Rate m ³	Cumm. m ³			
02/11/98	11:00	2553.00	77.52	21.26	60.45		60.45	73.08							
02/11/98	11:20	2555.00	77.52	21.59	60.51		60.51	73.90							
NO SAMPLE FOR 2555m															
02/11/98	11:30	2558.00	68.91	21.76	57.39		57.39	74.32							
02/11/98	11:45		68.91	22.01	59.03		59.03	74.93							
NO SAMPLE FOR 2560m															
02/11/98	12:00	2560.00	68.91	22.26	60.36	1.79	62.15	75.55							
02/11/98	12:10		68.91	22.42	59.06		59.06	75.97							
PULL OF BOTTOM TO CIRCULATE															
02/11/98	12:30	2564.00	77.52	22.75	61.02		61.02	76.79							
CONTINUE DRILLING															
02/11/98	13:00	2584.00	66.13	23.25	68.25		68.25	78.19							
02/11/98	13:30	2565.00	94.75	23.75	63.65		63.65	79.60							
NO SAMPLE FOR 2565m															
02/11/98	14:00	2568.00	60.29	24.21	39.65	11.75	51.40	80.88							
02/11/98	14:30	2568.00	8.61	24.89	17.31		17.31	81.71							
02/11/98	14:39		8.61	24.89	17.31		17.31	81.74							
PULL UP TOO INTERMEDIATE CASING TOO CIRCULATE															
02/11/98	16:13		17.23	25.46	25.55		25.55	81.98							
N ^o TOO SURFACE															
02/11/98	16:20	2568.00	60.29	25.51	54.28	1.44	55.72	82.20							
BACK ON BOTTOM DRILLING															
02/11/98	16:30	2570.00	66.13	25.73	61.51		61.51	82.63							
NO SAMPLE FOR 2570m															
02/11/98	17:00	2572.00	17.23	26.17	24.51		24.51	83.60							
PULL OFF BOTTOM TOO CIRCULATE															
02/11/98	17:19		103.36	26.47	70.43		70.43	84.90							
STOPPED N ^o INJECTION / STARTED AIR INJECTION @ 68m ³ /min															

02/12/98 THU 10:24 FAX 403 266 6032

+++ NEB CALGARY
TEL: 1403266977010
P:06

FEB-12-1998 09:39

403 266 6032

94%

P.11

Today's: 12-Feb-98 Page: 5 of 7

Test Date(s): From: To:

Company: Paramount Resources

Location: et al Arrowhead N65

Company Rep: Rod MacEachern

Formation: Nahanni

ENERGY SYSTEMS LTD. UnderBalanced-Drilling Report

Job No.: 3611

Unit No: Gemini 3

Test Operator: L Turnbull / T Fox

Operation: Underbalanced Drilling

Gas Sent To: Flare

Date	Time	Drill Depth m	Inlet Press kPa	Prod Flow l/min	GAS PRODUCTION			OIL PRODUCTION		WATER PRODUCTION		INJECT Gas/N2 m ³ /min	RATE Date Lq m ³ /min	OPTION A Net Gas 10 ³ m ³ /d	OPTION B m ³
					HPSec_Flow 10 ³ m ³ /d	LPGas_Flow 10 ³ m ³ /d	Total_Flow 10 ³ m ³ /d	Cummi_Gas 10 ³ m ³ /d	Rate m ³ /d	Cummi m ³	Rate m ³	Cummi m ³			
02/11/98	18:00		155.04	27.15	85.34		85.34	96.60							
CONTINUE PUMPING AIR @ 60m ³ /min															
02/11/98	18:35		163.65	27.73	90.03	1.51	91.55	89.00							
SHUT DOWN AIR INJECTION / BROUGHT N ² BACK ON LINE AT 42m ³ /min TO PURGE ANNULAR AND VESSEL															
02/11/98	19:00		86.13	28.14	62.05		62.05	90.19					45.00		
CONTINUE TO PURGE SYSTEM WITH N ²															
02/11/98	19:25		103.36	28.40	67.66		67.66	91.21					45.00		
PURGE TEST VESSEL WITH N ² DRILL AHEAD															
02/11/98	19:30 2575.00	94.75	28.48	63.92			63.92	91.44					45.00		
SAMPLE AT 2575 METERS - NO SAMPLE															
02/11/98	19:39 2578.80	111.37	28.63	76.51			76.51	91.87					45.00		
BURNABLE GAS TO SURFACE															
02/11/98	19:41		103.36	28.67	69.77		69.77	91.92					45.00		
BURNABLE GAS STOPPED															
02/11/98	19:46		94.75	28.74	66.94		66.94	92.16					45.00		
SAMPLE AT 2580 METERS - NO SAMPLE															
02/11/98	20:00 2579.00	94.75	28.98	66.48			66.48	92.81					45.00		
02/11/98	20:03		94.75	29.03	66.10		66.10	92.95					45.00		
SAMPLE AT 2585 METERS - NO SAMPLE															
02/11/98	20:18		94.75	29.28	65.63		65.63	93.64					45.00		
SAMPLE AT 2590 METERS - NO SAMPLE															
02/11/98	20:30 2593.00	94.75	29.48	66.14			66.14	94.20					45.00		
02/11/98	20:35		275.83	29.58	137.51		137.51	94.52					45.00		
SAMPLE AT 2595 METERS															
02/11/98	20:36 2596.00	344.54	29.58	170.24			170.24	94.64					45.00	105.44	
BURNABLE GAS TO SURFACE / STOP DRILLING															
02/11/98	20:38		378.99	29.61	191.61		191.61	94.90					45.00		
02/11/98	21:00 2596.00	241.17	29.98	131.58	1.66		133.21	97.19					45.00	47.90	
NO H2S PRESENT															
02/11/98	21:10		232.56	30.14	127.22		127.22	98.08					45.00		
DRILL AHEAD															

02/12/98 THU 10:25 FAX 403 266 6032
TEL: 14036265977

NEB CALGARY

0011
P:07

FEB-12-1998 09:40

403 266 6032

94%

P.12

Today's: 12-Feb-98 Page: 8 of 7

Test Date(s): From: To:

Company: Paramount Resources

Location: et al Arrowhead N65

Company Rep: Rod MacEachern

Formation: Nahanni

ENERGY SYSTEMS LTD. UnderBalanced-Drilling Report

Job No.: 3611

Unit No: Gemini 3

Test Operator: L Turnbull / T Fox

Operation: Underbalanced Drilling

Gas Sent To: Flare

Date	Time	Drill	Inlet	Prod	GAS PRODUCTION			OIL PRODUCTION		WATER PRODUCTION		INJECT	RATE		OPTION A		OPTION B
					HP Sep. Flow	LP Gas Flow	Total Flow	Cum. Gas	Rate	Cum.	Rate	Cum.	Gas/V2	Date Lq.	Net Gas		
		in	kPa	Flow	10 ³ m ³ /d	10 ³ m ³ /d	10 ³ m ³ /d	10 ³ m ³ /d	m ³ /d	m ³	m ³	m ³	m ³ /min	m ³ /min	10 ³ m ³ /d	m ³	
02/11/98	21:25		232.56	30.38	127.31		127.31	89.42					45.00				
SAMPLE AT 2600 METERS - NO SAMPLE																	
02/11/98	21:30	2600.00	232.56	30.47	126.66	1.62	128.49	99.66					45.00		63.69		
02/11/98	21:34		232.56	30.53	127.58	12.01	139.59	100.22					45.00				
CONNECTION																	
02/11/98	22:00	2600.00	206.72	30.97	118.47		118.47	101.99					45.00		53.67		
02/11/98	22:18		223.95	31.27	122.83		122.83	103.53									
SAMPLE AT 2605 METERS - NO SAMPLE																	
02/11/98	22:30	2610.00	223.95	31.47	124.80		124.80	104.56					45.00		60.10		
2610m SAMPLE TAKEN - NO SAMPLE																	
02/11/98	22:56	2615.00	223.95	31.68	124.65		124.65	106.72									
2615m SAMPLE TAKEN - NO SAMPLE																	
02/11/98	23:00	2618.00	223.95	31.96	123.96		123.96	107.15					45.00		59.15		
02/11/98	23:07	2620.00	223.95	32.08	122.58		122.68	107.74									
2620m SAMPLE TAKEN - NO SAMPLE																	
02/11/98	23:25	2625.00	223.85	32.33	122.74		122.74	109.02									
2625m SAMPLE TAKEN - VERY SMALL AMOUNT																	
02/11/98	23:38	2627.00	223.95	32.34	122.65		122.65	109.11					45.00		57.85		
02/11/98	23:43		223.85	32.36	122.55		122.55	109.19									
RESET TIME ON COMPUTER 20 MINUTES AHEAD TO CORRESPOND WITH PASON TIME																	
02/12/98	00:00	2629.00	241.17	32.84	128.35		128.35	110.89					45.00		63.55		
CONNECTION																	
02/12/98	00:23		196.11	33.03	110.21		110.21	112.25									
2630m SAMPLE TAKEN - VERY SMALL AMOUNT																	
02/12/98	00:30	2633.15	232.56	33.13	124.95		124.95	112.83					45.00		60.15		
02/12/98	00:37	2635.00	284.24	33.25	143.09		143.09	113.48									
2635m SAMPLE TAKEN - VERY SMALL AMOUNT																	
02/12/98	00:43	2636.91	1447.85	33.35	609.21	4.06	613.27	114.64					45.00		544.41		
STOP DRILLING / PULL OFF BOTTOM / INCREASE IN GAS RATE																	

02/12/98 THU 10:25 FAX 403 266 6032

TEL: 14038259877

NEB CALGARY

012
P.02

FEB-12-1998 09:40

403 266 6032

94%

P.13

Today's: 12-Feb-98 Page: 7 of 7

Test Date(s): From: 10:

Company: Paramount Resources

Location: et al Arrowhead N85

Company Rep: Rod MacEachern

Formation: Nahanni

ENERGY SYSTEMS LTD. UnderBalanced-Drilling Report

Job No.: 3811

Unit No: Gemini 3

Test Operator: L Turnbull / T Fox

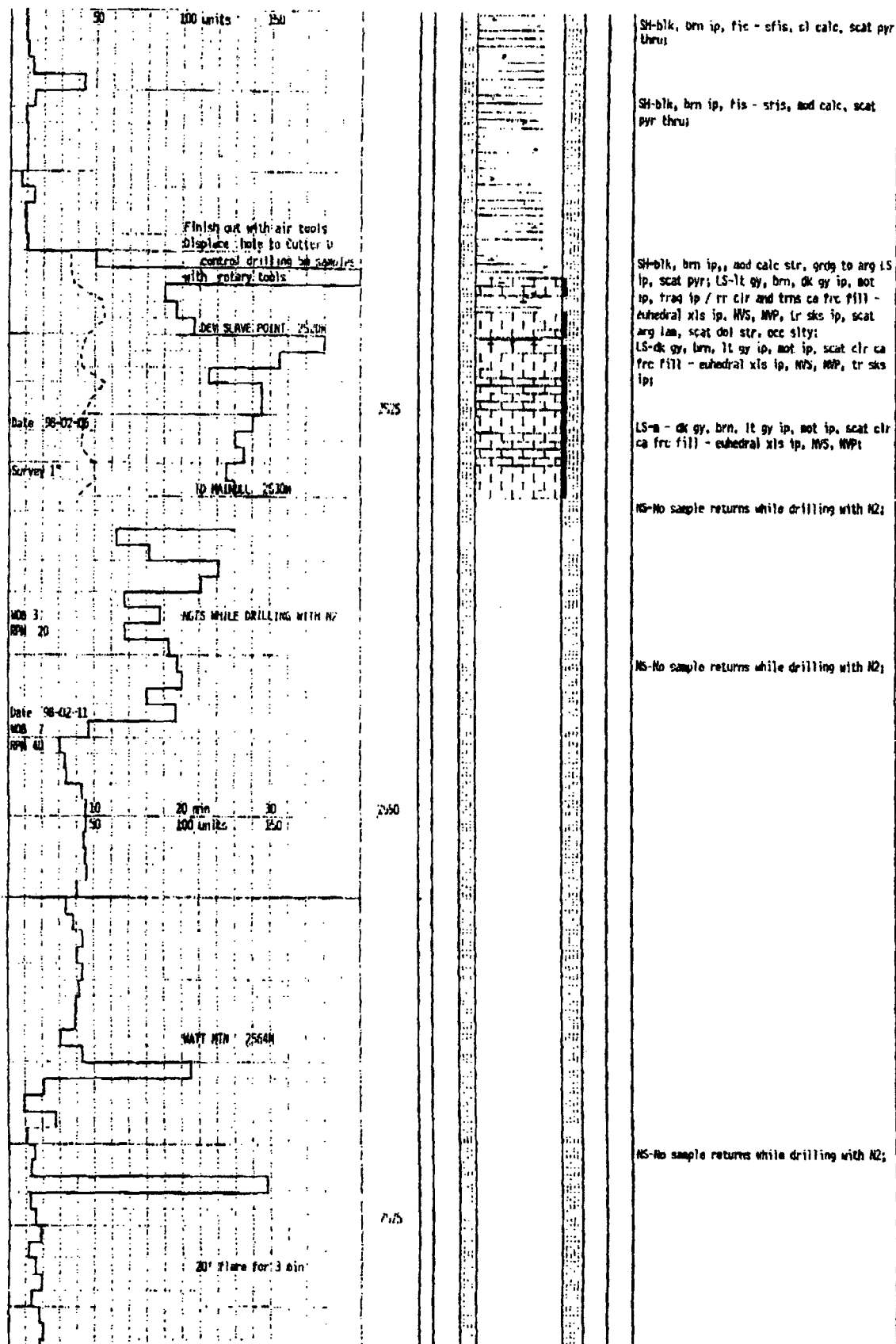
Operation: Underbalanced Drilling

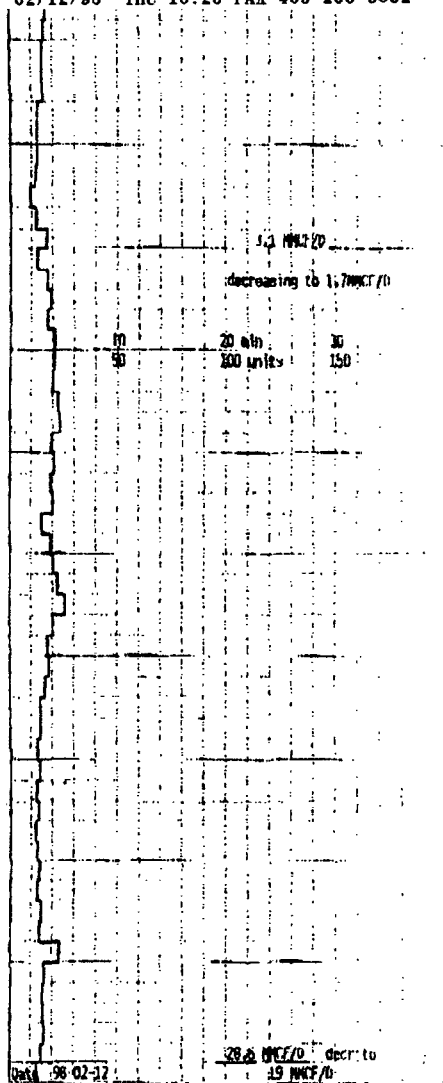
Gas Sent To: Flare

Date	Time	Drill	Intel	Prod	GAS PRODUCTION			OIL PRODUCTION		WATER PRODUCTION		INJECT		RATE	OPTION A	OPTION B
		Depth	Press	Hours	HPSep_Flow	LPGas_Flow	Total_Flow	Cumm_Gas	Rate	Cumm.	Rate	Cumm.	Gas/FI2	Data Liq.	Net Gas	
		m	kPa		10 ³ m ³ /d	10 ³ m ³ /d	10 ³ m ³ /d	10 ³ m ³ /d	m ³ /d	m ³	m ³	m ³	m ³ /min	m ³ /min	10 ³ m ³ /d	m ³
02/12/98	00:48		1694.94	33.43	865.06	6.19	871.25	117.46								
02/12/98	01:00	2636.91	1507.34	33.83	690.04		690.04	123.43					45.00		825.24	
H2S = 0 ppm																
02/12/98	01:30		826.88	34.12	359.09		359.09	133.30					45.00		294.29	
02/12/98	02:00	2636.91	690.46	34.61	318.02		318.02	140.70					45.00		253.22	
CONTINUE TO FLOW WELL / BLACK SLUDGE IN SAMPLE CATCHER																
02/12/98	02:04			34.68	2.28		2.28	141.26								
PRIMARY FLOW LINE PLUGGED OFF / SWITCH FLOW THROUGH SECONDARY LINE																
02/12/98	02:12		9.61	34.68			0.00	141.27					0.00			
SHUT DOWN N° PUMP																
02/12/98	02:21		34.45	34.79	43.41		43.41	142.99								
PLUGGED OFF AT CHOKE IN RIG'S MANIFOLD SHACK / SWITCH TO FULL 4" FLOW																
02/12/98	02:30	2636.91	1653.77	34.84	595.74		595.74	146.85					0.00		595.74	
FLUID TOO SURFACE / 70 300ppm / H2S = 25 ppm																
02/12/98	03:00	2636.91	801.04	35.44	311.84		311.84	154.84			7.43	7.83	0.00		311.84	
WORKING ON UNPLUGGING PRIMARY FLOW LINE																
02/12/98	03:30	2636.91	706.30	35.83	286.03		286.03	160.96					0.00		286.03	
02/12/98	04:00	2636.91	680.46	36.43	274.39		274.39	166.74			3.5	11.33	0.00		274.39	
02/12/98	04:30	2636.91	680.46	36.83	269.10		269.10	172.17					0.00		269.10	
02/12/98	04:38		783.82	37.07	307.22		307.22	173.82					45.00			
SWITCH FLOW THROUGH PRIMARY FLOW LINE / START N° DOWN HOLE @ 45.00m ³ /min																
02/12/98	04:48		826.88	37.23	311.76		311.76	175.93					45.00	0.12		
START PUMPING FOAM DOWN HOLE @ 0.12m ³ /min																
02/12/98	05:00	2636.91	861.34	37.43	335.64		335.64	178.66			1.2	12.53	45.00		270.84	
H2S READING = 0 ppm																
02/12/98	05:01		861.34	37.44	335.67		335.67	178.69								
CUMM. BURNABLE GAS TO DATE = 68.00 10 ³ m ³																
02/12/98	05:02		852.72	37.46	332.95		332.95	179.12								
CUMM. WATER PRODUCED TO DATE = 12.53 m ³																

02/12/98 THU 10:26 FAX 403 266 6032

NEB CALGARY
TEL: 1-403-266-9777013
P:09





2:00

2:00

NS-No sample returns while drilling with N2;

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT**FOR 24 HR PERIOD ENDING **98-02-11-8:00**

Yr - Mon - Day - Time

WELL NAME **PARAMOUNT et al ARROWHEAD**LOCATION **N65**Day **28**Depth **2550**Metres last 24 hr **20**HRS OB. **#**Activity at report time **N2 DRILL 156 MM HOLE,****DRILLING MUD PROPERTIES AT SHAKER/SUCTION/PTT**

Wt _____ Vis _____ WL _____ Gels _____ Solids _____ PV _____ YP _____ pH _____
 Oil _____ % Sand _____ S Cake _____ PPMCL 0 PPMCa 0

BIT RECORD

BIT NO.	SIZE mm	MAKE & TYPE	SER. NO.	BIT		DEPTH m	DRLD OUT m	CUM m. DRLD	Rot hrs TODAY	CUM. Rot hr	m/hr	Dull Cond.		
				WT	RPM							T	B	G
1	155.4	SECHZS84F	709977	6-Jan	38		20	20	6.00	6.00	3.30	R	N	G

CIRCULATION RECORD

BIT NO.	JETS - mm			PUMP				ANN. VEL.		JET VEL.	HHP	SURF. PRESS. kPa
	1	2	3	STROKE	SPM	LINER	m ³ /MIN	DP	DC			
1	20	20	20	40 M3	NITROGEN							1960

DEVIATION SURVEYS

• at _____ m • at _____ m
 • at _____ m • at _____ m
 • at _____ m • at _____ m
 • at _____ m • at _____ m

MUD & CHEMICALS ADDED

400-BARITE
 4- DISPERSE

BOTTOM HOLE ASSEMBLY

TOOL	ID mm	OD mm	LENGTH m	WEIGHT daN
BIT		156	0.15	
1-N.B. SHOCK SUB		121	1.83	
2-D.C.		121	18.6	1915
1-R3		156	1.25	
6 D.C.		121	56.01	5993
1 JARS		121	3.87	
1 FLOAT SUB		120	0.61	
13 D.C.		121	120.5	13014
TOTAL			202.8	20922

TIME ANALYSIS

OPERATION		TODAY	CUM.
1. Drilling		6.00	
2. Trips			
3. Rig Service		0.25	
4. Deviation Surveys			
5. Ream & Cond. Hole			
6. Mix & Cond. Mud			
7. Circulation			
8. Rig Repair		2.00	
9. Run Casing & Cement			
10. PRESS TEST			
11. Logging			
12. Coring			
13. Formation Testing			
14. DISPLACE HOLE & AIR DRY		14.00	
15. RIG UP UNDERBALA EQPT.			
16. Drilling Out		1.00	
17. B.O.P. DRILL		0.75	
18. RIG OUT LAY DOWN TRUCK			
19. SLIP & CUT DRL'G. LINE			
20. LAYDOWN & PICK UP PIPE			
21. SAFETY MEET			
TOTAL		24	

COSTS

DAILY \$54,985
 CUMMULATIVE \$2,241,675
 GR ELEV. 567.9M K.B. 574.6

SUPERVISOR **ROD MacEACHERN**
 PH. 1-403-210-2951

DRL-RPT.28A

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT (page 2)**FOR 24 HR PERIOD ENDING **98-02-11-08:00**

Yr - Mon - Day - Time

WELL NAME **PARAMOUNT ET AL ARROWHEAD**LOCATION **N65****OPERATIONS DETAIL:**

08:00-11:45 PRESSURE TEST LINE, DISPLACE HOLE TO H2O.

11:45-12:00 RIG SERV.

12:00-16:00 BLOW HOLE DRY WITH AIR.

16:00-16:45 CONTROL DRILL 1 METER OF CEMENT.

16:45-18:15 CONT. TO BLOW HOLE DRY WITH AIR.

18:15-18:30 DRILL 1M OF CEMENT

18:30-21:00 CONT TO DRY HOLE WITH AIR.

21:00-23:00 CHANGE RUBBER IN WILLIAMS HEAD.

23:00-24:00 DRY HOLE WITH N2.

00:00-01:15 DRY HOLE WITH N2.

01:15-01:30 H2S SAFETY MEETING, BOP DRILL PRIOR TO DRILL OUT.

01:30-01:45 CONTROL DRILL CEMENT, CHECK FOR DRYNESS.

1:45-02:00 DRILL OUT FLOAT & SHOE.

02:00-08:00 CONTROL DRILL, TRY TO DRY HOLE (NO CUTTINGS TO SURF.) 2550M KB.

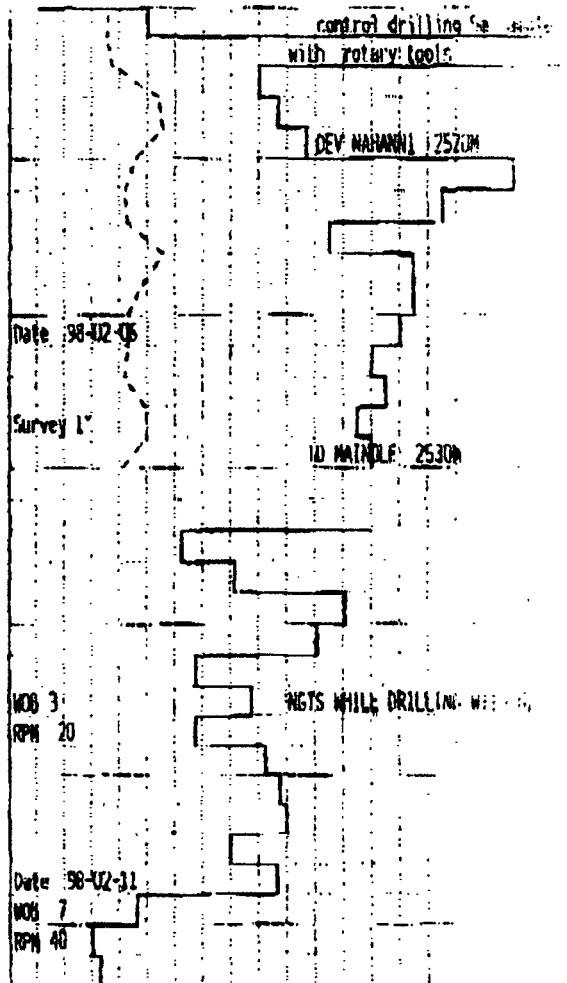
WILL WIPER TRIP @ 2553 M KB, IN TO 244 MM CSG (1890M KB.)

WANT LIST:

WEATHER: **-24**ROAD: **GOOD WINTER COND.**

IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)

DRL_RPT.288



5.5

SH-blk, brn ip., mod calc str. grdg to arg LS
ip, scat pyr; LS-lt gy, brn, dk gy ip, not
ip, frag ip / rr clr and trms ca frc fill -
euhedral xls ip, NYS, NYP, tr sks ip, scat
arg lam, scat dol str, occ slty;
LS-dk gy, brn, lt gy ip, not ip, scat clr ca
frc fill - euhedral xls ip, NYS, NYP, tr sks
ip;

LS-m - dk gy, brn, lt gy ip, not ip, scat clr
ca frc fill - euhedral xls ip, NYS, NYP;

NS-No sample returns while drilling with N2;

Well name : PARAMOUNT ET AL ARROWHEAD
 Location : N65
 Date : 02-11-98
 Contact : Paul Collens 290-3603

AM REPORT
 DFS: 28

Depth @ 0800hrs: 2550 24 hr Progress: 20
 Rotation hrs:
 Present operations: drill ahead 15-mm hole with S2

KOP: 4 m/hr
 Drill fluid: nitrogen Dens: V12: WL: pH:

Surveys:

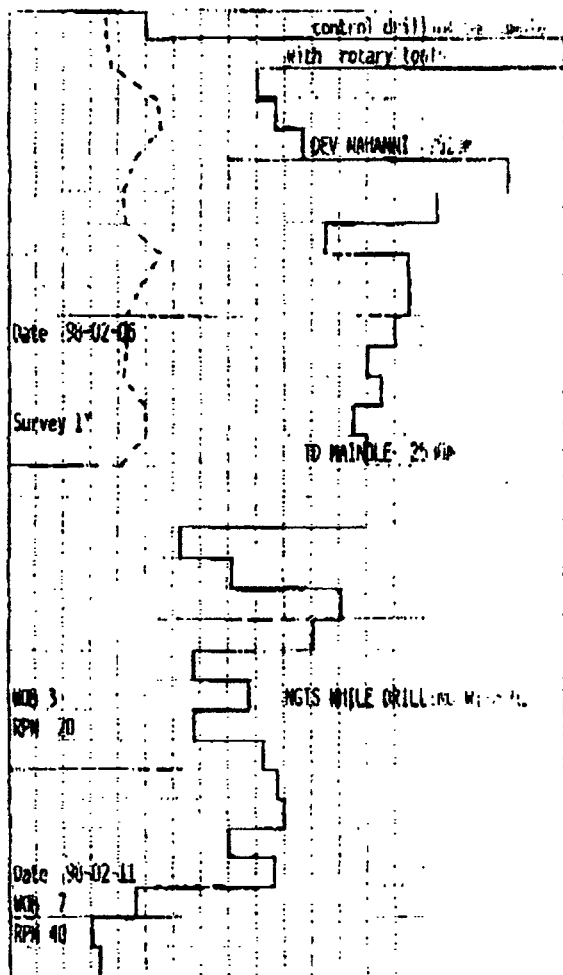
FORMATION TOPS			EB: 274.6M
Formation	Prognosis	Sample	Subsea
Nahanni	2564m	2520m	

SHOW SUMMARY:

Formation	Interval	Gas show/BOG	Lithology/shows/remarks
NGTS while drilling with Nitrogen			

Remarks: No sample returns at formation pressure vessel

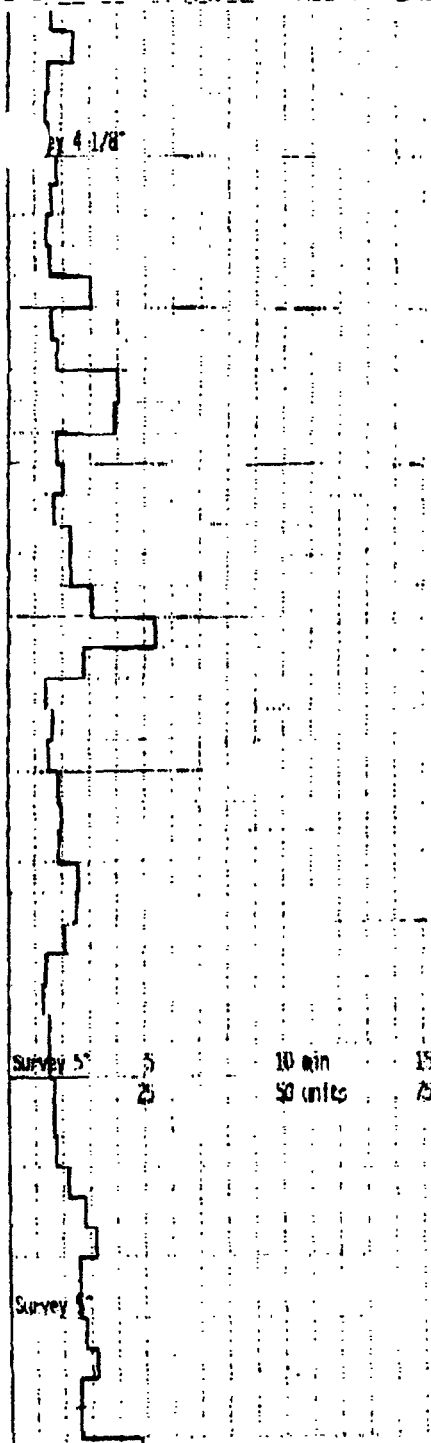
Geologist: D.Ferguson
 Phone: 210-2951



in bed, thin ip. mod calc str, grdg to arg LC
ip, cat part light gy, brn, dk gy ip, not
the top ip / in clr and trms ca fre fill -
unbedded xls ip, NYS, NVP, tr sks ip, scat
in bed, scat del str, occ slty:
dk gy, brn, lt gy ip, not ip, scat clr ca
for fill - unbedded xls ip, NYS, NVP, tr sks
ip

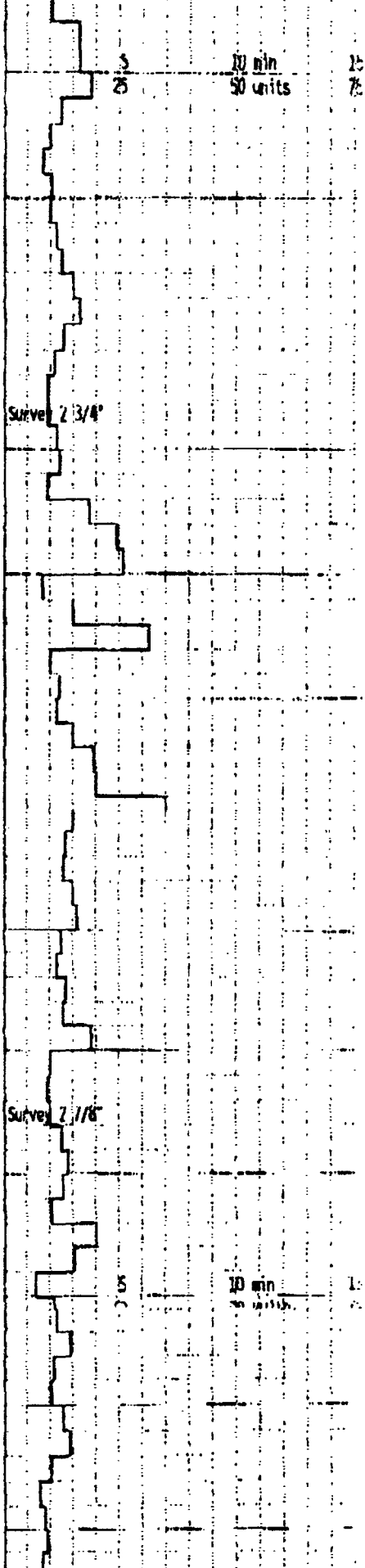
dk gy, brn, lt gy ip, not ip, scat clr
for fill - unbedded xls ip, NYS, NVP:

No sample returns while drilling with #2;



SH-a gy. stis - biky;

SH-a gy, bcag dk gy, stis - biky, rr clr dol
(nlc frc fill ?);



100

NS-81noey line problems;

SH-dk gy, sfis, sl na;

100

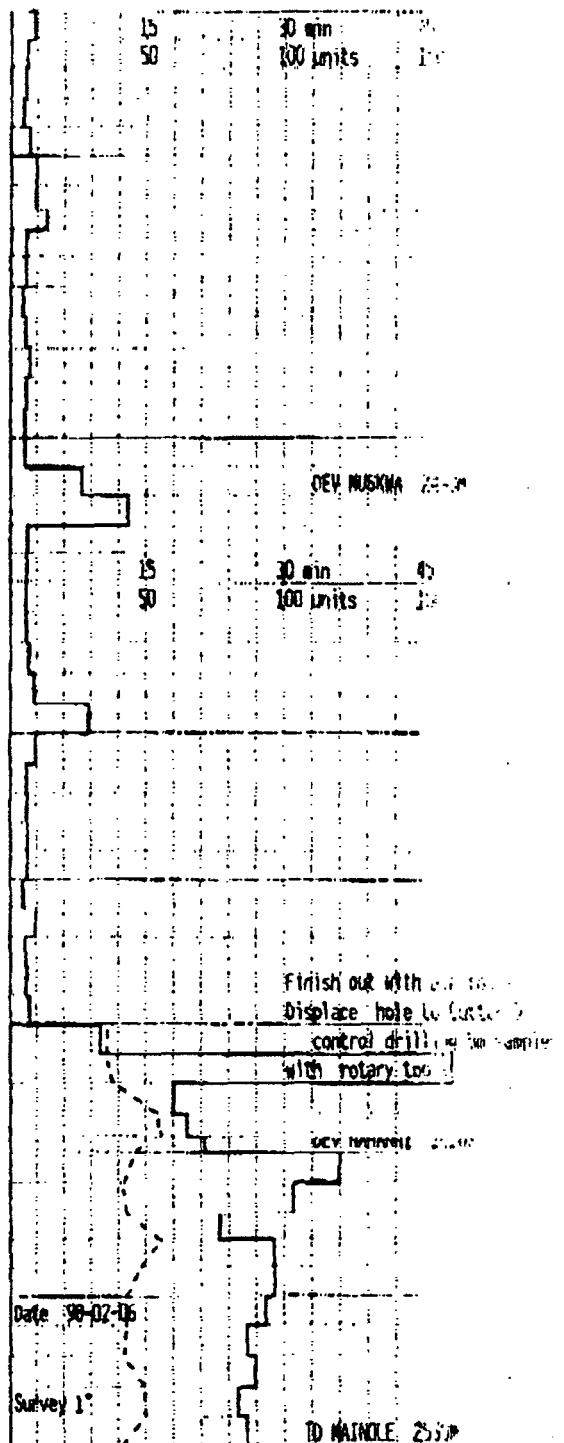
SH-a gy - dk gy, sfis - biky: SH-dk gy, sfis
sl na;

SH-dk gy - blk, brn ip, fis - sfis, sl carb
ip, scat pyr thru, mod calc;

SH-dk gy brn, fis - sfis, sl carb ip, scat
pyr thru, sl calc ip, bony dol isp;

100

SH-a gy - dk gy brn, sfis - biky;



SH-blk, fis, sl carb ip, scat pyr thru;

SH-blk, brn ip, fis - sfis, sl calc, scat py thru;

SH-blk, brn ip, fis - sfis, mod calc, scat pyr thru;

SH-blk, brn ip, mod calc str, grdg to arg L ip, scat pyr; LS-lt gy, brn, dk gy ip, mot ip, frag ip / rr clr and trms ca frc fill - euhedral xls ip, NUS, MVP, tr sks ip, scat pyr; LS-dk gy, brn, lt gy ip, mot ip, scat clr ca frc fill - euhedral xls ip, NUS, MVP, tr sks ip;

LS-m - dk gy, brn, lt gy ip, mot ip, scat clr ca frc fill - euhedral xls ip, NUS, MVP;

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT**FOR 24 HR PERIOD ENDING **98-02-10-8:00**

Yr - Mon - Day - Time

WELL NAME **PARAMOUNT et al ARROWHEAD**LOCATION **N65**Day **27**Depth **2530**

Metres last 24 hr

HRS OB.

Activity at report time **RUN IN WITH 89MM DRILL STRING.****DRILLING MUD PROPERTIES AT SHAKER/SUCTION/PIT**

Wt _____ Via _____ WL _____ Gels _____ Solids _____ PV _____ YP _____ pH _____
 Oil _____ % Sand _____ S _____ Cake _____ PPMCL 0 PPMCa 0

BIT RECORD

BIT NO.	SIZE mm	MAKE & TYPE	SER. NO.	BIT		DEPTH OUT m	m DRLD TODAY	CUM m. DRLD	Rot hrs TODAY	CUM. Rot hr	m/hr	Dug Cond.		
				WT	RPM							T	D	G
1	155.4	SECHZS84F	709977											

CIRCULATION RECORD

BIT NO.	JETS - mm			PUMP			ANN. VEL.		JET VEL.	HHP	SURF. PRESS. kPa
	1	2	3	STROKE	SPM	LINER m'/MIN	DP	DC			
1	20	20	20	40 M3 NITROGEN							

DEVIATION SURVEYS**MUD & CHEMICALS ADDED**

° at _____ m	° at _____ m
° at _____ m	° at _____ m
° at _____ m	° at _____ m
° at _____ m	° at _____ m

BOTTOM HOLE ASSEMBLY**TIME ANALYSIS**

TOOL	ID	OD	LENGTH	WEIGHT	OPERATION	TODAY	CUM.
	mm	mm	m	daN			
					1. Drilling		
					2. Trips	3.50	
					3. Rig Service	0.25	
					4. Deviation Surveys		
					5. Ream & Cond. Hole		
					6. Mix & Cond. Mud		
					7. Circulation		
					8. Rig Repair		
					9. Run Casing & Cement		
					10.PRESS TEST	2.75	
					11. Logging		
					12. Coring		
					13. Formation Testing		
					14. DISPLACE HOLE& AIR DRY		
					15. RIG UP UNDERBALANCED EQPT	16.25	
					16. Drilling Out		
					17. B.O.P. DRILL		
					18.RIG OUT LAY DOWN TRUCK	0.50	
					19. SLIP & CUT DRL'G. LINE		
					20. LAYDOWN & PICK UP PIPE	0.75	
					21. SAFETY MEET		
					TOTAL	24	
COSTS							
DAILY	\$41,800						
CUMMULATIVE	\$2,186,690						
GR ELEV.567.9M					K.B.574.6		
SUPERVISOR					ROD MacEACHERN		
PH.1-403-210-2951							

COSTS

DAILY \$41,800
 CUMMULATIVE \$2,186,690
 GR ELEV. 567.9M K.B. 574.6

SUPERVISOR **ROD MacEACHERN**
 PH. 1-403-210-2951

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT (Page 1)**

FOR 24 HR PERIOD ENDING

98-02-10-08:00

Yr - Mon - Day - Time

WELL NAME PARAMOUNT ET AL ARROWHEADLOCATION N65**OPERATIONS DETAIL:**

08:00-14:45 MAKE UP B.H.A. RUN IN THE HOLE.

14:45-15:15 SAFETY MEETING ,H2S DRILL, WITH ALL PERSONAL ON LOC.

15:15-17:30 DISPLACE CUTTER D, TO H2O,

17:30-19:00 DRILL CSG HANGER BUSHING

19:00-22:15 RUN IN THE HOLE TO DRILL OUT FLOAT COLLER.

22:15-23:45 CIRC, DRILL FLOAT COLLER, PLUGS, CEMENT.

23:45-24:00 RIG SERV.

00:00-02:15 DRILL OUT CEMENT

02:15-04:15 RIG UP TO ENTEST P TANK.

04:15-04:45 SAFETY MEETING, H2S DRILL.

04:45-08:00 DISPLACE HOLE TO AIR& BLOW DOWN WITH N2

RUN IN WITH 6.1/8 BIT DRILLED OUT LINER HANGER BUSHING, RUN IN TAG CEMENT @2511

DRILLED CEMENT, PLUGS, FLOAT COLLER, TO 2527M KB.

BLOW WATER FROM THE HOLE.

WANT LIST: _____

WEATHER: -24ROAD: GOOD WINTER COND.

IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)

DRL_RPT.27B

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT**FOR 24 HR PERIOD ENDING **98-02-09-8:00**

Yr: Mon Day Time

WELL NAME **PARAMOUNT et al ARROWHEAD**LOCATION **N65**Day **26**Depth **2530**

Metres last 24 hr

HRS OB.

Activity at report time **RUN IN WITH 89MM DRILL STRING.****DRILLING MUD PROPERTIES AT SHAKER/SUCTION/PIT**

Wt _____ Vis _____ WL _____ Gels _____ Solids _____ PV _____ YP _____ pH _____
 Oil _____ % Sand _____ S _____ Cake _____ PPMCL 0 _____ PPMCa 0 _____

BIT RECORD

BIT NO.	SIZE mm	MAKE & TYPE	SER. NO.	BIT		DEPTH m	m DRILL TODAY	CUM m. DRILL	Rot hrs TODAY	CUM. Rot hr	m/hr	Dull Cond.		
				WT	RPM							I	B	G
1	155.4	SECHZS84F	709977											

CIRCULATION RECORD

BIT NO.	JETS - mm			PUMP			m³/MIN	ANN. VEL.		JET VEL.	HHP	SURF. PRESS. kPa
	1	2	3	STROKE	SPM	LINER		DP	DC			
1	20	20	20	40 M3 NITROGEN								

DEVIATION SURVEYS

° at _____ m	° at _____ m
° at _____ m	° at _____ m
° at _____ m	° at _____ m
° at _____ m	° at _____ m

MUD & CHEMICALS ADDED

BOTTOM HOLE ASSEMBLY

TOOL	ID mm	OD mm	LENGTH m	WEIGHT daN

TIME ANALYSIS

OPERATION	TODAY	CUM.
1. Drilling		
2. Trips	3.50	
3. Rig Service	0.25	
4. Deviation Surveys		
5. Ream & Cond. Hole		
6. Mix & Cond. Mud		
7. Circulation		
8. Rig Repair		
9. Run Casing & Cement		
10. PRESS TEST	2.75	
11. Logging		
12. Coring		
13. Formation Testing		
14. DISPLACE HOLE & AIR DRY		
15. RIG UP UNDERBALANCED EQPT.	16.25	
16. Drilling Out		
17. B.O.P. DRILL		
18. RIG OUT LAY DOWN TRUCK	0.50	
19. SLIP & CUT DRILLING LINE		
20. LAYDOWN & PICK UP PIPE	0.75	
21. SAFETY MEET		
TOTAL	24	

COSTS

DAILY \$36,503
 CUMMULATIVE \$2,134,109
 GR ELEV. 567.9M K.B. 574.6

SUPERVISOR **ROD MacEACHERN**
 PH. 1-403-210-2951

DRL-RPT.26A

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT (page 2)**FOR 24 HR PERIOD ENDING **98-02-09-08:00**
Yr - Mon - Day - TimeWELL NAME **PARAMOUNT ET AL ARROWHEAD**LOCATION **N65****OPERATIONS DETAIL:**

08:00-08:45 PICK UP 89MM DRILL STRING .

08:45-09:15 RIG OUT LAY DOWN TRUCK

09:15-11:15 PULL OUT OF THE HOLE RACK 89 MM, STRING IN THE DERRICK.

11:15-11:30 RIG SERV.

11:30- 24:00 RIG UP FORMOST UNDERBALANCED DRILLING EQPT.CHANGE OUT AND

INSTALL MOD. 7100 WILLIAMS ROTATING HEAD, (HOSES MISSING MAKE UP AN INSTALL.

4 1/16" -5000 LB T MISSING FROM WILLIAMS HEAD SETUP, (WILL HOLD PRESSURE TESTER

OVER TO PRESSURE TEST FLOW LINE TO WILLIAMS EQUIPT, AFTER DRILLING OUT CEMENT

00:00-03:45 CONT.TO RIG UP UNDERBALANCED EQPT.CLEAN MUD TANKS & FILL WITH H2O

RIG UP FLAR STACK.

03:45-06:00 PRESSURE TEST 1400KPA. LOW,35000 KPA. HIGH. ANN. 14,000 KPA.

06:45-08:00 MAKE UP B.H.A. & RUN IN THE HOLE.

CHANGED PIPE RAMS TO 89 MM.

WILL DRILL OUT WITH H2O OVER THE SHAKER TO KEEP FLOAT RUBBER & ETC. OUT OF
THE WILLIAMS EQUIPT.**WANT LIST:**WEATHER: **-24**ROAD: **GOOD WINTER COND.****IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)**

DRL_RPT.26B

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT (page 2)**FOR 24 HR PERIOD ENDING **98-02-08-06:00**
Yr - Mon - Day - TimeWELL NAME **PARAMOUNT ET AL ARROWHEAD**LOCATION **N65****OPERATIONS DETAIL:****08:00-10:30 CIRC. CLEAN TO TOP OF LINER HANGER.****10:30-10:45 RIG SERV. CHECK CROWN SAVER, FUNCTION ANNUL.****10:45-14:30 LAY DOWN 127MM DRILL STRING.****14:30-14:45 RIG SERV. FUNCTION UPR.****14:45-16:30 RUN IN THE HOLE WITH THE REMAINDER OF 171MM D.C. & 127MM D.P.****16:30-19:45 LAY DOWN REMAINDER OF 171MM D.C. & 127MM D.P.****19:45-21:45 RIG TO PICK UP 89 MM STRING. CHECK & SET TORQUE BOX.****21:45-24:00 PICK UP & RUN IN 89 MM STRING.****00:00- 08:00 PICK UP 89 MM STRING.****WANT LIST:****WEATHER:** **-18****ROAD:** **GOOD WINTER COND.****IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)**

DRL_RPT.258

PARAMOUNT RESOURCES LTD.	
DAILY DRILLING REPORT (page 2)	
FOR 24 HR PERIOD ENDING	98-02-07-08:00 Yr - Mon - Day - Time
WELL NAME <u>PARAMOUNT ET AL ARROWHEAD</u>	LOCATION <u>N65</u>
OPERATIONS DETAIL:	
08:00-10:45 RUN 177.8 MM LINER.	
10:45-11:00 RIG SERV.	
11:00-15:00 RUN IN WITH LINER, STRAP IN, RUN IN SLOW.	
15:00-15:30 CIRC BOTTOM UP @ 1810M/KB	
15:30-17:30 STRAP IN WITH LINER, DRIFT, FILL PIPE.	
17:30-19:30 TAG BOTTOM & CIRC.	
19:30-19:45 PRE-CEMENT JOB SAFETY MEETING.	
19:45-22:00 CEMENT LINER WITH SANJEL.	
22:00-22:15 LAND LINER COME OFF LINER HANGER.	
22:15-23:00 TRY TO REVERSE CIRC.	
23:00-01:45 HOIST DRILL PIPE	
01:45-02:15 LAY DOWN LINER HANGER TOOLS, BREAK OFF CEMENT HEAD.	
02:15-07:00 DRESS BIT # 1 RR, STRAP IN THE HOLE TO CLEAN CEMENT TO TOP OF LINER	
07:00-08:00 CIRC & CLEAN TO TOP OF LINER @ 1708M @ 08:00, TOP OF LINER 1723M K/B	
RAN 58 JOINTS OF NEW ALGOMO 177.8 MM, 38.69 KG/M, N 80, LT/C, 8 RD.	
CARDIUM PDH SPADED FLOAT SHOE, LATCH FLOAT COLLAR, CARDIUM EXTENDED BBL.	
ROTATING LINER HANGER, C/W PACK OFF ELEMENT. FOR A TOTAL LENGTH OF	
806.01, LANDED @ TOP OF LINER HANGER 1723M KB, BOTTOM 2529 M KB.	
167M, OVER LAP IN SIDE 244.5 MM INTERMEDIATE CSG.	
CEMENTED BY SANJEL WITH: 19.5 TONS OF THERMAL 40, +1% CFR. 35% CFL-2, 35% CFL-H	
2% HTR-B. WT=1885 KG/M RAN 3 M3. INVERT PRE-FLUSH, 3 M3. INVERT WEGHTED SPACER	
MIX AND PUMPED 14.6 M3, 1885 KG/M3. SLURRY, DISPLACED WITH 31.7 M3, H2O.	
APPROX. 2 M3, CEMENT RETURNS.	
WHEN REVERSE CIRCULATING WAS ATTEMPTED TO REVERSE TO 1800M, ONLY 1800M	
MAX FOR CSG, ATTEMPTED TO PUMP DOWN THE PIPE WITH SANJEL (24000 KPA), CEMENT	
WOULD NOT MOVE IN THE DRILL PIPE, PULLED PIPE OUT OF THE HOLE, PIPE PULLED.	
DRY CEMENT FELL OUT THE BOTTOM OF THE PIPE, RUN IN WITH 216MM BIT CLEAN TO	
WANT LIST: <u>TOP OF CSG HANGER.</u>	
WEATHER: <u>-20</u>	ROAD: <u>GOOD WINTER COND.</u>
IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)	

DRL_RPT.248

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT**FOR 24 HR PERIOD ENDING **98-02-06-08:00**

Yr - Mon - Day - Time

WELL NAME **PARAMOUNT et al ARROWHEAD**LOCATION **N65**Day **23**Depth **2530**Metres last 24 hr **10**ROT HRS **6.25**Activity at report time **RUN 177.8 MM LINER****DRILLING MUD PROPERTIES AT SHAKER/SUCTION/PIT**

Wt 995 Vis 49 WL Gels 3/4 Solids 0.045 PV 30 YP 10 pH
 Oil 93 % Sand 0.04 S Cake PPMCL 0 PPMCa 0

BIT RECORD

BIT NO.	SIZE mm	MAKE & TYPE	SER. NO.	BIT		DEPTH OUT m	m DRLD TODAY	CUM m DRLD	Rot hrs TODAY	CUM. Rot hr	m/hr	Dull Cond.		
				WI	RPM							I	B	G
1	216	S-FDT	XH0071	3.4	40	1893	3	3	1.75	1.75	1.09	1	1	I
2	216	S-H42R8R3	K57760	.50	20/40	2514	134	721	15.75	26.50	22.15	1		1
3	216	R HP53A	RB0158	12	80	2530	11	16	6.25	7.25	5.00	1	1	I

CIRCULATION RECORD

BIT NO.	JETS - mm			PUMP				ANN. VEL.		JET VEL.	HHP	SURF. PRESS. kPa
	1	2	3	STROKE	SPM	LINER	m ³ /MIN	DP	DC			
3	9.5	9.5	9.5	254	80	152	1.1	46	81	86		7500

DEVIATION SURVEYS

2	at	2471 m	at	m
1	at	2503 m	at	m
1	at	2529 m	at	m
	at	m	at	m

MUD & CHEMICALS ADDED

61 BENTONE
 BARITE 35

BOTTOM HOLE ASSEMBLY

TOOL	ID mm	OD mm	LENGTH m	WEIGHT daN
BIT		216	0.30	
1-BIT SUB			0.79	
2-171 D.C.		171	18.0	2000
1-R3-RR.		216	1.73	250
4-171 D.C.		171	36.48	3903
1-D JARS		152	5.03	
8-171 D.C.		171	72.59	7811
1-XO			0.40	
		TOTAL	135.3	13964

TIME ANALYSIS

OPERATION	TODAY	CUM.
1. Drilling	6.25	
2. Trips	5.25	
3. Rig Service	0.25	
4. Deviation Surveys	0.75	
5. Ream & Cond. Hole		
6. Mix & Cond. Mud		
7. Circulation	5.00	
8. Rig Repair		
9. Run Casing & Cement	2.50	
10. HANDLE TOOLS		
11. Logging		
12. Coring		
13. Formation Testing		
14. DISPLACE HOLE & AIR DRY		
15. Nipple Up & Test BOPS	1.00	
16. Drilling Out		
17. B.O.P. DRILL		
18. LEAK OFF TEST		
19. SLIP & CUT DRL'G LINE		
20. RIG UP TONGS & LAY DOWN	2.75	
21. SAFETY MEET	0.25	
TOTAL	24	

COSTS

DAILY \$53,970
 CUMMULATIVE \$1,859,010
 GR ELEV 567.9M K.B 574.6

SUPERVISOR **ROD MacEACHERN**
 PH.1-403-210-2951

DRL-RPT.23A

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT (page 2)**FOR 24 HR PERIOD ENDING **98-02-06-08:00**
Yr - Mon - Day - TimeWELL NAME **PARAMOUNT ET AL ARROWHEAD**LOCATION **N65****OPERATIONS DETAIL:**

08:00-14:15 control drill FM 2520 TO 2530 M, K/B.

14:15-18:45 CIRC SAMPLE

18:15-19:30 SURVEY 1 DEG @ 2529 M. KB.

19:30-20:00 CIRC.

20:00-23:45 TRIP OUT HOLE IN GOOD COND..

23:45-24:00 RIG SERV.FUNCTION ANN. & UPR.

00:00-01:30 TRIP OUT HOLE IN GOOD COND..

01:30-02:30 LAYDOWN WILLIAMS HEAD, RIG UP FLOW NIPPLE.

02:30-05:15 RIG UP POWER TONGS & LAYDOWN MACHINE.

05:15-05:30 SAFETY MEETING WITH POWER TONG HAND, LAYDOWN, TOOL HAND.

05:30-08:00 MAKE UP & RUN LINER.

CARDIUM TOOL HAND ON LOC. TO RUN 177.8MM, 38.69KG/M, N80, LT/C, 8 RD. LINER.

TOP OF LINER HANGER TOOL WILL BE LANDED @ 1723.99M KB.

THAT WILL MAKE IT 166.01M UP INSIDE THE INTERMEDIATE CSG.

WANT LIST:WEATHER: **-17**ROAD: **GOOD WINTER COND.****IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)**

DRL_RPT.238

W Name : PARAMOUNT PT AL ARROWHEAD
 Location : N65
 Date : 02-06-98
 Contact : Paul Collins 290-3605

AM REPORT

DFS: 23

Depth @ 08:00 hrs: 2530m Progress last 24 hrs: 19 m
 Rotating hrs: 6.25

Present operations: Running 177.8 Liner

ROP: .m/hr

Drill fluid: Dens: Vls: WL: pH:

SURVEYS : 2520 1 deg;

FORMATION TOPS

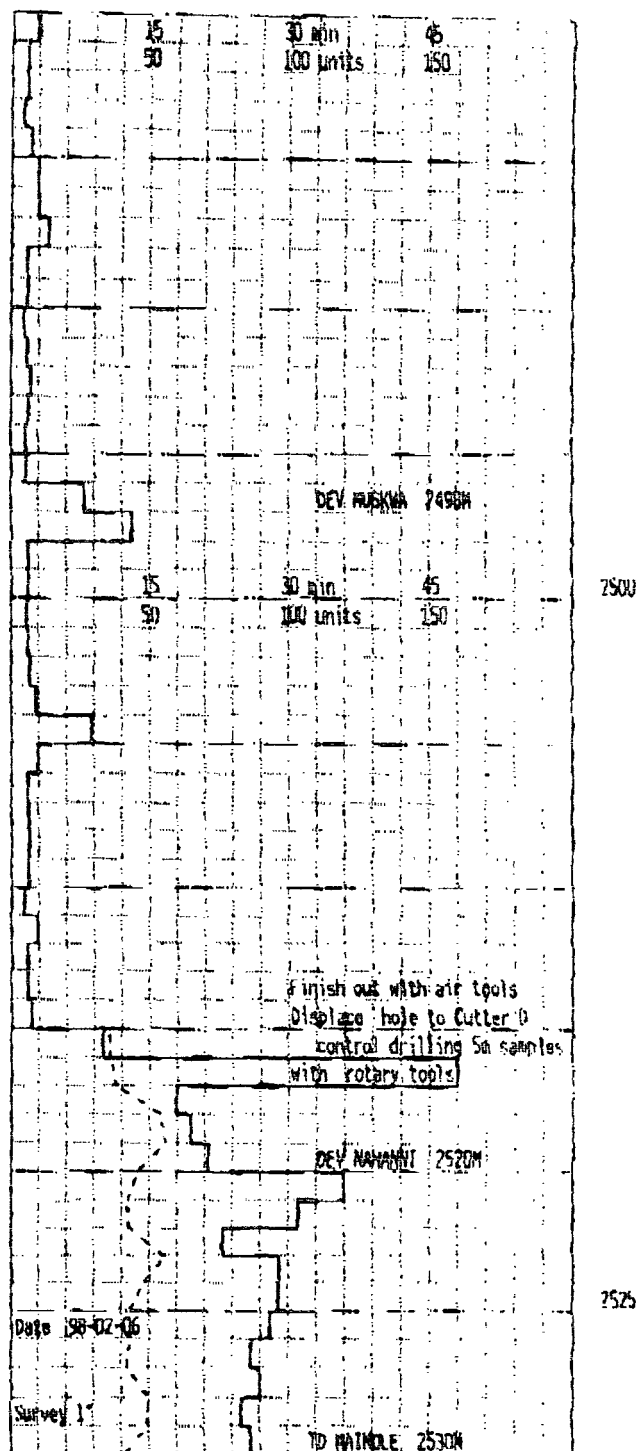
Formation	Prognosis	Sample	KB:574.0m Subsea
Dev Muskwa	2542m	2495m	
Dev Nahanni	2564m	2520m	

SHOW SUMMARY:

Formation	Interval	gas show/BOG	Lith/part shows remarks
Nahanni	2520-2530	avg 35-45BOG	LS- lt -m gy brn; dk gy brn ip, mx-ex; some m xln; small clt ch ea fre fill; subhedra xln ip; NVP, NVS; tr dol ric fill isp

REMARKS: control drill 5m samples to 2530m; samples rock to
 good with Cutter D; TD main hole @ 2530m; no logs required;
 POH to run liner.

Geologist: D. Ferguson
 Cell: 1-403-210-2951



SH-blk, fis, sl carb ip, scat pyr thru;

SH-blk, brn ip, fis - stis, sl calc, scat pyr thru;

SH-blk, brn ip, fis - stis, mod calc, scat pyr thru;

SH-blk, brn ip., mod calc str, grdy to arg LS ip, scat pyr; LS-lt gy, brn, dk gy ip, mot ip, frag ip / rr clr and lens ca frc fill - euhedral xls ip, NVS, NVP, tr ske ip, scat arg lam, scat dol str, occ slty; LS-dk gy, brn, lt gy ip, mot ip, scat clr ca frc fill - euhedral xls ip, NVS, NVP, tr ske ip;

LS-m - dk gy, brn, lt gy ip, mot ip, scat clr ca frc fill - euhedral xls ip, NVS, NVP;

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT**FOR 24 HR PERIOD ENDING **98-02-05-08:00**

Yr - Mon - Day - Time

WELL NAME **PARAMOUNT et al ARROWHEAD**LOCATION **N65**Day **22**Depth **2520**Metres last 24 hr **40**ROT HRS **3.25**Activity at report time **DRILL 216MM HOLE.****DRILLING MUD PROPERTIES AT SHAKER/SUCTION/PIT**

Wt **970** Vis **51** WL _____ Gels **2/3** Solids **0.04** PV **30** YP **7** pH _____
 Oil **94.5 %** Sand **0.04** S _____ Cake _____ PPMCL **0** PPMCa **0**

BIT RECORD

BIT NO.	SIZE mm	MAKE & TYPE	SER. NO.	BIT		DEPTH OUT m	m DRLD TODAY	CUM m. DRLD	Rot hrs TODAY	CUM. Rot hr	m/hr	Dull Cond.		
				WT	RPM							T	B	G
1	216	S-FDT	XH0071	3-4	40	1893	3	3	1.75	1.75	1.09	1	1	1
2	216	S-H42R8R3	K57760	.50	20/40	2514	134	721	15.75	26.50	22.15	1		1
3	216	R HP53A	RB0158	12	80		5	5	1.00	1.00	5.00	R	N	G

CIRCULATION RECORD

BIT NO.	JKTS - mm			STROKE	PUMP			ANN. VEL.		JET VEL.	HHP	SURF. PRESS. kPa
	1	2	3		SPM	LINER	m ³ /MIN	DP	DC			
1	12.7	12.7	12.7	254	110	152	1.4	56	96	61		4800
2	3/8	CHOKE		AIR VOL.62 M3 PR MIN								2000
3	9.5	9.5	9.5	254	80	152	1.1	46	81	86		7500

DEVIATION SURVEYS

2	°	at	2471 m	°	at	m
1	°	at	2503 m	°	at	m
	°	at	m	°	at	m
	°	at	m	°	at	m

MUD & CHEMICALS ADDED

CHANGED HOLE OVER FROM AIR
TO CUTTER:D.

BOTTOM HOLE ASSEMBLY

TOOL	ID	OD	LENGTH	WEIGHT
	mm	mm	m	daN
BIT		216	0.30	
1-BIT SUB			0.79	
2-171 D.C.		171	18.0	2000
1-R3-RR		216	1.73	250
4-171 D.C.		171	36.48	3903
1-D JARS		152	5.03	
8-171 D.C.		171	72.59	7811
1-X/O			0.40	
		TOTAL	135.3	13964

TIME ANALYSIS

OPERATION	TODAY	CUM.
1. Drilling	3.25	
2. Trips	15.50	
3. Rig Service	0.75	
4. Deviation Surveys	1.00	
5. Ream & Cond. Hole		
6. Mix & Cond. Mud		
7. Circulation	2.50	
8. Rig Repair		
9. Run Casing & Cement		
10. HANDLE TOOLS	0.75	
11. Logging		
12. Coring		
13. Formation Testing		
14. DISPLACE HOLE & AIR DRY		
15. Nipple Up & Test BOPS		
16. Drilling Out		
17. B.O.P. DRILL		
18. LEAK OFF TEST		
19. SLIP & CUT DRUG. LINE		
20. NIPPLE DOWN SET SLIPS		
21. SAFETY MEET	0.25	
TOTAL	24	

COSTS

DAILY \$58,584
 CUMMULATIVE \$1,805,040
 GR ELEV.567.9M K.B.574.6

SUPERVISOR **ROD MacEACHERN**
 PH.1-403-210-2951

DRL_RPT.22A

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT (page 2)**

FOR 24 HR PERIOD ENDING

98-02-05-08:00

Yr - Mon - Day - Time

WELL NAME PARAMOUNT ET AL ARROWHEADLOCATION N65**OPERATIONS DETAIL:**

08:00-10:15 AIR DRILL 216 MM HOLE FM.2447 TO 2515M K/B.

10:15-11:15 ACCUM SURVEY TIME.

11:15-11:30 RIG SERV. FUNCTION UPPER & LOWER PIPE RAMS.

11:30-12:30 BLOW DOWN STACK & HOLE BEFOR TRIPPING FOR BIT

12:30-20:30 HOIST, DISPLACE TO CUTTER D" EVERY 200M.

20:30-21:15 SERV & LAY DOWN HAMMER, & BIT, MAKE UP B.H.A.

21:15-23:45 RUN IN WITH HP 53 A BIT.

23:45-24:00 RIG SERV.FUNCTION ANN. MOTOR KILLS.

00:00-01:00 RUN IN BREAK CIRC @ 1890M

01:00-01:15 SAFETY MEETING ON H2S, CREW DONNED SCBA

01:15-02:30 CONTINUE TO RUN IN TO BOTTOM, HOLE IN GOOD COND.

02:30-02:45 RIG SERV.FUNCTION REMOTE CHOKE, LPR,

02:45-04:15 CIRC & COND CUTTER D:

04:15-07:00 WIPER TRIP TP CSG.

07:00- 08:00 BREAK IN BIT, & DRILL 216 MM HOLE.

WANT LIST:WEATHER: -15ROAD: GOOD WINTER COND.**IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)**

DRL_RPT.21B

WELLTYPE: WELL98

CLIENT: PARAMOUN

Attn: Greg Elliot

Well Name: N65

FEB. 4/98

Computation Method: 1 (Minimum Curvature)

Plane Of Vert Section 0.00 Height Of TVD Origin Above Field Datum 0.00
Distance Units used m Dogleg Base Length Used 30
Grid Convergence 0.000 Magnetic Declination 0.000

MD	Inc	Dir	Tvd	Vsec	Lat	Dep	Build	Turn	Dleg	Tool
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
480.0	1.75	0.00	479.9	7.3	7.3	0.0	0.1	0.0	0.1	
522.0	2.00	0.00	521.9	8.7	8.7	0.0	0.2	0.0	0.2	
550.0	2.00	0.00	549.9	9.7	9.7	0.0	0.0	0.0	0.0	
588.0	2.13	0.00	587.9	11.0	11.0	0.0	0.1	0.0	0.1	
627.0	3.00	0.00	626.8	12.8	12.8	0.0	0.7	0.0	0.7	
650.0	2.25	0.00	649.8	13.8	13.8	0.0	-1.0	0.0	1.0	
737.0	1.00	0.00	736.8	16.3	16.3	0.0	0.4	0.0	0.4	
824.0	0.75	0.00	823.8	17.6	17.6	0.0	-0.1	0.0	0.1	
920.0	0.75	0.00	919.7	18.9	18.9	0.0	0.0	0.0	0.0	
1014.0	1.00	0.00	1013.7	20.3	20.3	0.0	0.1	0.0	0.1	
1106.0	1.00	0.00	1105.7	21.9	21.9	0.0	0.0	0.0	0.0	
1220.0	1.00	0.00	1219.7	23.9	23.9	0.0	0.0	0.0	0.0	
1330.0	0.75	0.00	1329.7	25.6	25.6	0.0	-0.1	0.0	0.1	
1445.0	1.00	0.00	1444.7	27.4	27.4	0.0	0.1	0.0	0.1	
1533.0	1.50	0.00	1532.7	29.3	29.3	0.0	0.2	0.0	0.2	
1618.0	1.75	0.00	1617.6	31.7	31.7	0.0	0.1	0.0	0.1	
1700.0	2.00	0.00	1699.6	34.4	34.4	0.0	0.1	0.0	0.1	
1806.0	2.00	0.00	1805.5	38.1	38.1	0.0	0.0	0.0	0.0	
1884.0	2.25	0.00	1883.5	41.0	41.0	0.0	0.1	0.0	0.1	
1890.0	2.75	0.00	1889.5	41.2	41.2	0.0	2.5	0.0	2.5	
1956.0	3.00	0.00	1955.4	44.5	44.5	0.0	0.1	0.0	0.1	
1984.0	3.00	0.00	1983.3	46.0	46.0	0.0	0.0	0.0	0.0	
2012.0	2.00	0.00	2011.3	47.2	47.2	0.0	-1.1	0.0	1.1	
2099.0	2.00	0.00	2098.2	50.3	50.3	0.0	0.0	0.0	0.0	
2155.0	4.00	0.00	2154.2	53.2	53.2	0.0	1.1	0.0	1.1	
2182.0	3.50	0.00	2181.1	55.0	55.0	0.0	-0.6	0.0	0.6	
2212.0	2.75	0.00	2211.1	56.6	56.6	0.0	-0.8	0.0	0.7	
2241.0	2.25	0.00	2240.0	57.9	57.9	0.0	-0.5	0.0	0.5	
2270.0	4.13	0.00	2269.0	59.5	59.5	0.0	1.9	0.0	1.9	
2300.0	5.00	0.00	2298.9	61.9	61.9	0.0	0.9	0.0	0.9	
2308.0	5.00	0.00	2306.9	62.6	62.6	0.0	0.0	0.0	0.0	
2330.0	4.00	0.00	2328.8	64.3	64.3	0.0	-1.4	0.0	1.4	
2349.0	4.00	0.00	2347.8	65.6	65.6	0.0	0.0	0.0	0.0	
2369.0	3.88	0.00	2367.7	67.0	67.0	0.0	-0.2	0.0	0.2	
2385.0	3.00	0.00	2383.7	67.9	67.9	0.0	-1.6	0.0	1.6	
2414.0	2.75	0.00	2412.6	69.4	69.4	0.0	-0.3	0.0	0.3	
2443.0	2.88	0.00	2441.6	70.8	70.8	0.0	0.1	0.0	0.1	
2474.0	2.00	0.00	2472.6	72.1	72.1	0.0	-0.8	0.0	0.8	

Wellname : PARAMOUNT ET AL ARROWHEAD
 Location : NBS
 Date : 02-05-98
 Contact : Paul Collens 290-3605

AM REPORT

DFS: 22

Depth @ 08:00 hrs: 2520m Progress last 24 hrs: 40 m
 Rotating hrs: 1.25

Present operations: control drilling 216mm hole

ROP: 4m/hr

Drill fluid: cutter D Dens: 970 Visc: 01 WL: pH:

SURVEYS : 2471m 2deg; 2503m 1deg;

FORMATION TOPS

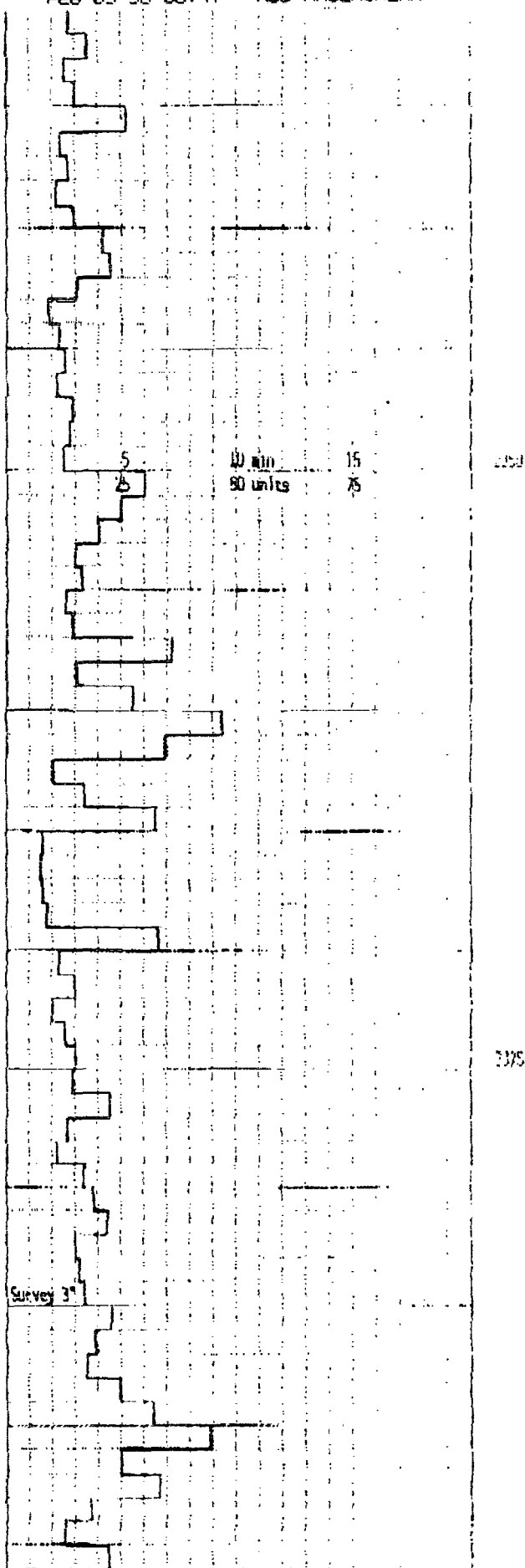
Formation	Prognosis	Sample	Subsea
Fl Simpson	1892m	1870m	LB:574.6m
Muskwa	2542m	2504m	

SHOW SUMMARY:

Formation	Interval	gas show/BGG	Lith/por/shows/remarks
Muskwa	2515	25 BGG	Initial circulating BGG

REMARKS: laydown air hammer and displace hole to cutter d for control drilling to Nahanni

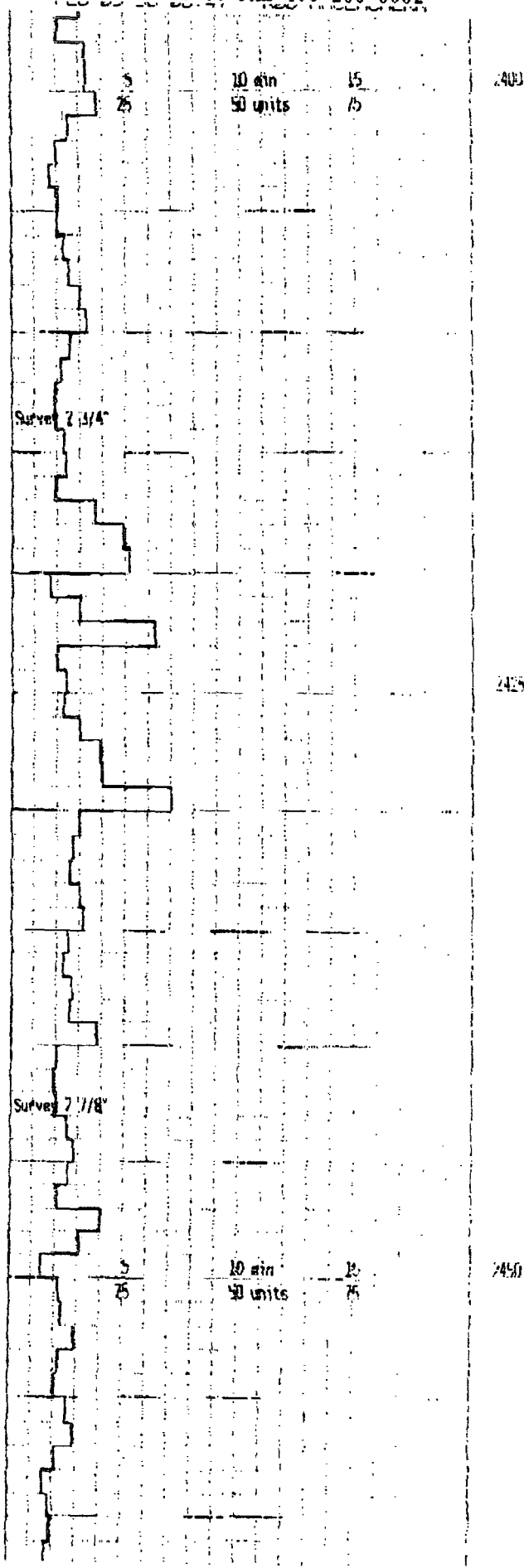
Geologist: D. Ferguson
 Cell: 1-403-210-2951



SH-m gy - dk gy, sfis - biky, rr cln dol (nic frn fill ?);

SH-m gy - dk gy, sfis - biky;

SH-dk gy to m gy, sl brn ip, sfis, sl em;

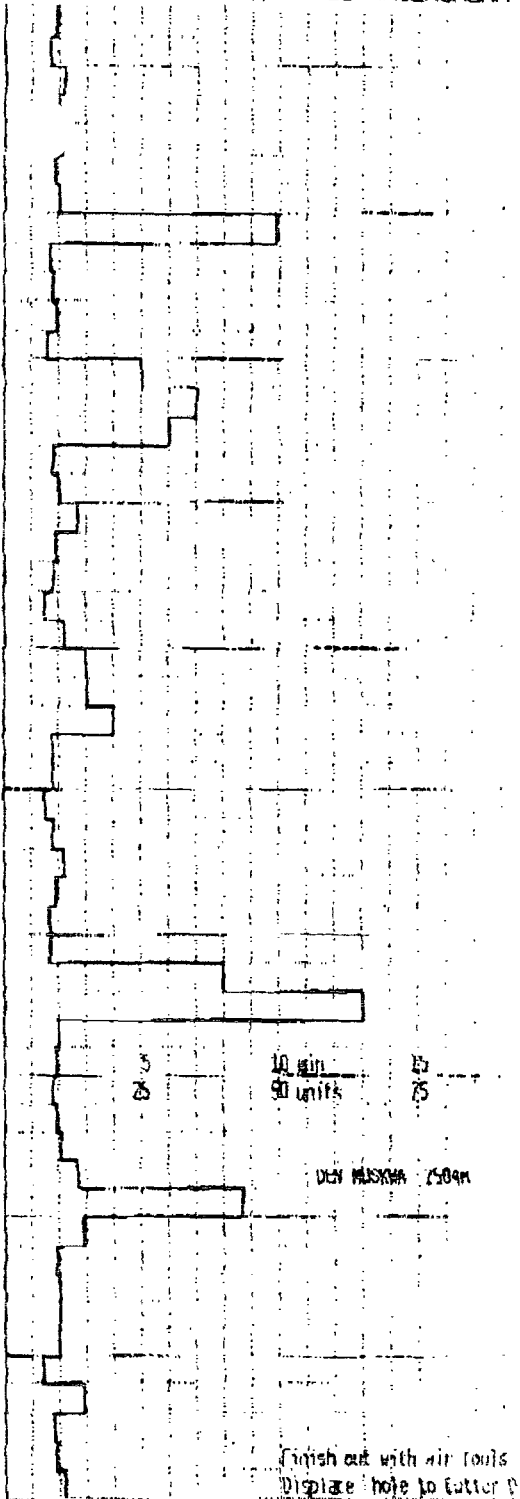


NS-Blaeey line problems;

SH-dk gy, sfis, sl ma;

SH-m gy - dk gy, sfis - blk; SH-dk gy, sfis,
sl ma;SH-dk gy - blk, brn ip, fis - sfis, sl carb
ip, scat pyr thru, mod calc;SH-dk gy brn, fis - sfis, sl carb ip, scat
pyr thru, sl calc ip, mod dol isp;

SH-e gy - dk gy brn, sfis - blk;



24/5

2500

SH-a gy - dk gy brn, sfis - blk, scat calc and tr qtz vn, scat calc frc fill ip;

SH-a gy - dk gy brn, sfis - blk, scat calc and tr qtz vn, scat calc frc fill ip; SH-dk gy brn, sfis, bcag blk, fis, sl carb ip;

SH-blk, fis, sl carb ip, scat pyr thru;

SH-blk, brn ip, fis - sfis, sl calc, scat pyr thru;

SH-blk, brn ip, fis - sfis, mod calc, scat pyr thru;

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT**FOR 24 HR PERIOD ENDING **98-02-04-08:00**

Yr - Mon - Day - Time

WELL NAME **PARAMOUNT et al ARROWHEAD**LOCATION **N65**Day **21**Depth **2480**Metres last 24 hr **293**ROT HRS **15.75**Activity at report time **AIR DRILL 216 MM HOLE****DRILLING MUD PROPERTIES AT SHAKER/SUCTION/PIT**

Wt _____ Vis _____ WL _____ Gels _____ Solids _____ PV _____ YP _____ pH _____
 Oil _____ % Sand _____ S _____ Cake _____ PPMCL **0** PPMCa **0**

BIT RECORD

BIT NO.	SIZE mm	MAKE & TYPE	SER. NO.	BIT		DEPTH OUT m	m DRLLD TODAY	CUM m. DRLLD	Rot hrs TODAY	CUM. Rot hr	m/hr	Dull Cond.		
				WT	RPM							T	B	G
1	216	S-FDT	XH0071	3-4	40	1893	3	3	1.75	1.75	1.09	1	1	1
2	216	S-H42R8R3	K57760	.50	20/40		293	587	15.75	26.50	22.15	R	N	G

CIRCULATION RECORD

BIT NO.	JETS - mm			PUMP			ANN. VEL.		JET VEL.	HHP	SURF. PRESS. kPa
	1	2	3	STROKE	SPM	LINER m ³ /MIN	DP	DC			
1	12.7	12.7	12.7	254	110	152	1.4	56	96	61	4800
2	3/8	CHOKE		AIR VOL 62 M3. PR. MIN.							2000

DEVIATION SURVEYS**MUD & CHEMICALS ADDED**

4 ° at 2155 m	41/8 ° at 2270 m	4 deg@ 2349	2 7/8 2443
3 1/2 ° at 2182 m	5 ° at 2300 m	3 7/8 @2369	
2 3/4 ° at 2212 m	5 ° at 2308 m	3 deg 2385	
2 1/4 ° at 2241 m	4 ° at 2330 m	23/4 2414	

BOTTOM HOLE ASSEMBLY**TIME ANALYSIS**

TOOL	ID mm	OD mm	LENGTH m	WEIGHT daN	OPERATION	TODAY	CUM.
BIT SUB			0.8		1. Drilling	15.75	
3 D.C.		171	26.91	2879	4. Deviation Surveys	7.50	
1-R3		216	1.73		5. Ream & Cond. Hole		
1 FIRE SUB			0.80		6. Mix & Cond. Mud		
6 D.C.		171	54.80	5918	7. Circulation		
1 DRILLING JARS			5.03		8. Rig Repair		
5 D.C.			45.38	4900	9. Run Casing & Cement		
X/O			0.4		10. HANDLE TOOLS		
	TOTAL=		138.2	13697	11. Logging		
					12. Coring		
					13. Formation Testing		
					14. DISPLACE HOLE & AIR DRY		
					15. Nipple Up & Test BOPS		
					16. Drilling Out		
					17. B.O.P. DRILL	0.25	
					18. LEAK OFF TEST		
					19. SLIP & CUT DRU'G. LINE		
					20. NIPPLE DOWN SET SLIPS		
					21. SAFETY MEET		
COSTS					TOTAL	24	
DAILY	\$34,336						
CUMMULATIVE	\$1,746,456						
GR ELEV.567.9M	K.B.574.6						
SUPERVISOR ROD MacEACHERN							
PH.1-403-210-2951							

COSTS

DAILY \$34,336
 CUMMULATIVE \$1,746,456
 GR ELEV.567.9M K.B.574.6

SUPERVISOR **ROD MacEACHERN**
 PH.1-403-210-2951

PARAMOUNT RESOURCES LTD.

DAILY DRILLING REPORT (page 2)

FOR 24 HR PERIOD ENDING 98-02-04-08:00
 Yr - Mon - Day - Time

WELL NAME PARAMOUNT ET AL ARROWHEAD

LOCATION N65

OPERATIONS DETAIL:

08:00-10:15 AIR DRILL 216 MM HOLE 2130-2245M.

10:15-11:45 ACCUM SURVEY TIME,

11:45-12:00 RIG SERV.FUNCTION LPR. REMOTE CHOKE, CHECK BRAK LINKAGE.

12:00-12:30 SURVEY @ 241M 2 1/4 DEG.

12:30-16:45 DRILL 216 MM HOLE FROM 2245 TO 2331M K/B.

16:45-19:45 ACCUM SURVEY TIME.

19:45-20:00 B. O.P. DRILL.

20:00-20:15 RIG SERV.

20:15-23:00 DRILL 216 MM HOLE, FROM 2331-2378M K/B.

23:00-24:00 ACCUM. SURVEY TIME.

00:00-04:30 DRILL 216 MM, HOLE FR:2378-2447M K/B.

04:30-06:00 ACCUM. SURVEY TIME.

06:00- 08:00 DRILL 216 MM HOLE 2447M TO 2480M

WANT LIST:

WEATHER: -10

ROAD: GOOD WINTER COND.

IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT**FOR 24 HR PERIOD ENDING **98-02-03-08:00**

Yr - Mon - Day - Time

WELL NAME **PARAMOUNT et al ARROWHEAD**LOCATION **N65**Day **20**Depth **2187**Metres last 24 hr **294**ROT HRS **10.75**Activity at report time **AIR DRILL 216 MM HOLE****DRILLING MUD PROPERTIES AT SHAKER/SUCTION/PIT**

Wt _____ Vis _____ WL _____ Gels _____ Solids _____ PV _____ YP _____ pH _____
 Oil _____ % Sand _____ S _____ Cake _____ PPMCL **0** PPMCa **0**

BIT RECORD

BIT NO.	SIZE mm	MAKE & TYPE	SER. NO.	BIT		DEPTH OUT m	m DRLD TODAY	CUM m. DRLD	Rot hrs TODAY	CUM. Rot hr	m/hr	Dull Cond.		
				WT	RPM							T	B	C
1	216	S-FDT	XH0071	3-4	40	1893	3	3	1.75	1.75	1.09	1	1	1
2	216	S-H42R8R3	K57760	.50	20/25		294	294	10.75	10.75	27.34	R	N	G

CIRCULATION RECORD

BIT NO.	JETS - mm			PUMP				ANN. VEL.		JET VEL.	HHP	SURF. PRESS. kPa
	1	2	3	STROKE	SPM	LINER	m ³ /MIN	DP	DC			
1	12.7	12.7	12.7	254	110	152	1.4	56	96	61		4800
2	3/8	CHOKE		AIR VOL. 62 M3. PR. MIN.								2000

DEVIATION SURVEYS**MUD & CHEMICALS ADDED**

2 3/4 ° at 1890 m 2 ° at 2099 m
 3 ° at 1956 m ° at m
 3 ° at 1984 m ° at m
 2 ° at 2012 m ° at m

BOTTOM HOLE ASSEMBLY**TIME ANALYSIS**

TOOL	ID mm	OD mm	LENGTH m	WEIGHT daN	OPERATION		TODAY	CUM.
BIT		216	0.29		1. Drilling		10.75	
AIR HAMMER			2.03		2. Trips		7.00	
BIT SUB			0.8		3. Rig Service		0.50	
3 D.C.		171	26.91	2879	4. Deviation Surveys		2.50	
1-R3		216	1.73		5. Ream & Cond. Hole			
1 FIRE SUB			0.80		6. Mix & Cond. Mud			
6 D.C.		171	54.80	5918	7. Circulation			
1 DRILLING JARS			5.03		8. Rig Repair			
5 D.C.			45.38	4900	9. Run Casing & Cement			
X/O			0.4		10. HANDLE TOOLS		0.75	
	TOTAL=		138.2	13697	11. Logging			
					12. Coring			
					13. Formation Testing			
					14. DISPLACE HOLE& AIR DRY		2.50	
COSTS					15. Nipple Up & Test BOPS			
					16. Drilling Out			
DAILY	\$60,218		K.B.574.6		17. B.O.P. DRILL			
CUMMULATIVE	\$1,712,120				18. LEAK OFF TEST			
GR ELEV.567.9M					19. SLIP & CUT DRL'G. LINE			
SUPERVISOR ROD MacEACHERN					20. NIPPLE DOWN SET SLIPS			
					21. SAFETY MEET			
					PH 1-403-210-2951		TOTAL	

COSTS

DAILY \$60,218
 CUMULATIVE \$1,712,120
 GR ELEV. 567.9M K.B. 574.6

SUPERVISOR **ROD MacEACHERN**
 PH. 1-403-210-2951

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT (page 2)**FOR 24 HR PERIOD ENDING **98-02-03-08:00**
Yr - Mon - Day - TimeWELL NAME **PARAMOUNT ET AL ARROWHEAD**LOCATION **N65****OPERATIONS DETAIL:**

08:00-10:30 DISPLACE HOLE WITH AIR , AIR DRY HOLE.

10:30-10:45 RIG SERV. FUNCTION TEST ,ANN , L.PR. CROWN SAVER

10:45-14:15 HOIST TO MAKE UP AIR HAMMER & B.H.A.

14:15-15:00 MAKE UP B.H.A.

15:00-18:30 RUN IN WITH BIT & AIR HAMMER ASSMY.

18:30-21:45 AIR DRILL 116MM HOLE.FM:1893 TO 1958M/KB.

21:45-22:00 RIG SERV.FUNCTION ,U.PR.,H.C.R.,MOTOR KILLS.

22:00-22:30 SURVEY 1956M ,3 DEG.

22:30-23:30 AIR DRILL FM:1958 TO 1987M/KB.

23:30-24:00 SURVEY @ 1984 M, 3DEG.

00:00-04:30AIR DRILL 216 MM FM: 1987TO 2130M/KB.

04:30-06:00 ACCUM.OF SURVEYS , 2012M, 2 DEG,2070M, MISRUN,2099M 2 DEG,2155,4DEG

06:00-08:00 AIR DRILL FM: 2130M TO2187M

LAST SURVEY @ 4 DEG, HAVE LIGHTENED UP ON WT. INCREASED R.P.M. TO 35 R.P.M.

WANT LIST:WEATHER: **-12**ROAD: **GOOD WINTER COND.****IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)**

DRL_RPT.208

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT**FOR 24 HR PERIOD ENDING **98-02-02-08:00**

Yr - Mon - Day - Time

WELL NAME **PARAMOUNT et al ARROWHEAD**LOCATION **N65**Day **19**Depth **1893**Metres last 24 hr **3**ROT HRS **1.75**Activity at report time **DISPLACE HOLE WITH AIR****DRILLING MUD PROPERTIES AT SHAKER/SUCTION/PIT**

Wt **1000** Vis **h2o** WL **5** Gels **5** Solids **0** PV **0** YP **0** pH **0**
 Oil **0** % Sand **0** S **0** Calc **0** PPMCL **0** PPMCa **0**

BIT RECORD

BIT NO.	SIZE mm	MAKE & TYPE	SER. NO.	BIT		DEPTH OUT m	m DRLD TODAY	CUM m. DRLD	Rot hrs TODAY	CUM. Rot hr	m/hr	Dull Cond.		
				WT	RPM							T	B	G
1	219	S-FDT	XH0071	3.4	40	1893	3	3	1.75	1.75	1.09	1	1	1

CIRCULATION RECORD

BIT NO.	JETS - mm			STROKE	PUMP			ANN. VEL.		JET VEL	HHP	SURF. PRESS. kPa
	1	2	3		SPM	LINER	m³/MIN	DP	DC			
1	12.7	12.7	12.7	254	110	152	1.4	56	96	61		4800

DEVIATION SURVEYS

2 3/4	at	1890 m	at	m
	at	m	at	m
	at	m	at	m
	at	m	at	m

MUD & CHEMICALS ADDED**BOTTOM HOLE ASSEMBLY**

TOOL	ID mm	OD mm	LENGTH m	WEIGHT daN
BIT		216	0.30	
B.S.			0.79	
23-171 D.C.			209.4	21316
1-XO, SUB.			0.40	

TIME ANALYSIS

OPERATION	TODAY	CUM.
1. Drilling	1.75	
2. Trips	4.50	
3. Rig Service	0.25	
4. Deviation Surveys		
5. Ream & Cond. Hole		
6. Mix & Cond. Mud		
7. Circulation	1.25	
8. Rig Repair		
9. Run Casing & Cement		
10. HANDLE TOOLS		
11. Logging		
12. Coring		
13. Formation Testing		
14. DISPLACE HOLE	2.00	
15. Nipple Up & Test BOPS	9.00	
16. Drilling Out	3.50	
17. B.O.P. DRILL		
18. LEAK OFF TEST	1.75	
19. SLIP & CUT DRL'G. LINE		
20. NIPPLE DOWN SET SLIPS		
21. SAFETY MEET		
TOTAL	24	

COSTS

DAILY \$43,668
 CUMMULATIVE \$1,668,184
 GR ELEV. 567.9M K.B. 574.6

SUPERVISOR **ROD MacEACHERN**
 PH. 1-403-210-2951

DRL_RPT.19A

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT (page 2)**FOR 24 HR PERIOD ENDING **98-02-02-08:00**
Yr - Mon - Day - TimeWELL NAME **PARAMOUNT ET AL ARROWHEAD**LOCATION **N65****OPERATIONS DETAIL:**

08:00-10:00 NIPPLE UP STACK.

10:00-17:00 PRESSURE TEST, CSG TO 80 % OF MAX 17000 KPA APPLIED SURF PRESS.
PLUS HYD OF H2O TOTAL=35540 KPA B.O.P.S. & RELATED EQPT. 1400 KPA LOW AND
A HIGH OF 35000 KPA. ALL HELD O.K.

17:00-21:30 MAKE UP BIT AND RUN IN TO DRILL OUT CEMENT.

21:30-21:45 RIG SERV & B.O.P. DRILL, WELL SECURED IN 95 SEC. FUNCTION TEST B.O.P.

21:45-01:15 DRILL OUT CEMENT.

01:15-03:00 DRILL 3M OF 216MM HOLE TO RUN FORMATION LEAK OFF TEST

03:00-03:30 CIRC

03:30-05:15 RUN FORMATION LEAK OFF TEST, WITH APPLIED SURF PRESSURE OF
17000 KPA FORMATION DID NOT LEAK OFF, TEST WAS STOPPED AS 80 % OF MAX
CSG. PRESS WAS REACHED, $9.81 \times 1890 = 18541 + 17000 = 35541$:1890M = 18.80 GRADIENT

05:15-06:00 CIRC & SURVEY 1890M 2.75 DEG.

06:00-08:00 DISPLACE HOLE WITH AIR.

PRESSURE TEST BY FALCON PRESSURE TESTERS.

WANT LIST:

WEATHER: **-10**ROAD: **GOOD WINTER COND.**

IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)

DRL_RPT.198

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT**FOR 24 HR PERIOD ENDING **98-02-01-08:00**
Yr - Mon - Day - TimeWELL NAME **PARAMOUNT et al ARROWHEAD**LOCATION **N65**Day **18**Depth **1890m**Metres last 24 hr **0**

ROT HRS

Activity at report time **NIPPLE UP****DRILLING MUD PROPERTIES AT SHAKER/SUCTION/PIT**

Wt 980 Vis 57 WL Gals 3-Feb Solids 5.4 PV 29 YP 6 pH
 Oil 99 % Sand % Cake PPMCL 0 PPMCa 0

BIT RECORD

BIT NO.	SIZE mm	MAKE & TYPE	SER. NO.	BIT		DEPTH OUT m	m DRLD TODAY	CUM m. DRLD	Rot hrs TODAY	CUM. Rot hr	m/hr	Dull Cond.		
				WT	RPM							I	B	G

CIRCULATION RECORD

BIT NO.	JETS - mm			PUMP				ANN. VEL		JET VEL	HHP	SURF. PRESS. kPa
	1	2	3	STROKE	SPM	LINER	m ³ /MIN	DP	DC			

DEVIATION SURVEYS

° at m	° at m
° at m	° at m
° at m	° at m
° at m	° at m

MUD & CHEMICALS ADDED

BOTTOM HOLE ASSEMBLY

TOOL	ID mm	OD mm	LENGTH m	WEIGHT daN

TIME ANALYSIS

					OPERATION	TODAY	CUM.
					1. Drilling		
					2. Trips		
					3. Rig Service	0.25	
					4. Deviation Surveys		
					5. Ream & Cond. Hole		
					6. Mix & Cond. Mud		
					7. Circulation	5.50	
					8. Rig Repair		
					9. Run Casing & Cement	8.00	
					10. HANDLE TOOLS		
					11. Logging		
					12. Coring		
					13. Formation Testing		
					14. DISPLACE HOLE		
					15. Nipple Up & Test BOPS	6.00	
					16. Drilling Out		
					17. B.O.P. DRILL		
					18. LEAK OFF TEST		
					19. SLIP & CUT DRL'G. LINE		
					20. NIPPLE DOWN SET SLIPS	3.75	
					21. SAFETY MEET	0.50	
					TOTAL	24	

COSTS

DAILY \$167,270
 CUMMULATIVE \$1,624,518
 GR ELEV. 567.9M K.B 574.6
 SUPERVISOR ROD MacEACHERN

DRL_RPT.18A

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT (page 2)**FOR 24 HR PERIOD ENDING **98-02-01-08:00**

Yr - Mon - Day - Time

WELL NAME **PARAMOUNT ET AL ARROWHEAD**LOCATION **N65****OPERATIONS DETAIL:**

08:00- 11:30 RUN 244.5 MM CSG.

11:30-17:00 CIRC CSG, RIG IN SANJEL CEMENTERS.

17:00-18:00 PRE CEMENT SAFETY MEETING & PRESS TEST LINES.

18:00-22:00 CEMENT INTERMEDIATE CSG.

22:00-23:45 LIFT B.O.P.S. TO SET CSG SLIPS

23:45-24:00 RIG SERV.

00:00-02:00 LIFT STACK SET SLIPS WITH 75000 DAN.

02:00-08:00 CUT CSG.NIPPLE UP STACK.

INTERMEDIATE:

RAN 136 JOINTS OF 244.5 MM 64.74 KG/M, L80, LT/C NEW CSG. TOTAL LENGTH OF

1891.36M, LANDED @ 1890M KB. CEMENTED BY SANJEL. WITH : PRE FLUSH INVERT

3M3. WEIGHTED INVERT SPACER 3M3. LEAD SLURRY LW14 29 TONN, 1400 KG/M3.

VOLUME 47M3, WITH ADDITIVES 2% SMS, 2% LWA, 2% CACL2,

TAIL SLURRY 0-1-0 G.43 TONN, 1901 KG/M3, VOLUME 32.7 M3, WITH ADDITIVES .4% CFL,

3. 1% CFL-H, 2%SPC2, HAD COMPLETE MUD RETURNS THROUGHT OUT MIXING AND

72.9 M3, H2O DISPLACEMENT OF CEMENT, NO CEMENT RETURNS TO SURF.

CALLED: ED REYVEN N.E.B. ABOUT NO RETURNS O.K. TO CONTINUE

WANT LIST:WEATHER: **-14**ROAD: **GOOD WINTER COND.**

IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)

DRL_RPT.168

PARAMOUNT RESOURCES LTD.**CASING SUMMARY**

WELL NAME PARAMOUNT ET AL. LOCATION ARROWHEADN65 DATE 98-02-01
 SURFACE () INTERMEDIATE () PRODUCTION () LINER ()

Size: 244.5 mm	NO.	DESCRIPTION	MEASURED	
			LENGTH	KB Depth
KB: 6.7 m	136	244.5MM, 64.74 KG/M, L80, LT/C	1891.36	1890.0
KB - CF: 6.97M	34	Scratchers		
		Centralizers		
		Total String	1891.36	
		minus KB to Csg Top (STICK UP)	1.36	Cut-off
		Landed Depth KB	1890.00	Jt. Length
		Hole Depth KB	1890.00	
		Distance Csg Landed Off Bottom	NILL	

Cementing Company SANJEL

Wash-Type PRE FLUSH INVERT, INVERT SPACER Volume: 6M3

Cement Type Lead Slurry LW14, 29 TONN, 1400 KG/M3 Volume: 47M3

Additives 2% SMS, 2% LWA, 2% CACL2

Cement Type Tail Slurry 0-1-0 G, 43 TONN, 1901 KG/M3 Volume: 32.7 M3

Additives 4% CFL 3, 1% CFL-H, 2% SPC2

Cement Type Above Stage Collar Volume: _____

Additives _____

Displacement Rate: Max 1 m3/min Average 0.7 m3/min

Calculated Cement Top(s): (fill) _____ mKB (tail) _____ mKB

Returns: Mud 157M3 Cement NILL m3

String Wt. in Mud Wt of: 980 kg/m3 = 116,000 daN

Wt. set on slips: 75,000 daN

Remarks: NO CEMENT RETURNS TO SURF ON CEMENT JOB, WORKED CSG
3-5M WHILE MIXING AND MOST OF THE DISPLACEMENT. RECOVERED APP. 157
M3 OF CUTTER D" DRILLING FLUID.

Supervisor ROD. MacEACHERN

CSG_SUM2.XLS

PARAMOUNT RESOURCES LTD.**PIPE TALLY SHEET**DATE 98-02-01PAGE 1 of 2WELL NAME PARAMOUNT ET ALLOCATION ARROWHEAD N65Size 244.5 Wt. 64.74 Grade N80 Cplg LT/C Thread 8RD.

Joint	Length	Joint	Length	Joint	Length	Joint	Length	Joint	Length
1	14.20	11	13.86	21	*14.13	31	13.95	41	13.52
2	14.06	12	14.02	22	*13.98	32	14.07	42	14.01
3	14.16	13	14.14	23	14.04	33	14.28	43	14.16
4	13.31	14	13.76	24	13.93	34	14.09	44	13.31
5	14.25	15	12.88	25	13.69	35	13.99	45	13.99
6	14.26	16	14.06	26	13.86	36	13.87	46	13.76
7	14.08	17	13.79	27	13.84	37	14.19	47	13.69
8	13.92	18	14.16	28	14.17	38	14.11	48	13.89
9	13.87	19	14.27	29	14.17	39	13.59	49	13.88
10	13.88	20	*14.22	30	14.17	40	13.23	50	*11.23
A	139.99	B	124.94	C	111.87	D	139.37	E	124.21

Joint	Length	Joint	Length	Joint	Length	Joint	Length	Joint	Length
51	14.09	61	14.07	71	14.25	81	14.60	91	14.18
52	14.07	62	14.06	72	13.59	82	14.11	92	13.27
53	13.48	63	13.96	73	13.95	83	14.16	93	13.84
54	11.28	64	13.97	74	14.08	84	12.86	94	14.10
55	13.57	65	14.11	75	14.10	85	13.85	95	13.91
56	13.11	66	14.00	76	14.06	86	14.24	96	13.58
57	12.74	67	14.11	77	14.08	87	14.28	97	13.86
58	14.20	68	14.18	78	14.24	88	12.69	98	14.14
59	14.00	69	14.11	79	14.10	89	13.89	99	14.20
60	14.08	70	14.17	80	14.19	90	11.45	100	14.09
F	134.62	G	140.74	H	140.64	I	136.13	J	139.17

A	139.99	Column Subtotal	Shoe	0.48	JOINTS	LENGTH
B	124.94	264.93	Collar	0.43	Page Total	1,331.68
C	111.87	376.80	Other	0.91	Brought FWD	0.91
D	139.37	516.17			Grand Total	1,332.59
E	124.21	640.38			JOINTS on Location	
F	134.62	775.00				
G	140.74	915.74				
H	140.64	1,056.38				
I	136.13	1,192.51				
J	139.17	1,331.68				
Total	1,331.68					

Remarks: JOINTS # 20,21,22,50, OUT
 TOTAL LENGTH OUT: 53.47M.

Supervisor ROD. MacEACHERN

NOTE: Use a new page for each casing type. Number joints in order of running.

Indicate joints not run by * and do not include in total length.

PIPEINMO.XLS

PARAMOUNT RESOURCES LTD.**PIPE TALLY SHEET**DATE 98-02-01PAGE 2 of 2WELL NAME PARAMOUNT ET ALLOCATION ARROWHEAD N65Size 244.5 Wt. 64.74 Grade N80 Cplg LT/C Thread 8RD.

Joint	Length	Joint	Length	Joint	Length	Joint	Length	Joint	Length
1	14.05	11	14.05	21	14.11	31	13.87	41	14.07
2	14.01	12	13.66	22	13.84	32	13.85	42	
3	13.75	13	14.11	23	14.04	33	14.25	43	
4	13.67	14	13.73	24	13.70	34	14.09	44	
5	13.68	15	13.91	25	14.11	35	14.04	45	
6	14.12	16	13.95	26	13.97	36	14.02	46	
7	13.83	17	13.91	27	14.00	37	14.12	47	
8	14.16	18	14.26	28	*13.83	38	14.11	48	
9	14.24	19	14.08	29	13.56	39	13.98	49	
10	14.10	20	13.63	30	14.00	40	14.14	50	
A	139.61	B	139.29	C	126.33	D	140.47	E	14.07

Joint	Length	Joint	Length	Joint	Length	Joint	Length	Joint	Length
51		61		71		81		91	
52		62		72		82		92	
53		63		73		83		93	
54		64		74		84		94	
55		65		75		85		95	
56		66		76		86		96	
57		67		77		87		97	
58		68		78		88		98	
59		69		79		89		99	
60		70		80		90		100	
F		G		H		I		J	

A	139.61	Column Subtotal	Shoe		JOINTS	LENGTH
B	139.29	278.90	Collar		Page Total	558.77
C	125.33	404.23	Other		Brought FWD	1,332.59
D	140.47	544.70			Grand Total	1,891.36
E	14.07	558.77			Joints on Location	141
F						
G						
H						
I						
J						
Total	558.77					

Remarks: JOINT # 128 STAYS OUT 13.83M
 53.47M=67.3M OUT.
 LANDED @ 1890.00 M/KB.

Supervisor ROD. MacEACHERN

NOTE: Use a new page for each casing type. Number joints in order of running.
 Indicate joints not run by * and do not include in total length.

PIP2INMD.XLS

PARAMOUNT RESOURCES LTD.

DAILY DRILLING REPORT

FOR 24 HR PERIOD ENDING 98-01-31-08:00

Yr Mon Day Time

WELL NAME PARAMOUNT et al ARROWHEAD

LOCATION N65

Day 17

Depth 1890m

Metres last 24 hr 0

ROT HRS 0

Activity at report time RUNNING CSG

DRILLING MUD PROPERTIES AT SHAKER/SUCTION/PI

Wt 880 Vis 57 WL Gels 3-Feb Solids 5.4 PV 29 YP 6 pH
Oil 89 % Sand % Cake PPMCL 0 PPMCa 0

BIT RECORD

BIT NO.	SIZE mm	MAKE & TYPE	SER. NO.	BIT		DEPTH CUT m	m DRILL TODAY	CUM. DRILL	Rot hrs TODAY	CUM. Rot hr	m/hr	Dull Cond.			
				WT	RPM							T	B	G	
1	311	REEDHP11	JL3622		45/80		490	10	10	12.00	28.50	6.00	3	3	1
2	311	REEDHP43	LB8263				634	144	144	11.25	11.25	12.80	3	3	1
3	311	REEDHP11	JL3622		CLEAN	OUT	TRIP								

CIRCULATION RECORD

BIT NO.	JETS - mm			PUMP				ANN. VEL.		JET VEL.	BHP	SURF. PRESS. kPa
	1	2	3	STROKE	SPM	LINE	m/min	DP	IK			
1	9.5	9.5	9.5									5900
2	22.2	22.2	22.2									1375
3	5/8"	CHOKE										

DEVIATION SURVEYS

"	at	at	"	at	at
"	at	at	"	at	at
"	at	at	"	at	at
"	at	at	"	at	at

MUD & CHEMICALS ADDED

BOTTOM HOLE ASSEMBLY

TOOL	ID mm	OD mm	LENGTH m	WEIGHT daN	TIME ANALYSIS		
					OPERATION	TODAY	CUM.
					1. Drilling		
					2. Trips		
					3. Rig Service	0.25	
					4. Deviation Surveys		
					5. Ream & Cond. Hole		
					6. Mix & Cond. Mud		
					7. Circulation		
					8. Rig Repair		
					9. Run Casing & Cement	8.75	
					10. HANDLE TOOLS	7.00	
					11. Logging	7.50	
					12. Coring		
					13. Formation Testing		
					14. DISPLACE HOLE		
					15. Nipple Up & Test BOPS		
					16. Drilling Out		
					17. B.O.P. DRILL		
					18. LEAK OFF TEST		
					19. STOP & CUT DRILLING LINE		
					20. Rig up		
					21. SAFETY MEET	0.50	

COSTS

DAILY \$131,184
CUMULATIVE \$1,493,334
GR ELEV. 567.9M KB 574.8

SUPERVISOR DAVE GARSTAD

TOTAL 24

URL RPT.17A

PARAMOUNT RESOURCES LTD.

DAILY DRILLING REPORT (page 2)

FOR 24 HR PERIOD ENDING 98-01-31-08:00
Yr - Mon - Day - Time

WELL NAME PARAMOUNT TETAL ARROWHEAD LOCATION N 65

OPERATIONS DETAIL:

08:00-10:00 CONT. TO HOOK UP FLOW NIPPLE + FLOWLINE.
10:00-12:00 RIG TO + LOG WITH WESTERN ATLAS, HELD SAFETY MEETING PRIOR.
12:00-12:30 CONT. TO LOG WITH WESTERN ATLAS.
17:30-22:30 RIG UP POWER TOWS, LAY DOWN MACHINE, HANG STABBING
BOARD, DRIFT CSG.
22:30-22:45 HELD SAFETY MEETING WITH LAYDOWN OPERATOR.
22:45-23:00 HELD SAFETY MEETING WITH TONG OPERATOR.
23:00-23:45 RIG SERVICE, FUNCTION MOTOR KILLS, ANNULAR + HCR.
23:45-24:00 RUN CSG.
00:00-08:00 RUN CSG.

WANT LIST:

WEATHER:

-24°C

ROAD: Good WINTER COND.

IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)

PARA-DRL_RPT2.xls

Mr. Alan Day Thaw

LOCATION N65

Depth 1890m

Metrics last 24 hr 0

ROT HRS 0

DRILLING: MUD PROPERTIES AT SHAKER/SUCTION PIT

WT	860	Vis	57	WI,		Gels	3-Feb	Solids	54	PV	29	YP	8	pH
(M)	89	%	Sand	%		Calc			PPMCL	0		PPMC ₂	0	

[illegible][illegible]

MUD & CHEMICALS ADDED

2	"	21	1700	IN	"	21	1700
2	"	21	1808	IN	"	21	1808
2 1/4	"	21	1884	IN	"	21	1884
"	"	21		IN	"	21	

DISPLACED HOLE TO CUTTER D.
165m³ IN HOLE & 38m³ on surface.

TIME ANALYSIS

TOOL	ID	QD	LENGTH	WEIGHT	OPERATION	TODAY	CUM.
					1. Drilling		
					2. Trips	13.75	
					3. Rig Service	0.25	
					4. Deviation Surveys		
					5. Meas & Cont. Hole		
					6. Mix & Cont. Mud		
					7. Circulation	3.25	
					8. Rig Repair		
					9. Non-Coring Drilling		
					10. HANDLE TOOLS	1.50	
					11. Logging		
					12. Coring		
					13. Formation Testing		
					14. DISPLACE HOLE	4.75	
					15. Nipple Up & Tool Change		
					16. Drilling Out		
					17. R.O.P. Tests		
					18. LEAK OFF TEST		
					19. SLIT & CUT DRILLING LINE	1.00	
					20. Rig up		
					21. SAFETY MEET		
					TOTAL	24	
DAILY \$35,283							
CUMULATIVE \$1,362,150							
GR ELEV. 567.9M K B 574.8							
SUPERVISOR DAVE GARSTAD							

ORL RPT.18A

PARAMOUNT RESOURCES LTD.

DAILY DRILLING REPORT (page 2)

FOR 24 HR PERIOD ENDING 98-01-30-08:00
Yr. Mon. Day. HourWELL NAME: PARAMOUNT TETAL ARROWHEAD LOCATION: D'GS

OPERATIONS DETAIL:

08:00-08:30 INSTALL ROTATING HEAD + BLOW HOLE CLEAN, 1m FILL.

08:30-12:00 HOIST 11 STDS, PUMP DISPLACEMENT OF 10 STDS. INTO CSG, FILL HOLE AND CIRC WHEN BIT IN CSG.

12:00-12:45 CONT. TO HOIST, PULL 15 STDS, PUMP DISPLACEMENT OF 10 STDS.

12:45-13:15 REMOVE BLANK FROM FLOWLINE, & PLACE IN BODY LINE.

13:15-17:30 DISPLACE UPPER SECTION TO CUTTER DOWN CSG WITH BIT, PUMPED 152. m³ WITH BHA IN HOLE.

17:30-21:00 BAK. CIRC. @ 950 m WHEN R/H, CROWN SAVER, R/H TO 1890 m.

21:00-23:45 CIRC. & CIRC. MUD & HOLE.

23:45-24:00 BIG SERVICE, FUNCTION MOTOR KILLS, ANNULAR, HCR, + REMOTE CHOKER.

00:00-03:00 FLOWY, P.O.D.H. FROM 1890 m, CHAIN OUT TO 350 m.

03:00-04:00 SLIP & CUT DRILLING LINE.

04:00-07:00 CONT. TO P.O.D.H., LAY DOWN 228 m D.C.

07:00-08:00 LAY DOWN ROTATING HEAD, PICK-UP FLOW NIPPLE.

WANT LIST:

WEATHER: -22°CROAD: GOOD WINTER COND.

IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)

Wellname : PARAMOUNT ET AL ARROWHEAD
Location : N65
Date : 01-30-98
Contact : Paul Collins 290-1605

AM REPORT

DFS: 16
Depth @ 08:00 hrs: 1890m Progress last 24 hrs: 0 m
Rotating hrs:

{ | }

ROP: --m/hr
Drill fluid: CutterD Dens: Vis: Wt: pH:

SURVEYS

FORMATION TOPS			LB: 574.6m
Formation	Prognosis	Sample	Subsea
Ft Simpson	1892m	1870m	

SHOW SUMMARY:
Formation Interval gas show/mils Lith/por/shows/remarks

N/A

REMARKS: expect to RTH with Logs at 1200hrs

Geologist: D. Ferguson
Cell: 1 403-210-2951

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT**FOR 24 HR PERIOD ENDING **98-01-29-08:00**

Yr. Mo. Day Time

NAME **PARAMOUNT et al ARROWHEAD**LOCATION **N85**Day **15**Depth **1890m**Metres last 24 hr **185**ROT HRS **8**Activity at report time **RIH TO 1890m, TAG BTM, P.O.O.H. 11 STD'S. TO BEGIN DISPLACEMENT****DRILLING MUD PROPERTIES AT SHAKER/SECTION/PIT**

WL	Vis	WL	Clk	Solids	% PV	YP	pH
Oil	%	Sand	%	Cake	PPMCL	0	PPMCL

RIT RECORD

BIT NO.	SIZE	MAKE & TYPE	SER. NO.	BIT		DEPTH OUT IN	IN DRILL TODAY	CUM. IN DRILL	ROT HRS TODAY	CUM. ROT HRS	MHR	DRILL COND.		
				WL	RPM							Y	B	G
1	311	REEDHP11	JL3622		45/80	490	10	10	12.00	28.50	6.80	3	3	1
2	311	REEDHP43	LB8263			634	144	144	11.25	11.25	12.80	3	3	1
3	311	ST/H4252R3	KJ7805	O/2000		1890	185	1258	8.00	48.75	23.00	3		1

CIRCULATION RECORD

BIT NO.	F.L.P. IN			PISTON				ANN. VEL.		JET VEL.	IDP	SUMP PRESS.	
	1	2	3	STROKE	RPM	LINEAL	W/PLAN	FP	FA			PSI	PSI
1	95	95	95									5900	
2	22.2	22.2	22.2									1375	
3	5/8"	CHOKE											

DEVIATION SURVEYS

2	at	1700 m	at	m
2	at	1806 m	at	m
2 1/4	at	1884 m	at	m
	at	m	at	m

MUD & CHEMICALS ADDED**BOTTOM HOLE ASSEMBLY**

TOOL	m	OD	LENGTH	WEIGHT
	m	mm	m	kg
BIT (311mm)	0.31			
RIT SUB	0.91			
2 (228mm)DC	18.14			
X/O	0.78			
JAN	5.03			
14 (171mm)DC	128.45			
	0.4			
TOTAL BHA	154.02			

TIME ANALYSIS

OPERATION	TODAY	CUM.
1. Drilling	8.00	
2. Trips	8.25	
3. Rig Arrival	0.26	
4. Deviation Surveys	2.00	
5. Make & Cond. Hole		
6. Mix & Cond. Mud		
7. Circulation	1.25	
8. Rig Setup		
9. Run Casing & Cement		
10. HANDLE TOOLS	4.25	
11. Tagging		
12. Casing		
13. Alternative Towing		
14. Working up		
15. Make up & Test BOP		
16. Drilling Out		
17. S.O.P. DRILL		
18. BREAK OFF TEST		
19. Water		
20. Rig up		
21. SAFETY MEET		
TOTAL	24	

COSTS

DAILY	\$78,127
CUMULATIVE	\$1,326,887
GR ELEV 567.9M	K B 574.6

SUPERVISOR **DAVE GARSTAD**

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT (page 2)**FOR 24 HR PERIOD ENDING **98-01-29-08:00**
Yr. Mon. Day TimeWELL NAME **PARAMOUNT ETAL ARROWHEAD** LOCATION **N 65****OPERATIONS DETAIL:**

08:00-08:30 SURVEY @ 1200m.
 08:30-11:15 DRILL 311mm HOLE, 1206-1783m.
 11:15-12:00 BIG SERVICE, FUNCTIONAL ANNULAR, ABC, CROWN SAYER.
 12:00-13:00 DRILL 311mm HOLE, 1783-1811m.
 13:00-13:30 SURVEY @ 1806m.
 13:30-17:15 DRILL 311mm HOLE, 1811-1890m (T.O. INTERMEDIATE HOLE @ 17:15 HRS. 28/01/25).
 17:15-17:45 BLOW HOLE CLEAN.
 17:45-18:15 SURVEY @ 1884m (MISRUN).
 18:15-20:30 BLOW HOLE CLEAN WHILE STRAP & DRESSING CS6.
 20:30-21:00 SURVEY @ 1884m.
 21:00-24:00 P.O.O.H. FROM 1890m, STRAP OUT (STRAP 26m LONG).
 00:00-00:45 BLOW OUT B.O. P.S. WITH AIR.
 00:45-02:00 CONT. TO P.O.O.H.
 02:00-04:00 LAY DOWN FIRE SHOT, REAMER, HAMMER SHOT, HAMMER, PICK UP BIT #1 RR.
 04:00-08:00 RIN TO 1890m, TAG BIT, P.O.O.H. 11 STDS. TO BEGIN DISPLACEMENT TO CUTTER-D.

GEOLOGY DEPT: NO GAS TO SURFACE WHILE DRILLING WITH AIR.T.O. 20⁺m INTO FOOT SIMPSON (BESA RIVER), 98/01/29 @ 17:15 HRS.**WANT LIST:****WEATHER:** -26°C**ROAD:** GOOD WINTER COND.**IN DETAIL:** MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)

PARA-DHL_KP12.xls

Wellname : PARAMOUNT ET AL ARROWHEAD
Location : N65
Date : 01-29-98
Contact : Paul Collens 290-3605

AM REPORT

DFS: 15

Depth @ 08:00 hrs: 1890m Progress last 24 hrs: 185 m
Rotating hrs:

Present operations: Displace hole for logs

ROP: .m/hr

Drill fluid: air Dens: Vis: WL: pH:

SURVEYS: 1700m 2 deg; 1806m 2 deg; 1884m 2 1/4 deg;

FORMATION TOPS

Formation	Prognosis	Sample	Subsea
Dev Tetchu	1720m	1725m	
Dev Kakisa	--	1845m	
Fl Simpson	1892m	1870m ?	

KB:574.6m

SHOW SUMMARY:

Formation	Interval	gas show/BGO	Lith/por/shows/remarks
No significant gas / oil shows - refer to striplog attached			

REMARKS: TD intermediate hole 1890m @ 1750 hrs 98-01-28; circ
sample and jet hole; prep to POH; POH to lay down air hammer;
RTH w/ bit to displace to cutter D for logs

Geologist: D. Ferguson

Cell: 1-403-210-2951

[illegible]

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8-10-69

8-11-69

8-12-69

8-13-69

8-14-69

8-15-69

8-16-69

8-17-69

8-18-69

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8-21-69

8-22-69

8-23-69

8-24-69

8-25-69

8-26-69

8-27-69

8-28-69

8-29-69

8-30-69

8-31-69

9-1-69

9-2-69

9-3-69

9-4-69

9-5-69

9-6-69

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9-10-69

9-11-69

9-12-69

9-13-69

9-14-69

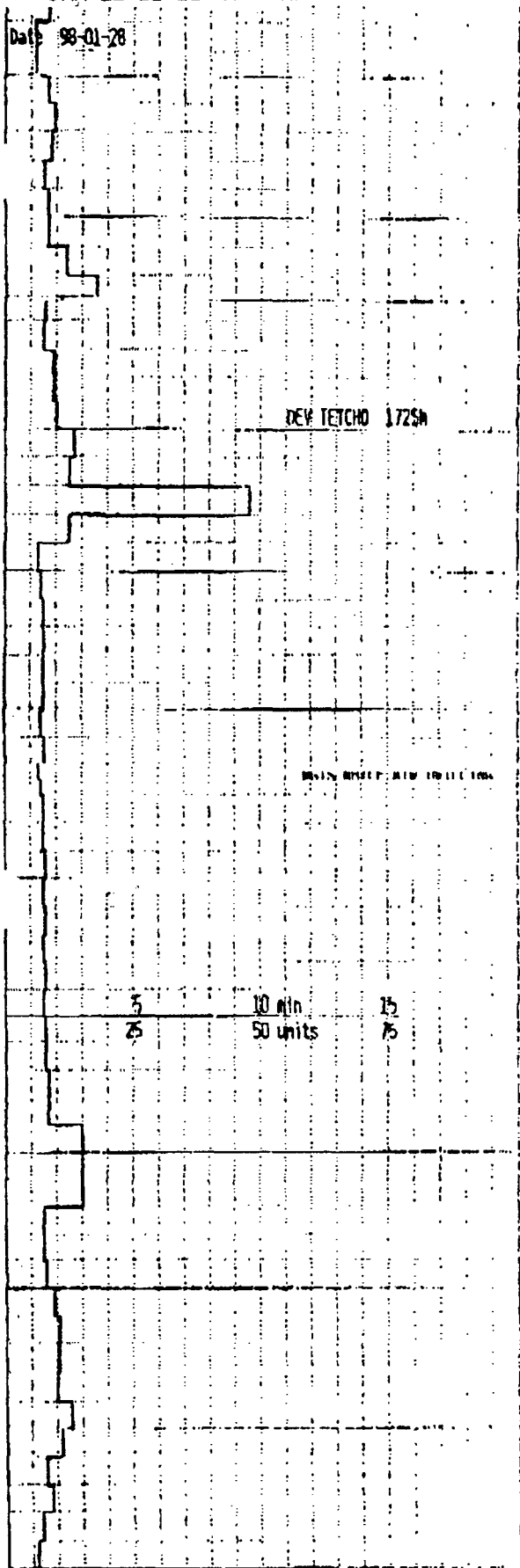
9-15-69

9-16-69

[illegible]

SH-a gy, sfis - fis, bcsng a - dk gy brn ip,
mod calc, mrlly ip;

Date: 98-01-28



1725

1750

SH-m gy, dk gy brn, sfis - fis, mod calc;

LS-lt gy brn, m gy ip, NVS, MVP, sl arg;

SH-m gy, dk gy brn, blk, mod calc; LS-lt gy
brn, m gy ip, NVS, MVP, sl arg, grdg to mod

SH-m gy, dk gy ip, blk, mod calc; LS-lt gy
brn, m gy ip, NVS, MVP, sl arg, grdg to mod
arg ip;

SH-m gy, blk, mod calc, scat SLI str; SLI-lt
gy, occ m gy ip, pred qtz, grdg to vf gr ss
ip, NVS, MVP, sl arg ip, sl calc;

gy, occ a gy ip, pred qtz, NVS, MVP, mod arg
ip, grdg to slty calc SH ip, sl calc;

SH-a gy, blk, sl calc, scat SLI str; SLI-lt
gy, occ a gy ip, pred qtz, NVS, MVP, mod arg
ip, grdg to slty calc SH ip;

SH-a gy, blk, sl calc, scat SLI str;

SH-a gy, blk, sl calc, scat SLI str; SLI-lt
gy, occ a gy ip, pred qtz, NVS, MVP, mod arg
ip, grdg to slty calc SH ip;

SH-a gy, blk, sl calc, scat SLI str;

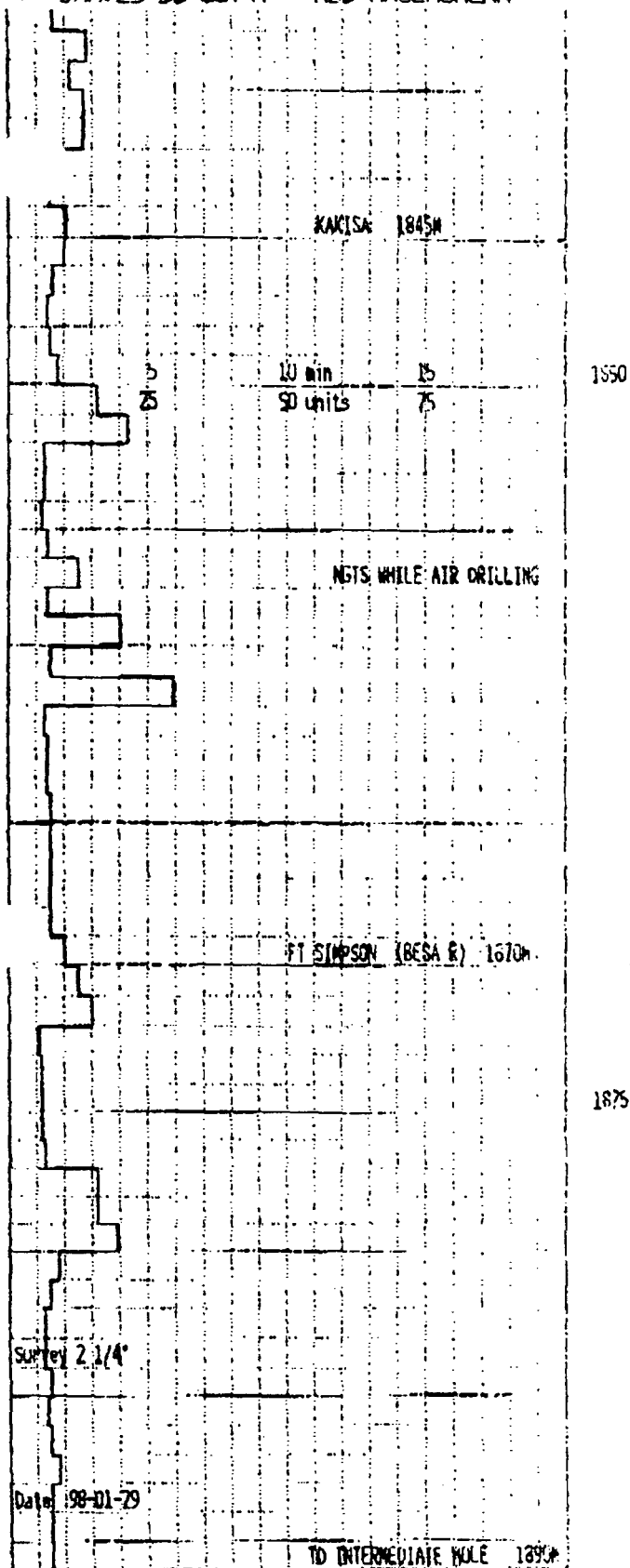
175

1800

1825

25 50 units 75

Survey 2



SLI-lt gy, occ m gy ip, pred qtz, grdg to vt
gr SS ip, MVS, MVP, sl arg ip;

SH-m gy, blk, sl calc, scat SLI str; SLI-lt
gy, occ m gy ip, pred qtz, MVS, MVP, mod arg
ip, grdg to slty calc SH ip, mod calc, grdg
to slty LS ip;

SH-m gy, sfis, blk ip, sl calc;

LS-m gy brn, MVS, MVP, mod arg, scat slty
str, grdg ip to calc SLI; SLI-lt gy, occ m gy
ip, pred qtz, MVS, MVP, mod arg ip, grdg to
slty calc SH ip, mod calc, grdg to slty LS
ip;

SH-m gy, blk ip, mod calc, scat SLI str;

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT**FOR 24 HR PERIOD ENDING **98-01-28-08:00**

Yr - Mo - Day - Time

WELL NAME **PARAMOUNT et al ARROWHEAD**LOCATION **N65**Day **14** Depth **1705m**Metres last 24 hr **595**ROT HRS **21.5**Activity at report time **DRLG. 311mm HOLE****DRILLING MUD PROPERTIES AT SHAKERSUCTION/PISTON**

WI _____ Vls _____ WL _____ Cols _____ Solids _____ % PV _____ YP _____ pH _____
 Oil _____ % Sand _____ % Cake _____ PPMCL **0** PPMCa _____

BIT RECORD

BIT NO.	SIZE mm	MAKE & TYPE	SER. NO.	BIT		DEPTH OUT m	m DRLD TODAY	C/TM m DRLD	Rot Hrs TODAY	CUM. Rot Hrs	m/hr	Dish Cond.		
				WT	RPM							T	R	G
1	311	REEDHP11	JL3622		45/80	490	10	10	12.00	28.50	6.80	3	3	T
2	311	REEDHP43	LB8263			634	144	144	11.25	11.25	12.80			
3	311	ST/H4252R3	KJ7805	0/2000	30		595	1071	21.60	40.25				

CIRCULATION RECORD

BIT NO.	JETS - mm			PUMP				ANN. VEL.		JET VEL.	HEF	SURF. PRESS. kPa
	1	2	3	STROKE	SPM	LINEAR	m/MLN	DP	DC			
1	9.5	9.5	9.5									5900
2	22.2	22.2	22.2									1375
3	5/8"	CHOKED										### 2450

DEVIATION SURVEYS

1	"	at	1108 m	1 1/2 "	at	1533 m
1	"	at	1220 m	1 3/4 "	at	1618 m
3/4	"	at	1330 m	"	at	1705 m
1	"	at	1445 m	"	at	1705 m

MUD & CHEMICALS ADDED**BOTTOM HOLE ASSEMBLY**

TOOL	ID	OD	LENGTH	WEIGHT
	mm	mm	m	kgN
BIT (311mm)	0.33			
HAMMER	2.1			
BIT SUB	0.91			
2 (228mm) DC	10.41			
R3	2.13			
FIRE SUB	0.44			
X/O	0.78			
JAR	5.03			
1 (171mm) DC	8.88			
FIRE SUB	0.95			
13 (171mm) DC	119.57			
X/O	0.04			
TOTAL BHA	159.93			

TIME ANALYSIS

OPERATION	TODAY	CUM.
1. Drilling	21.50	
2. Trips		
3. Rig Service	.5	
4. Deviation Surveys	2.50	
5. Water & Mud Hops		
6. Mix & Cond. Mud		
7. Circulation		
8. Rig Repair		
9. Run Casing & Cement		
10. HANDLE TOOLS		
11. Logging		
12. Coring		
13. Formation Testing		
14. Working on		
15. Nipple Up & Test BOPS		
16. Drilling Out		
17. R.O.P. DRILL		
18. LEAK OFF TEST		
19. Welder		
20. Rig up -		
21. SAFETY MEET		
TOTAL	24	

COSTS

DAILY **\$38,584**
 CUMMULATIVE **\$1,250,760**
 GR ELEV. 567.9M **K.B. 574.6**

SUPERVISOR **DAVE GARSTAD**

DRLG_RPT.14A

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT (page 2)**FOR 24 HR PERIOD ENDING 98-01-28-08:00
Yr - Mon - Day - TimeWELL NAME: PARAMOUNT TETAL ARROWHEAD LOCATION N 65**OPERATIONS DETAIL:**

08:00-08:15 SURVEY @ 1106 m.
08:15-11:15 DRILL 311mm HOLE, 1110-1195m.
11:15-12:00 RIG SERVICE, FUNCTION MOTOR KILLS, ANNULAR & HCR VALVE.
12:00-12:15 SURVEY @ 1220 m.
12:15-17:15 DRILL 311mm HOLE, 1195-1336m.
17:15-17:45 SURVEY @ 1330 m.
17:45-22:00 DRILL 311mm HOLE, 1336-1451m.
22:00-22:15 RIG SERVICE, FUNCTION UPPER & LOWER PIPERAMS,
 ✓ BRAKES & LINKAGE.
22:15-22:45 SURVEY @ 1445 m.
22:45-24:00 DRILL 311mm HOLE, 1451-1500m.
00:00-01:15 DRILL 311mm HOLE, 1500-1536m.
01:15-01:45 SURVEY @ 1533 m.
01:45-04:45 DRILL 311mm HOLE, 1536-1620m.
04:45-05:15 SURVEY @ 1608 m.
05:15-08:00 DRILL 311mm HOLE, 1620-1705m.

AIR DRILLERS VOLUME & PRESSURE, 112m³/min. @ 2450 Kpa.GEOLOGY DEPT. NO GAS TO SURFACE WHILE DRILLING WITH AIR.**WANT LIST:**WEATHER: =18°CROAD: GOOD WINTER COND.

IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)

PARA-DRL_RPT2.X15

Wellnam. : PARAMOUNT ET AL ARROWHEAD
 Location : N65
 Date : 01-28-98
 Contact : Paul Collens 290-3605

AM REPORT

DFS: 14

Depth @ 08:00 hrs: 1705m Progress last 24 hrs: 595 m
 Rotating hrs: 21hrs

Present operations: drill ahead 311mm hole w/air

ROP: 35-55m/hr

Drill fluid: air Dens: Vis: WL: pH:

SURVEYS : 1106m 1deg; 1220m 1deg; 1330m 3/4deg;
 1445m 1deg; 1533m 1.5deg; 1618m 1 3/4deg

FORMATION TOPS

KB:574.6m

Formation	Prognosis	Sample	Subsea
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Miss Flett	451m	628m	
Miss Banff	829m	810m	
Miss Exshaw	1329m	1318m	
Dev Kotcho	1341m	1329m	
Dev Tetcho	1720m		

HOW SUMMARY:

Formation	Interval	gas show/BOG	Lith/por/shows/remarks
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No significant gas/oil shows

REMARKS: sample quality fair; hi ROP, some cavings;

Geologist: D. Ferguson

Cell: 1-403-210-2951

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT**FOR 24 HR PERIOD ENDING **98-01-27-08:00**

Yr - Mon - Day Time

WELL NAME: **PARAMOUNT et al ARROWHEAD**LOCATION **N65**Day **13**Depth **1110m**Metres last 24 hr **476**ROT HRS **19.25**Activity at report time **DRL/G. 311mm HOLE****DRILLING MUD PROPERTIES AT SHAKER/SUCTION/PIT**

Wt Vls WL Gals Solids % PV YP pH
Oil % Sand % Cake PPMCL 0 PPMCa 0

BIT RECORD

BIT NO.	SIZE mm	MAKE & TYPE	SER. NO.	BIT		DEPTH OUT m	m DRLD TODAY	TIME m. DRLD	Rot hrs TODAY	CUM Rot hr	m/hr	Dab Cond.		
				WT	RPM							T	B	G
1	311	REEDHP11	JL3822		45/80	480	10	10	12.00	28.50	6.60	3	3	1
2	311	REEDHP43	LB8263			634	144	144	11.25	11.25	12.80			
3	311	ST/H42S2R3	KJ7805	0/2000	30		476	476	19.25	19.25	24.70			

CIRCULATION RECORD

BIT NO.	JETS - mm			PUMP			ANN. VEL.		JET VEL.	INT	SURF. PRESS. kPa
	1	2	3	STROKE	SPM	LINEAL m/MIN	DP	UC			
1	9.5	9.5	9.5								5800
2	22.2	22.2	22.2								1375
3	5/8"	CHOKE									2100

DEVIATION SURVEYS**MUD & CHEMICALS ADDED**

2 1/4"	at	650 m	1	"	at	1014 m
1	at	737 m		"	at	m
3/4	at	824 m		"	at	m
3/4	at	920 m		"	at	m

BIT/TOM HOLE ASSEMBLY**TIME ANALYSIS**

TOOL	ID	OD	LENGTH	WEIGHT	OPERATION	TODAY	CUM.
	mm	mm	m	kgN			
BIT (311mm)	0.33				1. Drilling	19.25	
HAMMER	2.1				2. Trips	2.50	
BIT SUB	0.91				3. Rig Service	0.50	
2 (228mm) DC	18.41				4. Deviation Surveys	1.25	
R3	2.13				5. Wash & Cond. Hole		
FIRE SUB	0.44				6. Mix & Cond. Mud		
X/O	0.78				7. Circulation	0.50	
JAR	5.03				8. Rig Repair		
1 (171mm) DC	8.88				9. Run Cement & Cement		
FIRE SUB	0.95				10. HANDLE TOOLS		
13 (171mm) DC	119.57				11. Logging		
X/O	0.04				12. Coring		
TOTAL BHA	159.93				13. Formation Testing		
					14. Waiting on:		
	</						

COSTS

DAILY \$125,812
 CUMULATIVE \$1,212,176
 GR ELEV. 567.9M K.B. 574.6

SUPERVISOR **DAVE GAKSTAD**

DRIG_RPT.13A

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT (page 2)**ROR 24 HR PERIOD ENDING 98-01-27-18:00
Yr. Mo. Day TimeWELL NAME: PARAMOUNT ARROWHEAD LOCATION N 65**OPERATIONS DETAIL:**

08:00-10:30 MAKE UP BHA, RTH, PICK UP 7 SINGLES 114mm DRILL PIPE.
 10:30-11:00 DAY UP HOLE WITH AIR.
 11:00-11:45 DRILL 311mm HOLE, 634-654m.
 11:45-12:00 RIG SERVICE, FUNCTION MOTOR KILL + ANNULAR (5 SEC TO LOCK).
 12:00-12:15 SURVEY @ 650m.
 12:15-16:15 DRILL 311mm HOLE, 654-732m.
 16:15-16:30 SURVEY @ 732m.
 16:30-19:45 DRILL 311mm HOLE, 732-825m.
 19:45-20:00 SURVEY @ 825m.
 20:00-23:45 DRILL 311mm HOLE, 825-920m.
 23:45-24:00 RIG SERVICE, FUNCTION LOWER PIPE RANS (Lose 6 sec).
 00:00-00:15 SURVEY @ 920m.
 00:15-04:30 DRILL 311mm HOLE, 920-1015m.
 04:30-04:45 SURVEY @ 1015m.
 04:45-08:00 DRILL 311mm HOLE, 1015-1110m.

AIR DRILLERS VOLUME & PRESSURE: 87/99 m³/min. @ 2100 Kpa.

GEOLOGY DEPT: NO GAS TO SURFACE WHILE DRILLING WITH AIR.

WEATHER: -18°C

ROAD: GOOD WINTER COND.

IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)



JAN-27-98 07:32 RØD MACERACHERN

Wellname : PARAMOUNT ET AL ARROWHEAD
 Location : N65
 Date : 01-27-98
 Contact : Paul Collens 290-3605

AM REPORT

DFS: 13

Depth @ 09:00 hrs: 1110m Progress last 24 hrs: 470 m
 Rotating hrs: 19.25

Present operations: drill ahead 31mm hole w/ air

ROP: 35-55m/hr

Drill fluid: air dens: Vps: WL: pH:

SURVEYS: 650m 2 1/4deg; 737m 1deg; 824m 3/4deg;
 920m 3/4deg; 1014m 1 deg;

FORMATION TOPS

EB:574.6m

Formation	Prognosis	Sample	Subsea
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Banff	829m	810m	
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SILOW SUMMARY:

Formation	Interval	gas show/DGC	Lith/por/shows/remarks
	770- 780	NGTS	LS- bf- lt brn, frag' ip, tr indst fns frags, sl dol' with dol mic frc ill (?); NVP, pale lt o stn, dull yel F, mky wh C ip
Banff	843 - 850m	NGTS	LS - mol brn, mx, ool' ip, tr indst fns frags, NVP, pale lt o stn; bri yel F, stmg wh mky C

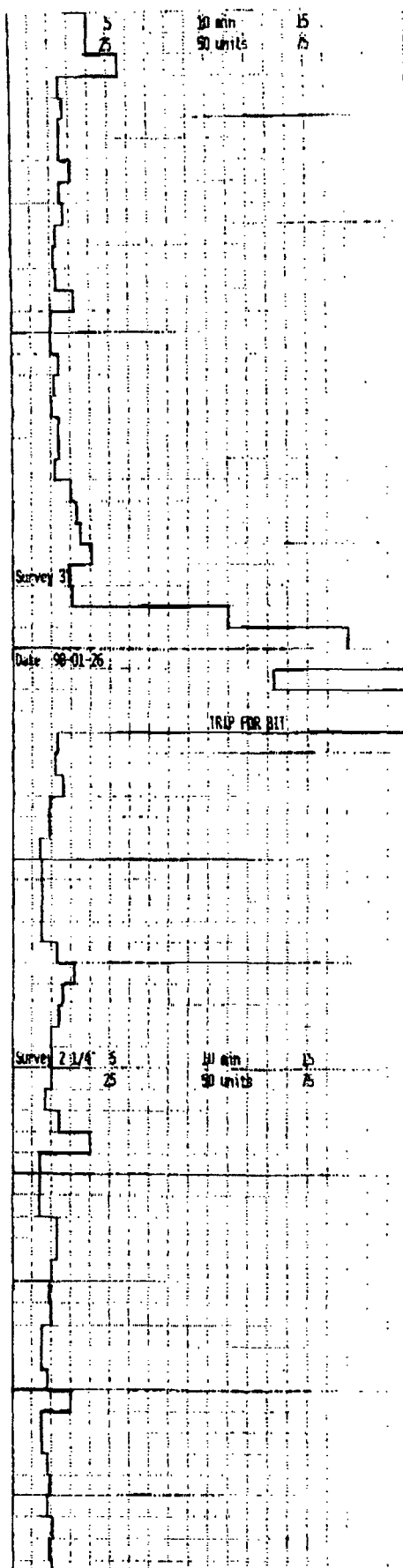
REMARKS: drill ahead 31mm hole with air; NGTS while drilling
with air; sample quality is fair to good

Geologist: D. Ferguson
 Cell: 1-403-210-2951

JAN-27-1998 08:46

403 266 6032

P.02



625

650

SH-dk gy, fis to sfis, tr pyr vn, sft, grdg
to mdst ip;

SH-dk gy, fis to sfis, tr pyr vn, sft, grdg
to mdst ip; SH-Kao, wh, fis;

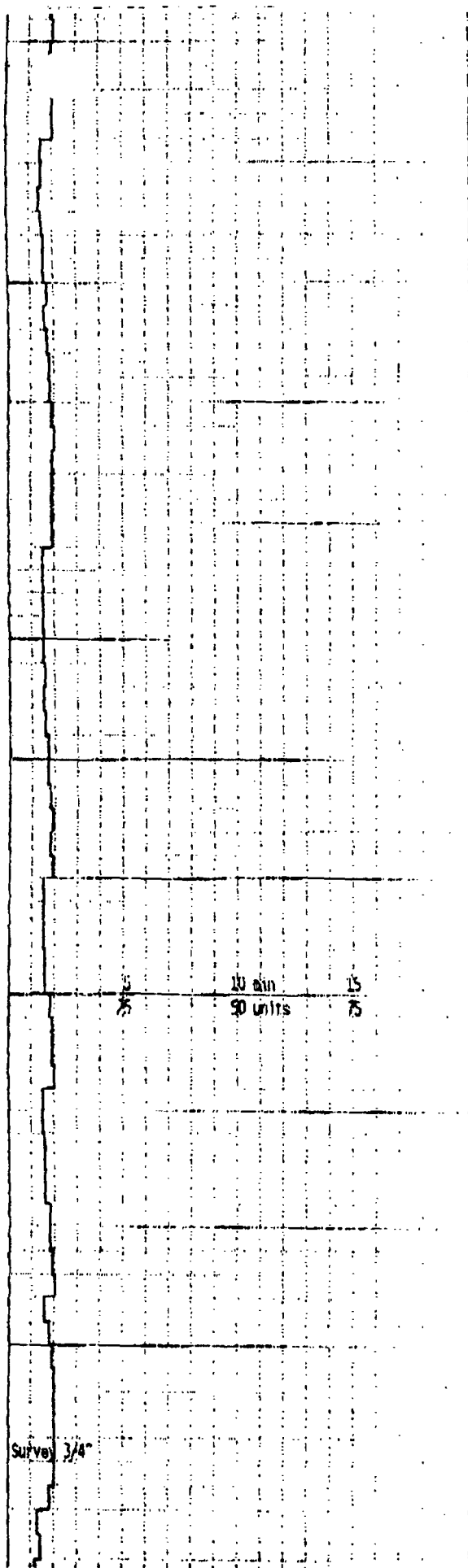
SH-dk gy, fis to sfis, tr pyr vn, sft, grdg
to mdst ip; LS-brn, n gy ip, NWS, NWP, sl arg
ip;

LS-brn, n gy ip, indst fos frags ip, NWS,
NWP, scat arg lam ip;

SH-a gy, bang dk gy ip, sfis; LS-brn, n gy
ip, indst fos frags ip, NWS, NWP, scat arg
lam ip;

LS-brn, n gy ip, indst fos frags ip, NWS,
NWP, scat arg lam ip; SH-a gy, bang dk gy ip,
sfis;

LS-brn, n gy ip, indst fos frags ip, NWS,
NWP, scat arg lam ip; SH-a gy, bang dk gy ip,
sfis;



875

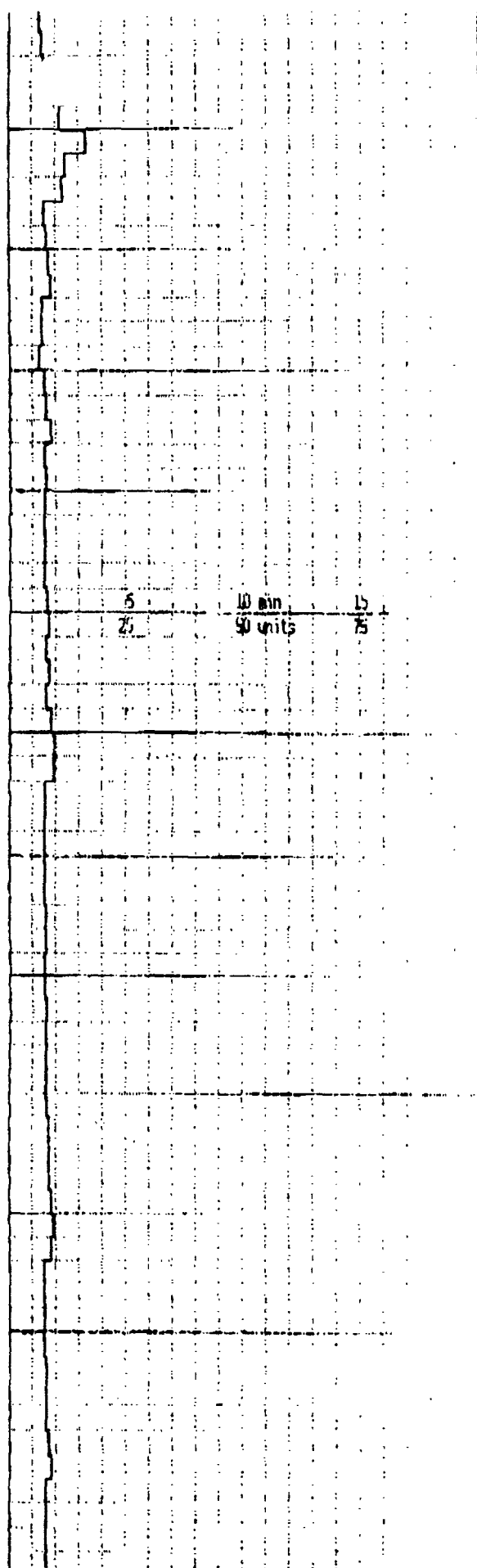
900

SH-n gy, lt gy ip, sfis, mod calc;

SH-n gy, lt gy ip, sfis, mod calc;

SH-n gy, sfis - fis, sft, sl calc ip;

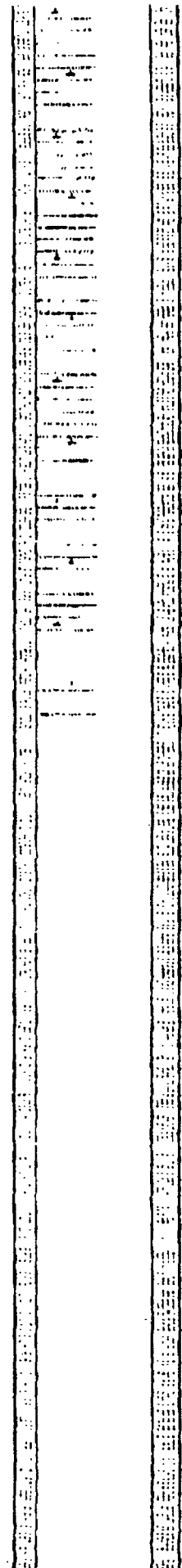
SH-n gy, bcaq lt gy ip, sfis, sft, mod calc;



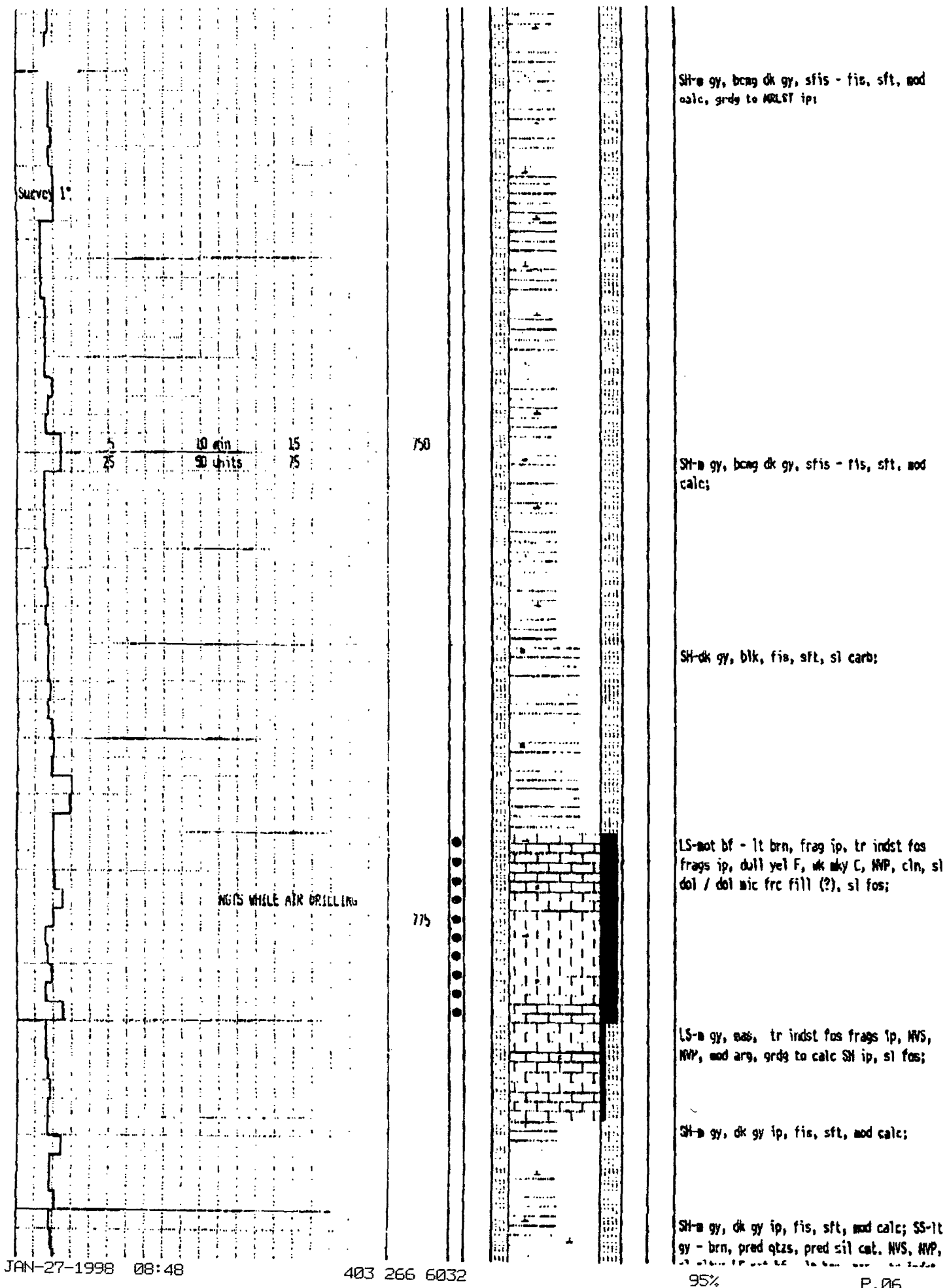
5 10 min 15
25 50 units 75

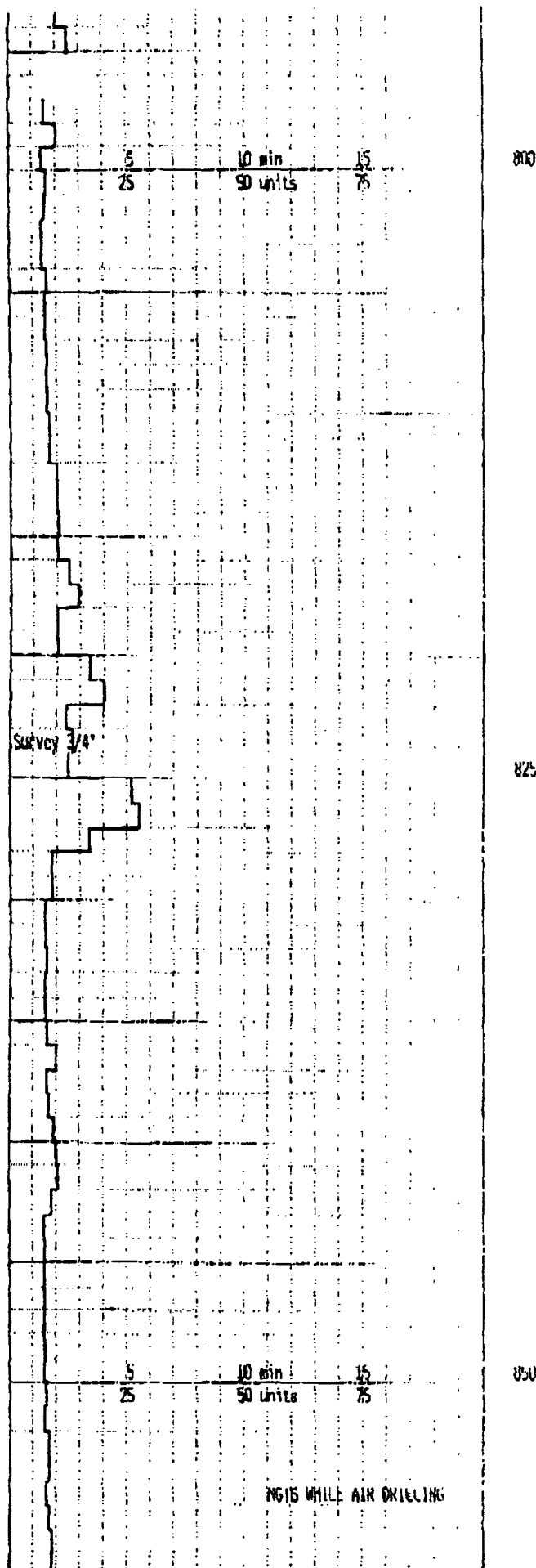
950

975



St-m oy, beng lt gy ip, sfis, sft, mod calc;





fos frags ip, NVS, NVP, clin, sl fos;

SH-dk gy, blk, fis, sft, sl carb;

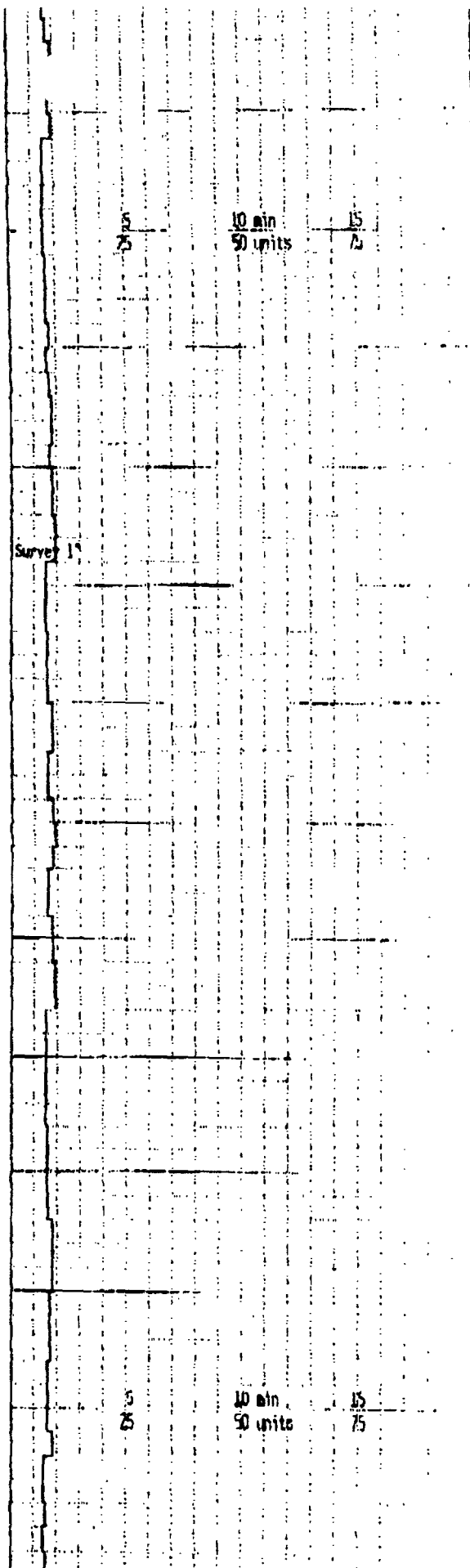
SH-m gy, dk gy ip, fis, sft, mod calc; SS-m
gy, pred qtzs, pred sil cat, NVS, NVP, sl
arg; SH-gy - gn, sft, fis, mod calc, grdg to
calc MRLST ip, scat qtz grns fitg;

SH-m gy, dk gy ip, fis, sft, mod calc; LS-mot
bf - lt brn, mas, tr indst fos frags ip,
NVS, NVP, clin, sl fos; SH-gy - gn, sft, fis,
mod calc, grdg to calc MRLST ip, scat qtz
grns fitg;

LS-mot bf - lt brn, mas, tr indst fos frags
ip, NVS, NVP, clin, sl fos;

LS-mot bf - lt brn, tr indst fos frags ip,
bri yel f, stag mky C, NVP, clin, sl ool, sl
fos;

SH-m gy, lt gy ip, sft, mod calc; LS-mot bf
- lt brn, tr indst fos frags ip, bri yel f,
stag mky C, NVP, sl ool, sl fos, sl arg ip;



1030

1025

1050

1075

JAN-27-1998 08:49

403 266 6032

P.09

PARAMOUNT RESOURCES LTD.

DAILY DRILLING REPORT

FOR 24 HR PERIOD ENDING 98-01-26-08:00

Yr-Mon Day-Hr

WELL NAME PARAMOUNT et al ARROWHEAD

LOCATION N65

Day 12

Depth 634m

Metres last 24 hr 144

ROT HRS 1125

Activity at report time BREAK OFF BIT & MAKE UP AIR HAMMER + BIT# 3

DRILLING MUD PROPERTIES AT SHAKERSUCTION/PIT

WI OH % Visc % Sand % WL % Gels Cake Solids % PY PPMCL 0 YP PPMCL 0 pH 0

BIT RECORD

BIT NO.	SIZE mm	MAKE & TYPE	SER. NO.	BIT		DEPTH OUT m	M DRILL TODAY	CUM m DRILL	Rot hrs TODAY	CUM Rot hr	m/hr	Ditch Count		
				WT	RPM							I	B	G
1	311	REEDHP11	JL3622	3/10.00	45/80	490	10	10	12.00	28.50	8.60	3	3	1
2	311	REEDHP43	188203	1/4.00	23/90	634	144	144	11.25	11.25	12.80	3	3	1

CIRCULATION RECORD

BIT NO.	JET A mm			PUMP				ANN. VEL		JET VEL	IDUP	SURF. PRESS. Lps
	1	2	3	STROKE	SPM	LINER	m/MIN	DF	DC			
1	95	95	95									
2	22.2	22.2	22.2									1375

DEVIATION SURVEYS

MUD & CHEMICALS ADDED

2	at	522 m	at	m
2	at	550 m	at	m
2 1/8	at	588 m	at	m
3	at	627 m	at	m

BOTTOM HOLE ASSEMBLY

TIME ANALYSIS

TOOL	ID mm	OD mm	LENGTH m	WEIGHT kg	OPERATION		
					TODAY		CUM.
					1. Drilling	11.25	
					2. Trips	4.00	
					3. Rig Service	0.50	
					4. Deviation Surveys	2.00	
					5. Run & Cement Hole		
					6. Mix & Cond. Mud		
					7. Circulation		
					8. Rig Repair		
					9. Run Casing & Cement		
					10. HANDLE TOOLS	6.25	
					11. Logging		
					12. Coring		
					13. Formation Testing		
					14. Working on:		
					15. Nipple Up & Test BOPS		
					16. Drilling On		
					17. B.O.P. DRILL		
					18. LEAK OFF TEST		
					19. Welder		
					20. Rig up -		
					21. SAFETY MEET		
					TOTAL	24	

DAILY	\$80,514
CUMMULATIVE	\$1,086,364
GR ELEV. 567.9M	K.B. 574.6
SUPERVISOR	DAVE CARSTAD

DRLG_RPT.12A

PARAMOUNT RESOURCES LTD.

DAILY DRILLING REPORT (page 2)

FOR 24 HR PERIOD ENDING 98-01-26-08:00
Fr. Mon - Day - TimeWELL NAME: PARAMOUNT ARROWHEAD LOCATION: N65

OPERATIONS DETAIL:

08:00-11:45 Lay down HAMMER, HAMMER BIT WOULD NOT MAKE UP PROPERLY, PICK UP TRI-CONE BIT & ROTARY DRILLING ASSEMBLY.

11:45-12:00 RIG SERVICE, FUNCTION BLIND RAMS, CHECK CROWN SAVER.

12:00-14:00 R I H T. 485 m.

14:00-15:00 INSTALL INSERT ON ROTARY HEAD & DRY OUT HOLE WITH AIR.

15:00-19:15 DRILL 311mm HOLE, 490-523 m.

19:15-19:45 SURVEY @ 522 m.

19:45-21:00 DRILL 311mm HOLE, 523-551 m.

21:00-21:30 SURVEY @ 550 m.

21:30-23:00 DRILL 311mm HOLE, 551-589 m.

23:00-23:30 SURVEY @ 588 m.

23:30-23:45 DRILL 311mm HOLE, 589-601 m.

23:45-24:00 RIG SERVICE, FUNCTION UPPER PIPE RAMS.

00:00-01:30 DRILL 311mm HOLE, 601-628 m.

01:30-02:00 SURVEY @ 627 m.

02:00-04:30 DRILL 311mm HOLE, 628-634 m (control drill 1 dm/800 rpm).

04:30-06:30 P.O.C.H. WITH BIT #2.

06:30-08:00 BREAK OFF BIT & MAKE UP AIR HAMMER AND BIT #3.

AIR DRILLERS VOLUME AND PRESSURE, VOL-85 m³/min @ 1375 Kpa.

GEOLOGY DET: 522 m - SURVEY & CONNECTION, GAS OBSERVED AFTERWARDS @ END OF Blow Line @ 19:30 HRS.

605 m - GAS OBSERVED AFTER CONNECTION @ 00:15 HRS. SMALL QUANTITIES OF GAS OBSERVED AFTER REMAINING CONN. DOWN TO 634 m. NOTHING OBSERVED DURING TRIP WHILE JETTING HOLE.

WANT LIST: ADJUST PARKING AREA @ CAMP.WEATHER: -26°CROAD: GOOD WINTER COND.

IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)

PARA-DRL_RPT2.xls

Well: : PARAMOUNT ET AL ARROWHEAD
Location : N65
Date : 01-26-98
Contact : Paul Collens 290-3605

AM REPORT

DFS: 12

Depth @ 08:00 hrs: 634m Progress lost 24 hrs: 144 m
Rotating hrs: .

Present operations: Make up air hammer and bit

ROP: --m/hr

Drill fluid: air Dens: Vis: Wt: pH:

SURVEYS 522m 2deg; 627m 3deg;

FORMATION TOPS

Formation Prognosis Sample Subsea FB:574.6m

SHOW SUMMARY:

Formation	Interval	gas show/BOG	Lith/por/shows/remarks
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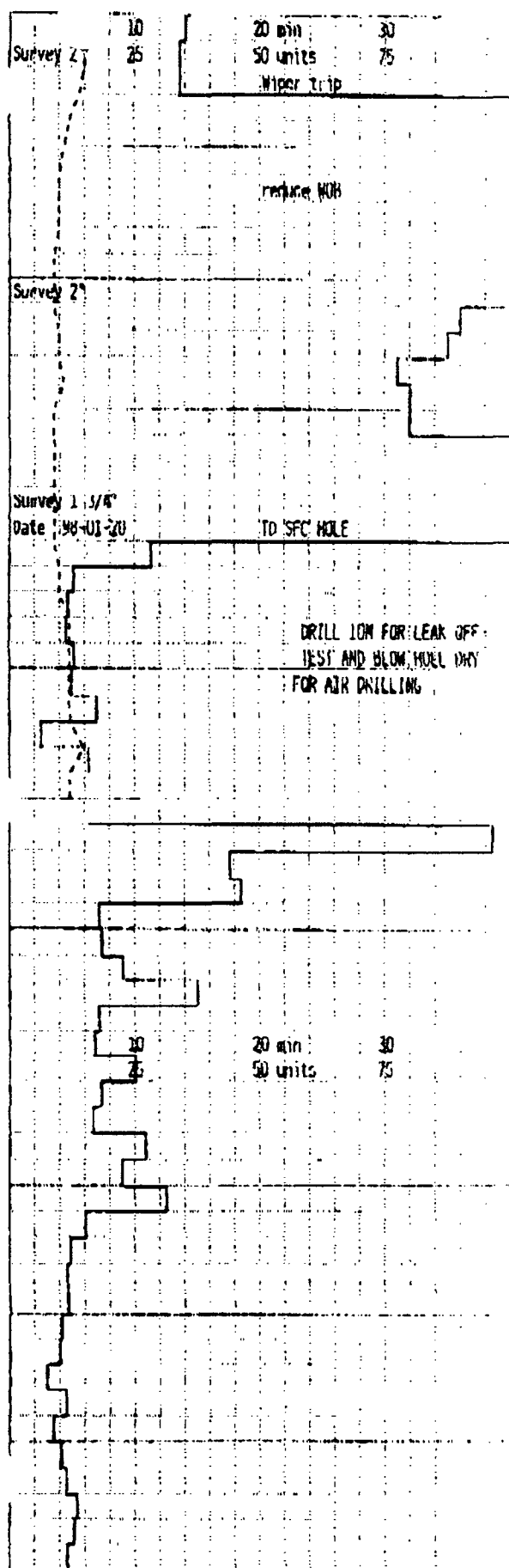
	490-634m	NCTS while air drilling	
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refer to striplog attached

REMARKS: drill ahead 490m-634m w/ air;

Geologist: D. Ferguson

Cell: 1-403-210-2951



475

SUU

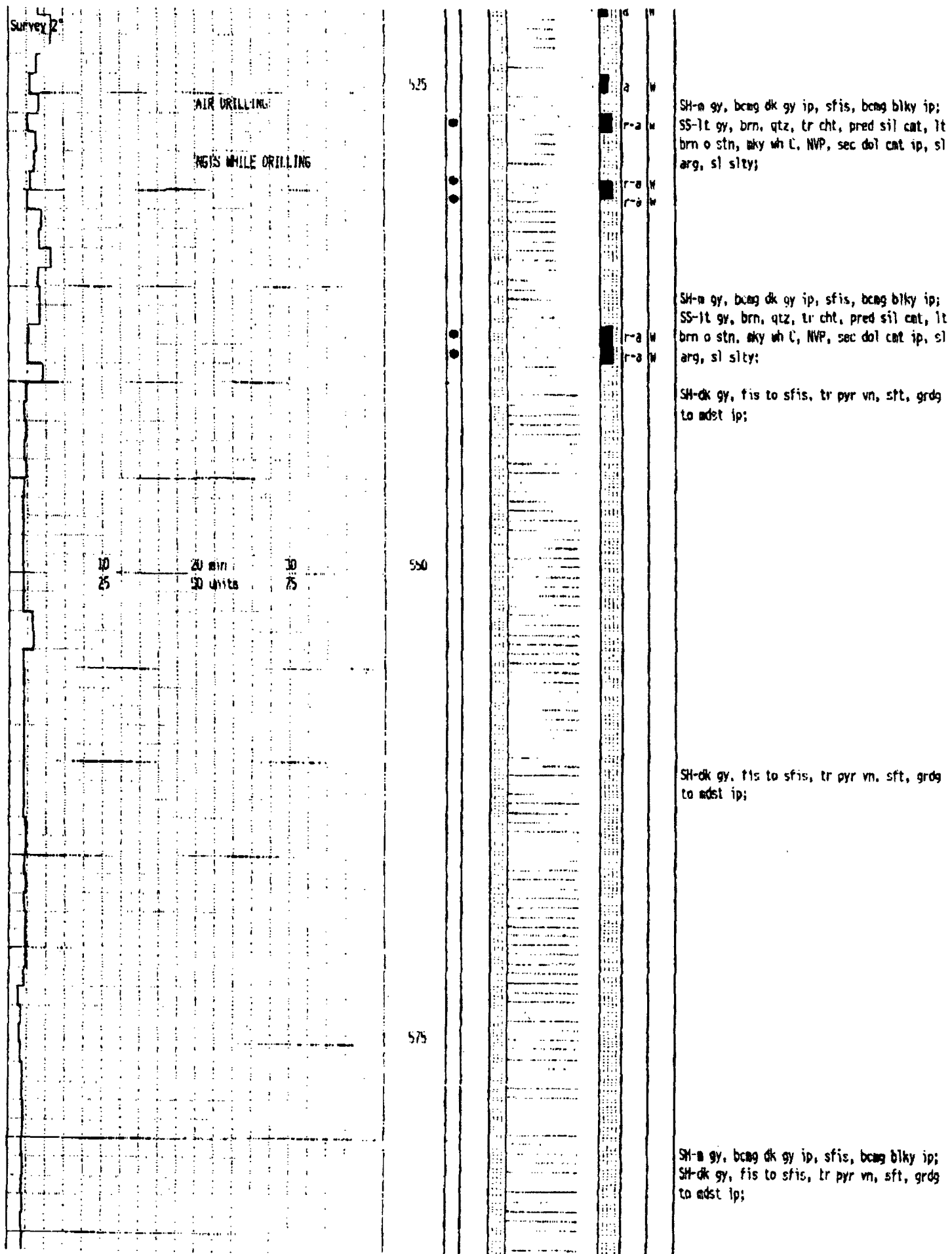
SLT-m gy, grdg to slty SH, NVS, NVP, mod arg;
SH-m gy, sfis to blk, scat slts;

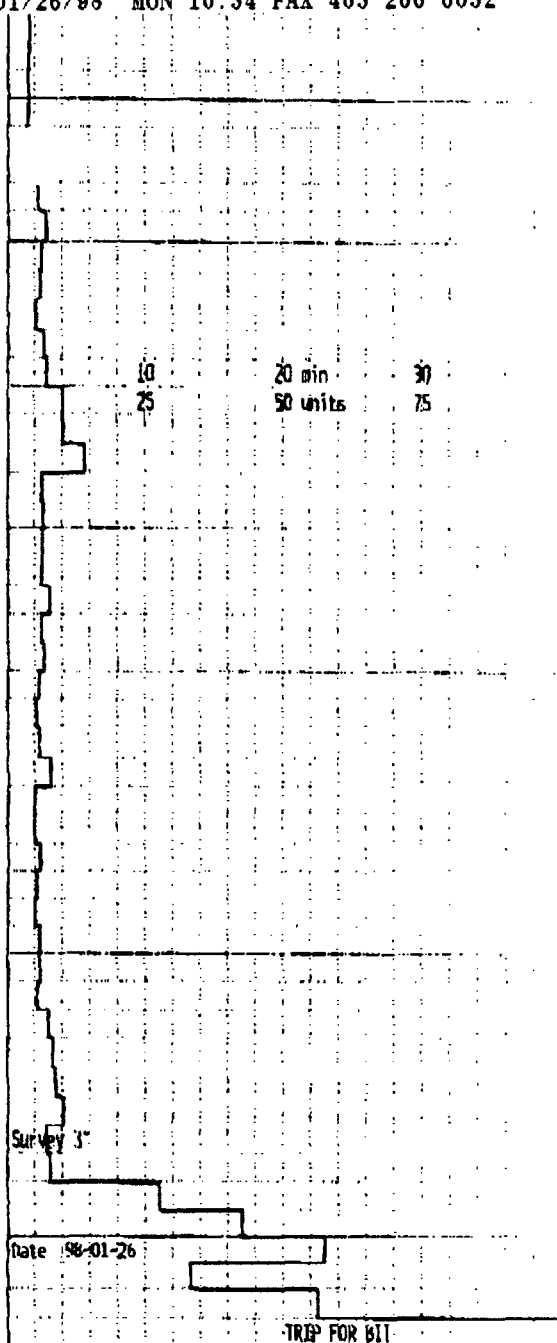
SH-m gy, sfis;

SH-m gy, sfis, bcag blk ip; SLT-m gy, sp,
grdg to slty SH, NVS, NVP, mod arg;

SH-m gy, bcag dk gy ip, sfis, bcag blk ip;
SLT-m gy, sp, grdg to slty SH, NVS, NVP, mod
arg; SS-lt gy, sp, qtz, tr cht, pred sil cat,
NVS, NVP, sl arg, / scat arg, sl slty, grdg
to SLT ip;

SH-m gy, bcag dk gy ip, sfis, bcag blk ip;
SLT-m gy, sp, grdg to slty SH, NVS, NVP, mod
arg; SS-lt gy, sp, qtz, tr cht, pred sil cat,
NVS, NVP, scat arg, sl slty;





690

625

Slt-dk gy, fis to sfis, tr pyr vn, sft, grdg
to mds: ip;

SH-Ok gy, fis to sfis, tr pyr vn, sft, grdg
to mdst ip; SH-Kan, wh, fis;

DAILY DRILLING REPORT

FOR 24 HR PERIOD ENDING 96-01-25-08:00

Ye Mon - Day - Time

WELL NAME PARAMOUNT et al ARROWHEAD

LOCATION N65

Day 11

Depth 490m

Metros last 24 hr 10

10

ROT HRS

12

Activity at report time

DRILLING MUD PROPERTIES AT SHAKER/SUCTION PIT

W:	Vis	WL	Gels	Solids	%	PV	YP	pH
(1)	% Sand	%	Cake	PPMCL	0		PPMCL	0

BIT RECORD

HJ NO.	SIZE	MAKE & TYPE	SER. NO.	RIT		DEPTH OUT m	m DRILL TODAY	CTIM m. DRILL	Rot hr TODAY	CTIM Rot hr	m/hr	DRILL COND.		
				WI	RPM							I	D	G
1	311	REEDHP11	JL3622	3/10	45/80	490	10	10	12.00	28.50	6.60	3	3	1

CIRCULATION RECORD

[illegible]

DEVLATION SURVEYS

11	12	13	14	15
16	17	18	19	20
21	22	23	24	25
26	27	28	29	30

MUD & CHEMICALS ADDED

1. NAME _____
 2. DATE _____
 3. TIME _____
 4. LOCATION _____
 5. REMARKS _____
 6. SIGNATURE _____
 7. INITIALS _____
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 214. INITIALS _____

BOTTOM HOLE ASSEMBLY

[illegible]

TIME ANALYSIS

OPERATION	TODAY	TOTAL
1. Drilling	1.50	
2. Trips	3.00	
3. Rig Service	0.25	
4. Deviation Surveys		
5. Hoist & Cond. Hoist		
6. Mix & Cond. Mud		
7. Circulation	0.50	
8. Rig Repair		
9. Run Casing & Cement		
10. HANDLE TOOLS	7.25	
11. Laying		
12. Coring		
13. Formation Testing		
14. Waiting on:		
15. Nipple tip & Test ROPE		
16. Drilling Out	10.50	
17. B.O.P. DRILL	0.25	
20. Run up		
21. SAFETY MEET		
TOTAL		24

COSTS

DAILY

\$43,285

SUPERVISOR

DAVE GARSTAD

TOTAL

24

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT (page 2)**FOR 24 HR PERIOD ENDING **98-01-25-08:00**
Yr - Mon - Day - TimeWELL NAME **PARAMOUNT ARROWHEAD** LOCATION **N 65****OPERATIONS DETAIL:****08:00-11:45** CONT. TO DRILL OUT CEMENT FROM 430-450m.**11:45-12:00** BIG SERVICE, FUNCTION MOTOR KILLS, UPPER & LOWER
PIPE RAMS, REMOTE CHOKE.**12:00-12:15** HELD BOP DRILL, WELL SECURE & METV IN POSITION
IN 1 min. 30 SEC.

YF MTH - DAY THREE

ROI HRS 16.5

P. 10

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT (page 2)**FOR 24 HR PERIOD ENDING 98-01-24-08:00
Yr - Mon - Day - TimeWELL NAME PARAMOUNT TETAL ARROW HEAD LOCATION N 65**OPERATIONS DETAIL:**

08:00-12:00 CONTINUE TO PRESS TEST LOWER KELLY COCK, UPPER
WELL CONTROL VALVE, STABING VALVE, INSIDE
BOP & STABING VALVE & ALL OTHER RELATED EQUIP.
14,000 HL, 1,400 L/W (KPa) 10 MIN.

12:00-14:30 PRESS. TEST ANNUAL PREVENTOR, UPPER PIPE RAM,
LOWER PIPE RAM, KILL LINES, STAND PIPE
AND ALL OTHER RELATED EQUIP.
1,400 KPa HI, 1,400 KPa LOW 10 MIN.

14:30-15:00 RIH FROM 250m - 314m (TAG CEMENT).

15:00-21:45 DRILL OUT CEMENT FROM 314m - 364m.

21:45-22:00 HELD B.O.P. DRILL WITH RIG CREW, WELL SERVICE PER.

22:00-22:15 RIG SERVICE FUNCTION ANN. (CLOSE 12 SEC).

22:15-24:00 DRILL OUT CEMENT, FLOAT & SHOE FROM 364m - 380m.

24:00-08:00 DRILL OUT CEMENT, FLOAT & SHOE FROM 380m - 430m.

WANT LIST:**WEATHER:**-8°CROAD: GOOD WINTER CONDITION**IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)**

PARA DRL_NPT2.xls

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT**FOR 24 HR PERIOD ENDING **98-01-23-08:00**

Yr Mon Day Time

WELL NAME: **PARAMOUNT et al ARROWHEAD**LOCATION **N65**Day **9** Depth **480**Metres last 24 hr **0**ROI HRS **0**Activity at report time **PRESSURE TESTING****DRILLING MUD PROPERTIES AT SHAKER/SUCTION/PIT**

WI 1000 Vls 28 WL Cels Solids % PV YP pH
 Oil % Sand % Cals PPMCL 0 PPMCa 0

HIT RECORD

BIT NO.	SIZE mm	MAKE & TYPE	NOM. NO.	RTI		DEPTH OUT m	m DRILL TODAY	CTIM m. DRILL	Rot hr. TODAY	CTIM. Rot hr	m/hr	Dull Cond.		
				WT	RPM							I	B	G
1	311	REEDHP11	JL3622			480								

CIRCULATION RECORD

BIT NO.	JET - mm			PUMP				ANN. VEL.		JET VEL.	LIMP	SURF. PRESS. kPa
	1	2	3	STROKE	SPM	LINK	m/MIN	DP	DC			
1	9.5	9.5	9.5				152					8400

DEVIATION SURVEYS**MUD & CHEMICALS ADDED**

"	al	in	"	al	m
"	al	m	"	al	m
"	al	m	"	al	m
"	al	m	"	al	m

BOTTOM HOLE ASSEMBLY**TIME ANALYSIS**

ITEM	ID	OD	LENGTH	WEIGHT	OPERATION	TODAY	CUM.
BIT			0.03		1. Drilling		
BIT SUB			0.91		2. Trips	1.50	
2 (228)mm DC			18.40		3. Rig Service		
X/O			0.78		4. Deviation Surveys		
23 (171)mm DC			20.90		5. Room & Cond. Mud		
X/O			0.40		6. Mix & Cond. Mud		
					7. Circulation	0.25	
					8. Rig Repair		
					9. Run Casing & Cement		
TOTAL			229.94		10. HANDLE TOOLS	11.50	
					11. Logging		
					12. Casing		
					13. Formation Testing		
					14. Waiting on		
					15. Nipple Up & Test BOPS	6.00	
					16. Drilling Out		
					17. Lost Clev.		
					18. PRESSURE TESTING	4.75	
					19. Welder		
					20. Rig up		
					21. SAFETY MEET		
					TOTAL	24	

COSTS

DAILY \$25,188
 CUMULATIVE \$815,701
 GR ELEV 567.8M K.B.574.6

SUPERVISOR **DAVE GARSTAD**

DRLG_RPT.10A

PARAMOUNT RESOURCES LTD.

DAILY DRILLING REPORT (page 2)

FOR 24 HR PERIOD ENDING 98-01-23-08100
Yr-Mon-Day-Time

WELL NAME: PARAMOUNT TETAL ARROWHEAD LOCATION N 65

OPERATIONS DETAIL:

08:00-12:00 CONT. TO NIPPLE UP B.D.P.'S.
12:00-14:00 NIPPLE UP A.C.P.'S & RIG UP AUX. BOILER FOR OIL TANK FARM.
14:00-18:00 PRESS. TEST WINDFOLD 35000 KPa H/L AND 14000 KPa LOW 10 MIN.
PRESS. TEST BLIND RAMS AGAINST CSG 14000 KPa H/L AND 14000 KPa LOW 10 MIN.
18:00-24:00 RIG UP ROTATING HEAD AND DEVERTER LINES TO FLOW LINE,
(WELDING NEEDED) + DEVERTER LINES TO FLARE PIT.
24:00-05:30 RIG UP DEVERTER LINES TO FLOW LINE (WELDING
NEEDED) + DEVERTER F/BOP TO FLARE PIT.
05:30-07:00 MAKE UP BHA & R/H.
07:00-07:15 CIRC. HOLE.
07:15-08:00 PRESS. TEST.

WANT LIST: WATER SILED FOR CAMP.

WEATHER: -10°C

ROAD: GOOD WINTER COND.

IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)

1-8 BUNK SLEEP SHACK WITH 2 (250 Lb.) PROPANE PIGS.
FROM BOREK CONSTRUCTION, LAWSON CREEK B.C.

PARA-DRL_RP12.xls

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT (page 2)**FOR 24 HR PERIOD ENDING 98-01-21-08:00
Yr - Mth - Day - TimeWELL NAME PARAMOUNT TAIL ARM WELD LOCATION N 65**OPERATIONS DETAIL:**

08:00-12:00 HAIST TO RUN 339.7mm SURFACE CSG
 12:00-14:00 LAY DOWN BHA
 14:00-20:00 RIG TO RUN CSG, HELD SAFETY MEETING WITH TOOL HAND,
 RUN 339.7mm CSG
 20:00-21:00 P/U CIRC. AIRBID, WASH LAST 2 SINGLES TO RM 480m
 21:00-24:00 CIRC. & CEMENT. MUD, RIG OUT POWER TONGS, RIG IN CEMENTERS
 00:00-00:15 HELD SAFETY MEETING WITH CEMENTERS.
 00:15-04:15 RIG IN CEMENTERS & CEMENT 339.7mm CSG PLUG DOWN @ 03:45 HRS
 PUMP OUT DEVERTER AND RIG OUT CEMENTERS
 04:15-08:00 RIG DOWN DEVERTER TO CUT CSG, WAIT ON CEMENT.

NOTE: RAN 35 JNTS, 481.16m, 339.7mm, 81 Kg/m, J-55, 57C, 9 RD,
 ALSO AB SURFACE CSG, & CEMENT SAME WITH 32 TONNES 0-1-0
 + 1% CaCl₂, + 29 TONNES 0-1-0 + 2% CaCl₂, LANDED @ 480m K.B.
 PLUG DOWN @ 03:45 HRS 98/01/21, PLUG HELD, 4m³ GOOD
 CEMENT RETURNS TO SURFACE.

NOTE: WHEN 6m³ LEFT TO DISPLACE PLUG RIG WATER TANK
 RAN OUT OF SUCTION AND 400 GAL UPRIE LOST SUCTION
 FINISH DISPLACING CSG WITH RIG MUD PUMP AND BUMP
 PLUG TO 4500 Kpa WITH RIG PUMP.

WANT LIST:WEATHER: -27°CROAD: GOOD WINTER COND.**IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)**

PARAMOUNT RESOURCES LTD.

DAILY DRILLING REPORT (page 2)

FOR 24 HR PERIOD ENDING 98-01-22 08:00
Yr - Mon - Day - Time

WELL NAME PARAMOUNT ETAL ARROWHEAD LOCATION N 65

OPERATIONS DETAIL:

08:00-12:00 CONT. TO RIG DOWN DEVERTER & WAIT ON CEMENT.

12:00-14:00 CUT OFF CONDUCTOR BBL, CUT OFF CSG

14:00-16:15 ASSIST AIR DRILLERS INSPECTING AIR EQUIP.

& 400 BBL TANKS.

16:15-20:15 WELD ON CSG BOWL.

20:15-24:00 NIPPLE UP BOP'S.

00:00-08:00 NIPPLE UP BOP'S.

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT**FOR 24 HR PERIOD ENDING **98-01-22-08:00**

Yr - Mon - Day - Time

WELL NAME **PARAMOUNT et al ARROWHEAD**LOCATION **N65**Day **8**Depth **480**Metres last 24 hr **0**ROT HRS **#**Activity at report time **NIPPLE UP BOP'S****DRILLING MUD PROPERTIES AT SHAKER/SUCTION/PIT**

Wt 1000 Vls 28 WI. Gels Solids % PV YP pH
 Oil % Sand % Cake PPMCL 0 PPMCa 0

BIT RECORD

BIT NO.	SIZE mm	MARK & TYPE	SER. NO.	BIT		DEPTH OUT m	m DRILL TODAY	CUM m. DRILL	Rot hrs TODAY	CUM. Rot hr	m/hr	Dust Cond.		
				WT	RPM							T	B	C

CIRCULATION RECORD

BIT NO.	JETS - mm			PUMP				ANN. VEL.		JET VEL.	HHP	SURF. PRESS. kPa
	1	2	3	STROKE	SPM	LINER	m ³ /MIN	DP	IN			
												8400

DEVIATION SURVEYS

	at	m	at	m
	at	m	at	m
	at	m	at	m
	at	m	at	m

MUD & CHEMICALS ADDED

BOTTOM HOLE ASSEMBLY

TOOL.	ID mm	OD mm	LENGTH m	WEIGHT duN

TIME ANALYSIS

OPERATION	TODAY	CUM.
1. Drilling		
2. Riggs		
3. Rig Service		
4. Deviation Surveys		
5. Ream & Cond. Hole		
6. Mix & Cond. Mud		
7. Circulation		
8. Rig Repair		
9. Run Casing & Cement		
10. HANDLE TOOLS	6.25	
11. Logging		
12. Coring		
13. Formation Testing		
14. Waiting on		
15. Nipple Up & Test BOPS	11.75	
16. Drilling Out		
17. Lost Circ.		
18. Laying Down DP & BOP's		
19. Welder	6.00	
20. Mix up		
21. SAFETY MEET		
TOTAL	24	

COSTS

DAILY \$208,912
 CUMMULATIVE \$890,583
 GR ELEV. 567.0M K.B. 574.6

SUPERVISOR **DAVE GARSTAD**

DRL_RPT.8A

PARAMOUNT RESOURCES LTD.

DAILY DRILLING REPORT

FOR 24 HR PERIOD ENDING: 98-01-21-08:00
Yr - Mon - Day - Time

WELL NAME PARAMOUNT et al ARROWHEAD

LOCATION N65

Day 7

Depth 480

Metres last 24 hr

8

ROT HRS 5.5

Activity at report time RIG DOWN DEVERTER TO CUT CSG

DRILLING MUD PROPERTIES AT SHAKERSUCTION/PIT

WT	Vis	WL	Cats	Solids	% FV	YP	pH
Oil	% Sand	%	Cake	PPMCL	0	PPMCa	0

BIT RECORD

[illegible]

CIRCULATION RECORD

[illegible]

DEVIATION SURVEYS

1	"	at	404 m	2	"	at	471 m
1	"	at	424 m	1 3/4	"	at	480 m
1 1/2	"	at	443 m		"	at	m
2	"	at	462 m		"	at	m

MUD & CHEMICALS ADDED

GEL 26
LIGNITE 10

BOTTOM HOLE ASSEMBLY

[illegible]

TIME ANALYSIS

OPERATION	TODAY	CUM.
1. Drilling	5.50	
2. Trips	5.00	
3. Rig Service		
4. Deviation Surveys	1.00	
5. Ream & Cond. Hole		
6. Mix & Cond. Mud		
7. Circulation	3.50	
8. Rig Repair		
9. Run Casing & Cement	7.00	
10. HANDLE TOOLS	2.00	
11. Logging		
12. Coring		
13. Formation Testing		
14. Waiting on		
15. Make Up & Test BOPS		
16. Drilling Out		
17. Lost Circ.		
18. Laying Down DP & BOP's		
19. Plug & Abandon		
20. Rig up -		
21. SAFETY MEET		
TOTAL	24	

COSTS

DAILY	\$49,514
CUMMULATIVE	\$681,671
GR ELEV. 567.9M	K.B. 574.6

SUPERVISOR DAVE GARSTAD

JAN-22-1998 07:43

403 266 6032

P.03

PARAMOUNT RESOURCES LTD.

DAILY DRILLING REPORT (page 2)

FOR 24 HR PERIOD ENDING 98-01-20 8:00
Yr - Mon - Day - Time

WELL NAME PARAMOUNT ET AL ARROWHEAD

LOCATION N65

OPERATIONS DETAIL:

08:00-08:45 DRILL 444MM SURF HOLE TO 462M KB.

08:45-09:15 SURVEY 462M 2 DEG.

09:15-11:45 DRILL 444 MM SURF HOLE 462 TO 464 CONTROL DRILL 3DAN/180

11:45-12:00 RIG SERV.

12:00-18:15 CONTROL DRILL 444MM SURF HOLE 464 TO 472M KB.

18:15-18:30 SURVEY @ 471M 2 DEG.

18:30-21:45 WIPER TRIP & STRAP.

21:45-22:30 CUT DRILLING LINE.

22:30-22:45 RIG SERV.

22:45-24:00 RUN IN THE HOLE

00:00-01:00 RUN IN REAM BRIDGES @ 280M, 360M KB.

01:00-06:30 CONTROL DRILL 472M TO 480M. 4/6 DAN. 160 R.P.M.

06:30-07:30 CIRC. SURVEY @ 479 M 13/4 DEG

07:30-08:00 HOIST TO RUN 339.7MM SURF CSG.

WANT LIST:

WEATHER: -27

ROAD: GOOD WINTER COND.

IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT**FOR 24 HR PERIOD ENDING **98-01-19-08:00**

Yr - Mon - Day - Time

WELL NAME **PARAMOUNT et al ARROWHEAD**LOCATION **N65**Day **5** Depth **460**Metres last 24 hr **63**ROT HRS **19**Activity at report time **DRILL 444MM SURF HOLE.****DRILLING MUD PROPERTIES AT SHAKER/SUCTION/PISTON**

Wt 1190 Vls 53 WL Cals Solids % PV YP pH 10
 Oil % Sand % Cake PPMCL 0 PPMCa 0

BIT RECORD

BIT NO.	SIZE mm	MAKE & TYPE	SER. NO.	BIT		DEPTH OUT m	m DRLD TODAY	CUM m DRLD	Rot hrs TODAY	CUM Rot hr	m/hr	Dull Cond.		
				WT	RPM							I	B	G
1ART	444	REEDY11J	96332	3/10	100/160	185	95	185	15.00	28.25	6.54	3	2	I
2ART	444	REEDS13J	F08500	3/10	100/160	395	63	210	17.00	28.25	6.81	8	1	I
3AN	444	SECSS81J	687007	10/14	140		65	65	19.00	19.00	3.42	R	N	G

CIRCULATION RECORD

BIT NO.	JETE - mm			PUMP			ANN. VEL.		JET VEL.	HHP	SURF. PRESS. kPa
	1	2	3	STROKE	SFM	LINER	DP	DC			
3A	15.9	15.9	15.9	254	200	152	2.77	19	28	75	8400

DEVIATION SURVEYS

1	at	404 m	at	m
1	at	424 m	at	m
1/2	at	443 m	at	m
	at	m	at	m

MUD & CHEMICALS ADDED

GELL 95
CAUSTIC 1

BOTTOM HOLE ASSEMBLY

TOOL	ID mm	OD mm	LENGTH m	WEIGHT kN
BIT		444	0.45	
NBR		444	1.20	
5-8" DRILL COLLARS	75	224	44.81	12000
X/O			0.78	
DRILLING JARS			5.03	
23-63/4" D.C.	72	164	162	19826

TIME ANALYSIS

OPERATION	TODAY	CUM.
1. Drilling	19.00	
2. Trip	3.50	
3. Rig Service	0.25	
4. Deviation Surveys	0.75	
5. Resto & Cond. Hole		
6. Mix & Cond. Mud		
7. Circulation	0.50	
8. Rig Repair		
9. Run Casing & Cement		
10. Fishing		
11. Logging		
12. Coring		
13. Formation Testing		
14. Waiting on		
15. Nipple Up & Test BOP's		
16. Drilling Out		
17. Lost Circ.		
18. Laying Down DP & BOP's		
19. Plug & Abandon		
20. Rig up -		
21. SAFETY MEET		
TOTAL	24	

COSTS

DAILY \$22,645
 CUMMULATIVE \$591,703
 GR ELEV. 567.9M K.B. 574.6

SUPERVISOR **ROD MACEACHERN**

DRL_RPT.SAA

01/06/1998 08:46 14039147198

RIG 16

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT (page 2)**FOR 24 HR PERIOD ENDING **98-01-18-08:00**

Yr - Mon - Day - Time

WELL NAME **PARAMOUNT ET AL ARROWHEAD**LOCATION **N65****OPERATIONS DETAIL:**

08:00-10:15 TRIP IN WITH BIT #3

10:15-10:45 CIRC HOLE CLEAN @ 200M.

10:45-12:00 CLEAN TO BOTTOM. TRIP IN.

12:00-15:15 DRILL 444MM SURF HOLE. 395 TO 405M KB.

15:15-15:30 SURVEY 404M 1 DEG.

15:30-21:00 DRILL 444MM, SURF HOLE. 405 TO 425 M KB.

21:00-21:15 RIG SERV. DRAIN STACK AND FUNCTION ANN. H.C.R. CHECK BRAKES.

21:15-21:30 SURVEY @ 424M 1 DEG.

21:30-24:00 DRILL 444 MM, SURF HOLE 425 TO 433M KB.

00:00-03:15 DRILL 444 MM, SURF HOLE 433 TO 444M KB.

03:15-03:30 SURVEY @ 443M 1/2 DEG.

03:30-08:00 DRILL 444MM, SURF HOLE 444M TO 460M KB.

WANT LIST: _____

WEATHER: **-28**ROAD: **GOOD WINTER COND.**

IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)

Wellname : PARAMOUNT ET AL ARROWHEAD
Location : N65
Date : 01-19-98
Contact : Paul Collens 290-3605

AM REPORT
DFS:5

Depth @ 08:00 hrs: 460m Progress last 24 hrs: 63 m
Rotating hrs: 19

Present operations: drill ahead 444mm sfc hole

ROP: 3.6m/hr
Drill fluid: gelchem Dens: 1180 Vis: 53 WL: pH: 10

SURVEYS: 404m 1deg; 424m 1deg; 443m 1/2

FORMATION TOPS KB:574.6m
Formation Prognosis Sample Subsea

Cret Scatter	311m	276m ??
Cret Garbutt	349m	328m
Miss Flett	451m	--

SHOW SUMMARY:

Formation	Interval	gas show/BGG	Lith/por/shows/remarks
Garbutt	395-450	avg 15-24 BGG	Ibbd sh / slt; no significant shows

REMARKS: -34 deg C;

Geologist: D. Ferguson
Cell: 1-403-210-2951

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT**FOR 24 HR PERIOD ENDING **98-01-18-08:00**

Yr - Mon - Day - Time

WELL NAME **PARAMOUNT et al ARROWHEAD**LOCATION **N65**Day **4** Depth **389**Metres last 24 hr **57**ROT HRS **17**Activity at report time **RUN IN WITH BIT # 3A.****DRILLING MUD PROPERTIES AT SHAKER/SUCTION/PIT**

Wt 1190 Vis 53 WL Gels Solids % PV YP pH 11
 Oil % Sand % Cake PPMCL 0 PPMCA 0

BIT RECORD

BIT NO.	SIZE mm	MAKE & TYPE	SER. NO.	BIT		DEPTH OUI m	m DRLD TODAY	CUM m. DRLD	Rot hrs TODAY	CUM. Rot hr	m/hr	Dull Cond.		
				WT	RPM							I	B	G
1ART	444	REEDY11J	96332	3/10	100/160	185	95	185	15.00	28.25	6.54	3	2	1
2ART	444	REEDS13J	F08500	3/10	100/160	389	57	204	17.00	28.25	6.91	8	1	1
3AN	444	SECSS81J												

CIRCULATION RECORD

BIT NO.	JETS - mm			PUMP			m³/MIN	ANN. VEL.		JET VEL.	HHP	SURF. PRESS. kPa
	1	2	3	STROKE	SPM	LINER		DP	DC			
2A	12.7	12.7	12.7	254	200	152	2.77	19	28	120		8600

DEVIATION SURVEYS

3/4 °	at	342 m	°	at	m
1/2 °	at	361 m	°	at	m
1/2 °	at	380 m	°	at	m
°	at	m	°	at	m

MUD & CHEMICALS ADDED

GELL 114
CAUSTIC 3

BOTTOM HOLE ASSEMBLY

TOOL	ID mm	OD mm	LENGTH m	WEIGHT daN
BIT		444	0.45	
BIT SUB		229	1.20	
5-9" DRILL COLLARS	75	224	44.81	12000
23-6 3/4" D.C.	72	164	162	19926

TIME ANALYSIS

					OPERATION	TODAY	CUM.
					1. Drilling	17.00	
					2. Trips	5.50	
					3. Rig Service	0.50	
					4. Deviation Surveys	1.00	
					5. Ream & Cond. Hole		
					6. Mix & Cond. Mud		
					7. Circulation		
					8. Rig Repair		
					9. Run Casing & Cement		
					10. Fishing		
					11. Logging		
					12. Coring		
					13. Formation Testing		
					14. Waiting on:		
					15. Nipple Up & Test BOPS		
					16. Drilling Out		
					17. Lost Circ.		
					18. Laying Down DP & BOP's		
					19. Plug & Abandon		
					20. Rig up -		
					21. SAFETY MEET		
					TOTAL	24	

OAN 31926

COSTS

DAILY \$63,932
 CUMMULATIVE \$569,058
 GR ELEV.567.9M K.B.574.6

SUPERVISOR **ROD MACEACHERN**

DRL_RPT.4AA

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT (page 2)**FOR 24 HR PERIOD ENDING 98-01-18-08:00
Yr - Mon - Day - TimeWELL NAME PARAMOUNT ET AL ARROWHEADLOCATION N65

OPERATIONS DETAIL:

08:00-11:30 DRILL 444MM SURF HOLE 324 TO 342M

11:30-11:45 SURVEY @ 342M 3/4 DEG.

11:45-12:00 DRILL 444MM SURF HOLE 342 TO 343M

12:00-16:45 DRILL 444 MM SURF HOLE 343 TO 362M

16:45-17:00 SURVEY @ 361M 1/2 DEG.

17:00-21:30 DRILL 444MM SURF HOLE 362 TO 381M

21:30-21:45 RIG SERV.

21:45-22:00 SURVEY @ 380M 1/2 DEG.

22:00-24:00 DRILL 444MM SURF 381 TO 389M.

00:00-02:00 DRILL 444MM SURF 389 TO 395M

02:00-02:15 SURVEY @ 389M 1/4 DEG.

02:15-02:30 RIG SERV.

:02:30-06:00 TRIP OUT FOR BIT.

06:00-08:00 MAKE UP BIT & NEAR BIT ROLLER REAMER, RUN IN.

WANT LIST:

WEATHER: -32ROAD: GOOD WINTER COND.

IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)

Wellname : PARAMOUNT ET AL ARROWHEAD
Location : N65
Date : 01-18-98
Contact : Paul Collens 290-3605

AM REPORT
DFS: 4

Depth @ 08:00 hrs: 395 m Progress last 24 hrs: 63 m

Present operations: RIM with bit #3a

ROP: ..m/hr
Drill fluid: gelchem Dens: 1190 Vis:53 WL: pH: 10

SURVEYS : 342 3/4deg; 361m 1/2deg; 380m 1/2deg;

FORMATION TOPS			KB:574.6m
Formation	Prognosis	Sample	Subsea
Cret Scatter	311m	276m??	
Cret Garbutt	349m	328m	

SHOW SUMMARY:

Formation	Interval	gas show/BGG	Lith/por/shows/remarks
Garbutt	330-395	20-60 avg BGG	no significant shows

REMARKS: -37 deg C;

Geologist: D. Ferguson
Cell: 210-2951

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT (page 2)**FOR 24 HR PERIOD ENDING **98-01-17-08:00**
Yr - Mon - Day - TimeWELL NAME **PARAMOUNT ET AL ARROWHEAD**LOCATION **N65****OPERATIONS DETAIL:**

08:00-08:30 TRIP IN

08:30-11:00 DRILL 444 SURF HOLE 185 TO 200M.

11:00-11:15 SURVEY @ 199M 1/4 DEG.

11:15-12:00 DRILL 444 SURF HOLE 200 TO 207M

12:00-15:00 DRILL 207 TO 228.

15:00-15:15 SURVEY @ 227M 1/2.

15:15-17:45 DRILL 444 SURF 228 TO 246.

17:45-18:00 SURVEY @ 245M 3/4

18:00-18:15 RIG SERV.

18:15-20:45 DRILL 444 SURF HOLE 246 TO 266M.

20:45-21:00 SURVEY @ 266M 1/2 DEG.

21:00-23:45 DRILL 444 SURF HOLE 266 TO 285

23:45-24:00 SURVEY 284M 1/2 DEG.

00:00-02:30 DRILL 444 SURF HOLE

02:30-02:45 SURVEY 303M 1/2 DEG.

02:45-03:00 RIG SERV. FUNCTION ANN.

03:00-06:30 DRILL 444 SURF HOLE.

06:30-06:45 SURVEY 323M 1/2 DEG.

06:45-08:00 DRILL 444 SURF HOLE.

WANT LIST:WEATHER: **-32**ROAD: **GOOD WINTER COND.****IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)**

DRL_RPT2.368

lname : PARAMOUNT ET AL ARROWHEAD
 Location : N65
 Date : 01-17-98
 Contact : Paul Collens 290-3605

AM REPORT

DFS: 3

Depth @ 08:00 hrs: 332 m Progress last 24 hrs: 147 m

Present operations: Drill ahead 444mm sfc hole with bit #2a

ROP: 7 m/hr

Drill fluid: gelchem Dens: 1280 Vls:59 WL: pH: 10

SURVEYS: 183m 0deg; 199m 1/4deg; 227m 1/4deg; 245m 3/4deg;
 266m 1/2deg; 284m 1/2deg; 303 1/2deg; 323m 1/2deg

FORMATION TOPS

KB:574.6m

Formation	Prognosis	Sample	Subsea
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Cret Scatter	311m	??	
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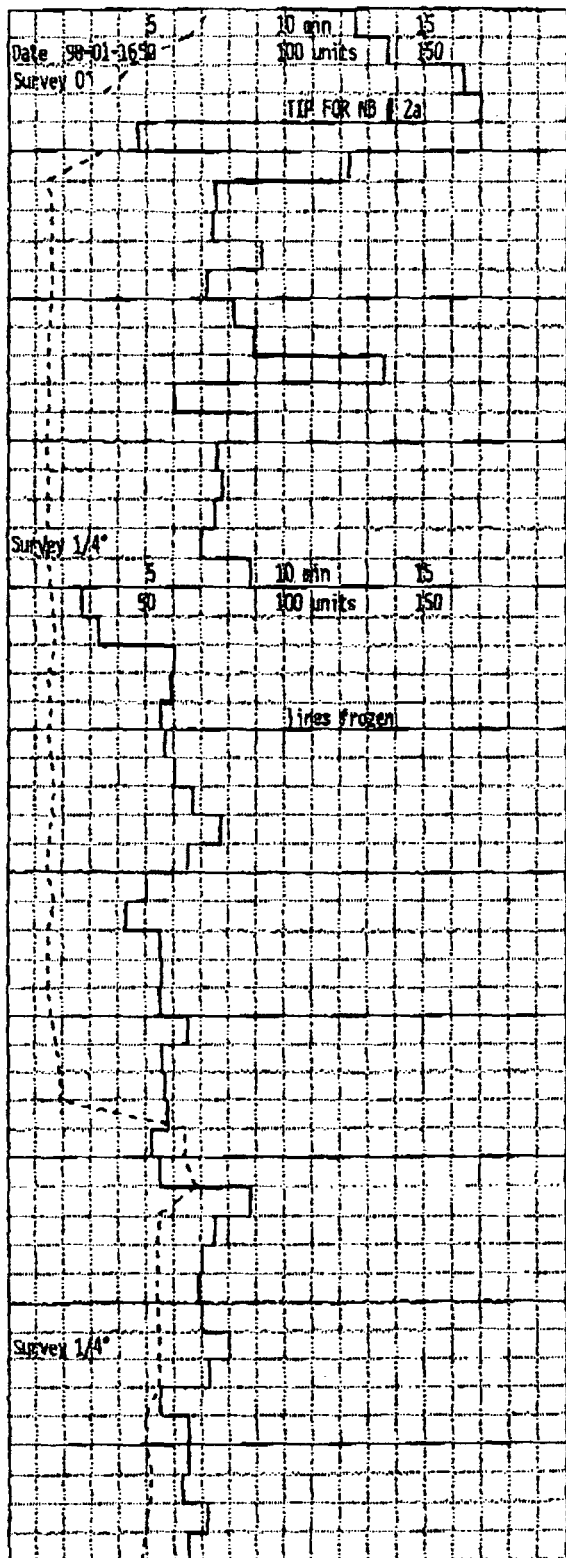
SHOW SUMMARY:

Formation	Interval	gas show/BGG	Lith/por/shows/remarks
sfc	185-325m	avg 18-45 BGG	Ibbd SS / SH - NVS, NVP no significant shows

REMARKS: -36 deg C;

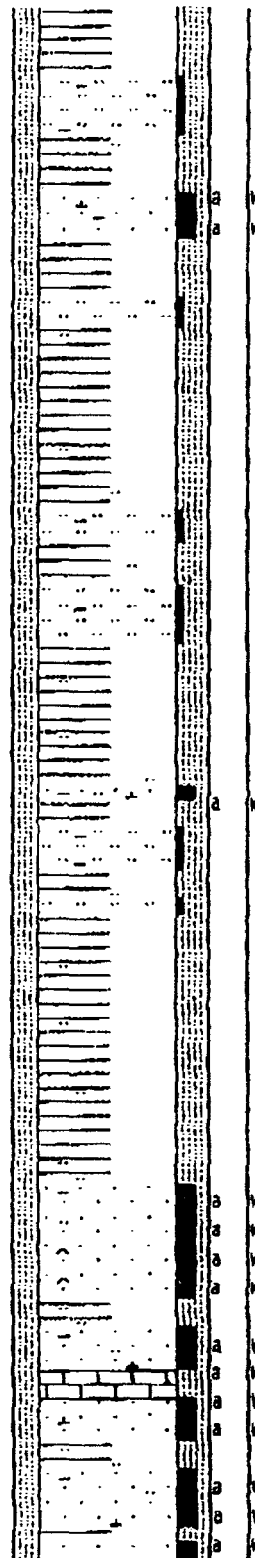
Geologist: D. Ferguson
 Cell: 210-2951

N-65



200

225



SH-m gy, sfis to blk. mod slty ip, grdg SLT ip; SLT-m gy, grdg to slty SH, NVS, NVP, mod arg;

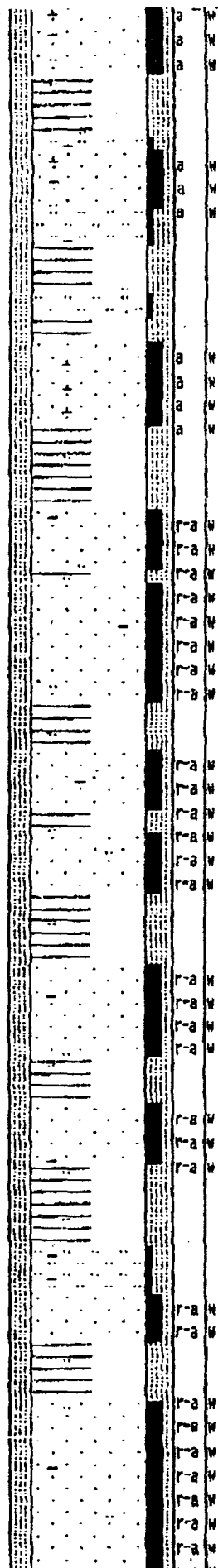
SS-gy, brn isp, qtz, tr cht, NVS, NVP, sl arg, sl slty, occ calc ip; SLT-m gy, grdg to slty SH, NVS, NVP, mod arg; SH-m gy, sfis to blk, mod slty ip, grdg SLT ip;

SH-m gy, sfis to blk, mod slty ip, grdg SLT ip;

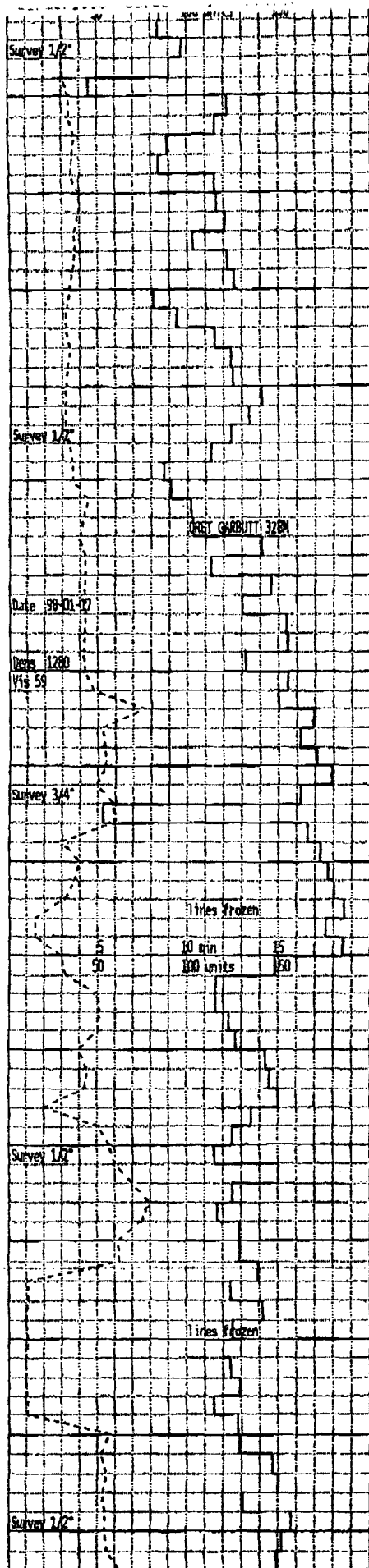
SS-lt gy, brn isp, qtz, tr cht, NVS, NVP, sl arg, sl slty, mod sil ip;

SS-lt gy, brn isp, qtz, tr cht, NVS, NVP, sl arg, sl slty, mod calc ip; LS-wh, trns, NVS, NVP;

SS-lt gy, brn isp, qtz, tr cht, NVS, NVP, tr Fe std ip, sl arg, sl slty, mod calc ip; SH-m gy, sfis to blk, mod slty ip, grdg SLT ip;



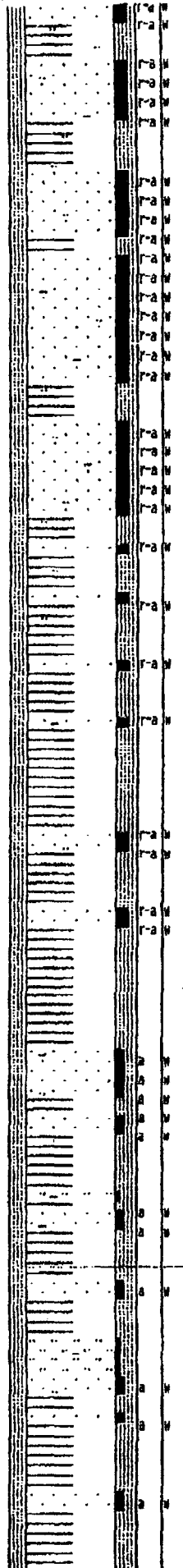
SS-lt gy, brn isp, qtz, tr cht, MVS, NVP, tr
Fe stnd ip, sl arg, sl slty; Sh-g gy, sfis to
blky, mod slty ip, grdg SLT ip;



325

350

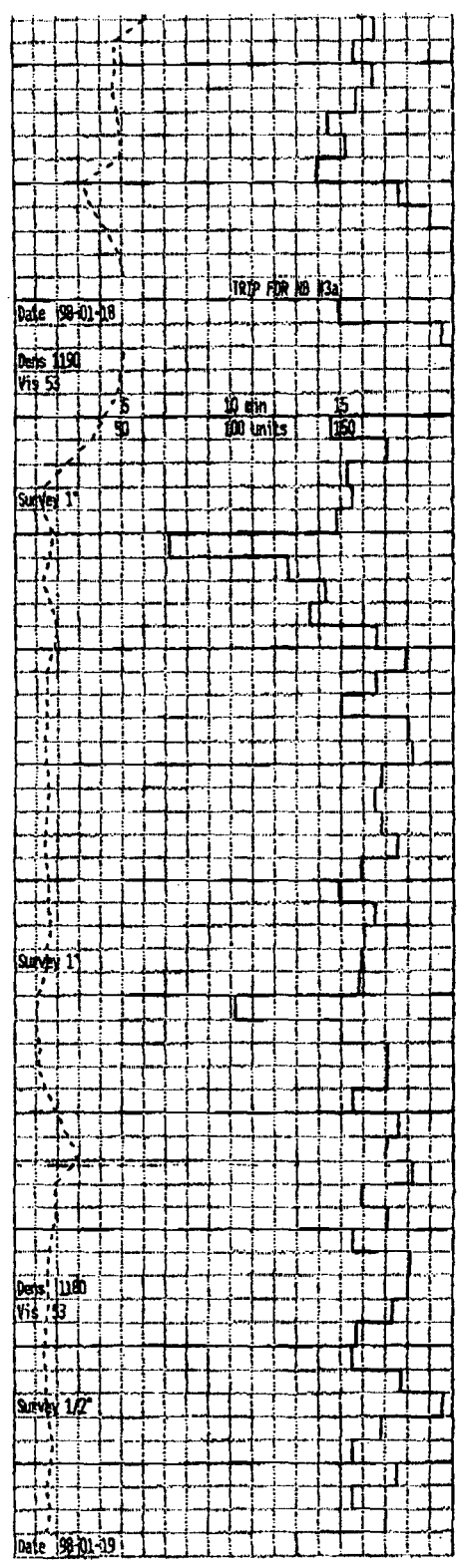
375



SS-lt gy, brn isp, qtz, tr ckt, NWS, NWP, tr
Fe stnd ip, sl arg, sl slty; SH-a gy, sfis to
blky, mod slty ip, grdg SLT ip;

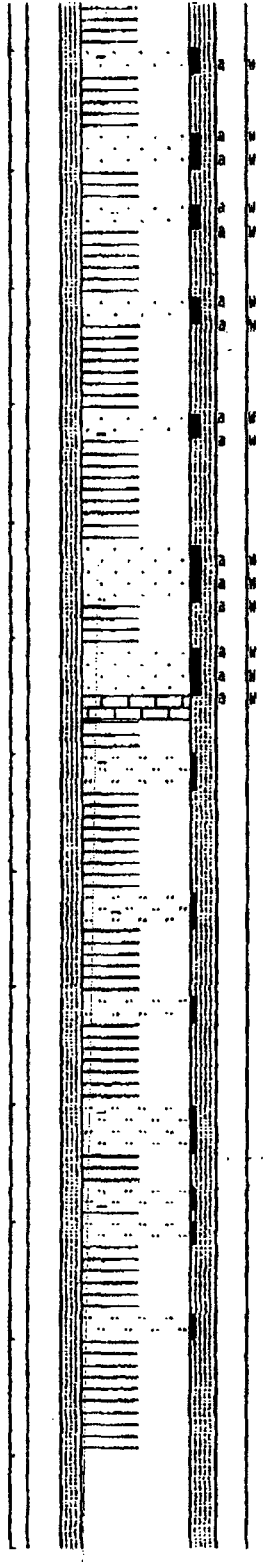
SH-a gy, sfis to blky;

SS-lt gy, brn isp, qtz, tr ckt, NWS, NWP, sl
arg, / scat argl, sl slty, grdg to SLT ip;
SLT-a gy, grdg to alty SH, NWS, NWP, mod arg;
SH-a gy, sfis to blky, scat slts;



400

425



SS-lt gy, brn lsp, qtz, tr cht, MVS, MWP, sl
arg, / scat argl, sl slty, grdg to SLT ip;
SH-m gy, sfis to blk, scat slts;

SLT-m gy, grdg to slty SH, MVS, MWP, and arg;
SH-m gy, sfis to blk, scat slts;

SLT-m gy, grdg to slty SH, MVS, MWP, and arg;
SH-m gy, sfis to blk, scat slts;

N-65

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT**

FOR 24 HR PERIOD ENDING 98-01-16-08:00

Fri Mon Day-Thurs

WELL NAME PARAMOUNT et al ARROWHEADLOCATION N65Day 2Depth 185Metres last 24 hr 95ROTATING CHRS 15.25Activity at report time DRILL 444MM SURF HOLE WITH BIT # 2A**DRILLING MUD PROPERTIES AT SHAKER/SUCTION/FTT**

Wt 1180 Vls 58 WI. Gels Solids % PV VP pH 10
 Oil % Sand % Cake PPMCL 0 PPMCA 0

BIT RECORD

BIT NO.	SIZE mm	MAKE & TYPE	SER. NO.	BIT		DEPTH CUT m	m DRILL TODAY	CUM m DRILL	Rot hrs TODAY	CUM Rot hr	m/hr	Drill Cond.		
				WT	RPM							T	B	G
1A	444	REEDY11J	86332	3/10	100/160	185	95	185	15.00	28.25	6.54	3	2	1
2A	444	REEDS13J	F08500	3/10	100/160									

CIRCULATION RECORD

BIT NO.	JETS mm			STROKE	PUMP			ANN. VEL.		JET VEL.	HRT	SURF. PRESS. kPa
	1	2	3		SPM	LINE	m³/MIN	DP	DC			
1A	12.7	12.7	12.7	254	200	152	2.77	19	28	120		2600
2A												

DEVIATION SURVEYS

0	"	at	183 m	0	"	at	100 m
1	"	at	48 m	1/4	"	at	127 m
3/4	"	at	84 m	1/2	"	at	145 m
0	"	at	83 m	1	"	at	173 m

MUD & CHEMICALS ADDEDGELL-40
CAUSTIC -1**BOTTOM HOLE ASSEMBLY**

TOOL	ID mm	OD mm	LENGTH m	WEIGHT daN
BIT		444	0.45	
BIT SUB		228	1.20	
5-9" DRILL COLLARS	75	224	44.81	12000
15-6 3/4" D.C.	72	164	45.00	18200

TIME ANALYSIS

OPERATION				TODAY	CUM.
1. Drilling				15.25	
2. Trips				6.75	
3. Rig Service				0.75	
4. Deviation Surveys				1.25	
5. Run & Cond. Hole					
6. Mix & Cond. Mud					
7. Circulation					
8. Rig Repair					
9. Run Casing & Cement					
10. Fishing					
11. Logging					
12. Coring					
13. Formation Testing					
14. Waiting on					
15. Make Up & Test BOPS					
16. Drilling Out					
17. Tool Chg.					
18. Laying Down DP & BOP's					
19. Plug & Abandon					
20. Rig up					
21. SAFETY MEET					
TOTAL				24	

DAN 28200

COSTS

DAILY \$42,080
 CUMMULATIVE \$478,386.00
 GR ELEV. 567.8M

SUPERVISOR ROD MACEACHERN

DRL_RPT.2AA

P:01

TEL:1403869977

403 266 6032

JAN-16-1998 13:59

ROD MACEACHERN

94%

P.03

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT (page 2)**FOR 24 HR PERIOD ENDING **98-01-16-08:00**
Yr. Mon Day-TimeWELL NAME **PARAMOUNT ET AL ARROWHEAD**LOCATION **N6S****OPERATIONS DETAIL:****08:00-08:15 DRILL 444MM SURF HOLE.****08:15-08:30 SURVEY 83M 0DEG.****08:30-08:45 RIG SERV.****08:45-10:45 DRILL 444 MM SURF HOLE.****10:45-11:00 SURVEY 100M 0 DEG.****11:00-12:00 DRILL.****12:00-13:30 DRILL.****13:30-13:45 SURVEY 127M 1/4 DEG.****13:45-15:15 DRILL.****15:15-15:30 SURVEY 145 1/2 DEG.****15:30-21:45 DRILL****21:45-22:00 SURVEY 173M 1 DEG.****22:00-22:15 RIG SERV.****22:15-24:00 DRILL****00:00-00:45 DRILL.****00:45-01:00 RIG SERV.****01:00-01:15 SURVEY 183M 0 DEG.****01:15-05:15 TRIP OUT FOR BIT.****05:15- 08:00 RUN IN WITH BIT #2A.****WANT LIST:****WEATHER: -34****ROAD: GOOD WINTER COND.****IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)**

DRL_RPT2.1BB

20:J

TEL: 140328259877

JAN-16-1998 13:59

403 266 6032

N6S WIDE AREA

94%

P.04

Wellname : PARAMOUNT ET AL ARROWHEAD
 Location : N65
 Date : 01-16-98
 Contact : Paul Collens 290-3605

AM REPORT
 DFS: 2

Depth @ 08:00 hrs: 185 m Progress last 24 hrs: 95 m

Present operations: trip in hole with bit #2a

ROP: --m/hr
 Drill fluid: gel/water Dens:1180 Vis: 56 WL: pH: 10

SURVEYS : 46m 1deg; 64m 3/4deg; 83m 0deg; 100m 0deg;
 127m 1/4deg; 145m 1/2deg; 173m 1deg;

FORMATION TOPS KB:574m

Formation	Prognosis	Sample	Subsea
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Scatter	31m	not penetrated	
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SHOW SUMMARY:

Formation	Interval	gas show/BGG	Lith/por/shows/remarks
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gas detector on line at 1600HRS (149m)			
sfc	75-125m	n/a	SS-lt gy, wh, s&p ip. f-vf gr, pred qtzs, scat carb lam, sl calc, p-f lz por, no shows
	125-149m	n/a	SH- dk gy, occ' brn ip. sfis-blky, mm ip, tr pyr, occ' sl carb ip

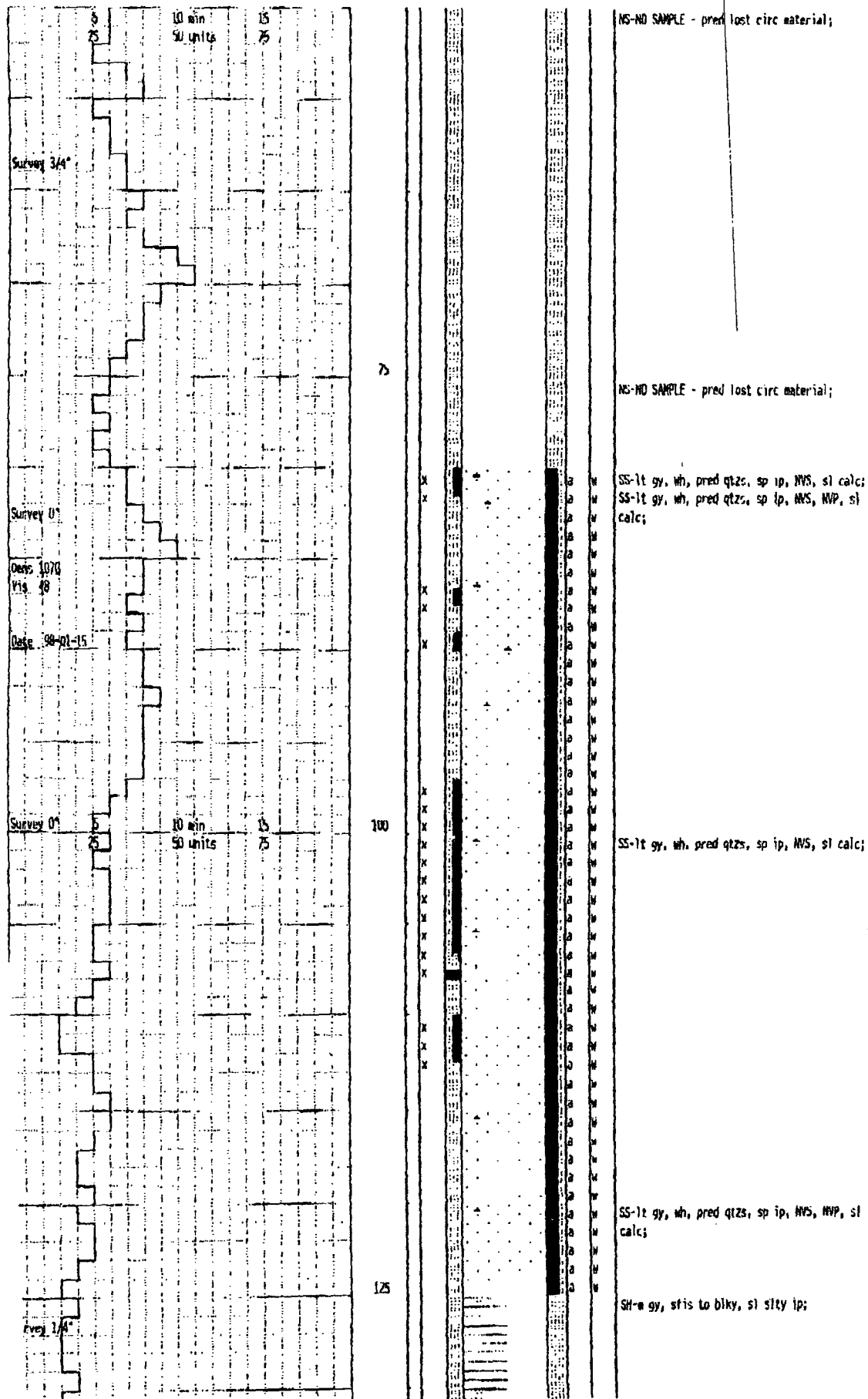
sfc	149-185m	avg 65-85 BGG	SH- a/a sl slty
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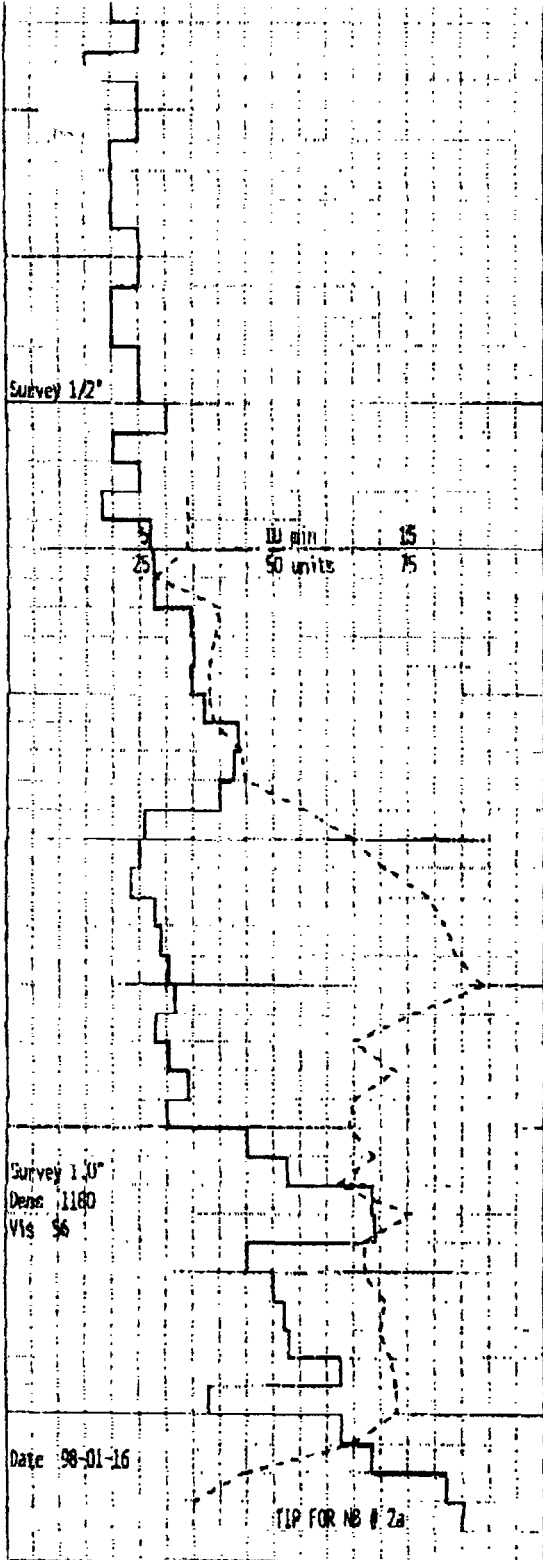
REMARKS: (Temp -36 deg). Drill ahead 444mm sfc hole 90-185m
 (15.25 drilling hrs) and survey, trip for NB #2a; make up bit
 and RIN;

Geologist: D. Ferguson
 Cell: 210-2951

Attn: Paul Collins.
Paramount at Arrowhead

N-65





150

175

SH-a gy, sfis to blkv, sl slty ip;

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT**FOR 24 HR PERIOD ENDING **98-01-15-08:00**

Yr - Mon - Day - Time

WELL NAME **PARAMOUNT et al ARROWHEAD**LOCATION **N65**Day **1**Depth **90**Metres last 24 hr **90**Rotating hrs **13**Activity at report time **DRILL 444MM SURF HOLE****DRILLING MUD PROPERTIES AT SHAKER/SUCTION/PIT**

Wt 1070 Vis 48 WL Gels Solids % PV YP pH 11
 Oil % Sand % Cake PPMCL 0 PPMCa 0

BIT RECORD

BIT NO.	SIZE mm	MAKE & TYPE	SER NO.	BIT		DEPTH OUT m	m DRLD TODAY	CUM m. DRLD	Rot hrs TODAY	CUM. Rot hr	m/hr	Dust Cond.		
				WT	RPM							I	B	G
1A	444	REED	96332	2/3	100/160		90	90	13.00	13.00	6.90	R	N	G

CIRCULATION RECORD

BIT NO.	JETS - mm			PUMP				ANN. VEL.		JRT VEL.	HHP	SURF. PRESS. kPa
	1	2	3	STROKE	SPM	LINER	m³/MIN	DP	DC			
1A	12.7	12.7	12.7	254	200	152	2.77	19	28			2600

DEVIATION SURVEYS

3/4 °	at	27 m	°	at	m
1 °	at	46 m	°	at	m
3/4 °	at	64 m	°	at	m
°	at	m	°	at	m

MUD & CHEMICALS ADDED

155= GELL
 4 = CAUSTIC
 2 = QUICK SEAL
 20= SAWDUST

BOTTOM HOLE ASSEMBLY

TOOL	ID mm	OD mm	LENGTH m	WEIGHT daN
BIT		444	0.45	
BIT SUB		229	1.20	
5-9" DRILL COLLARS	75	224	44.81	12000
5.6 3/4" D.C.	72	164	45.00	5400

TIME ANALYSIS

					OPERATION	TODAY	CUM.
					1. Drilling	13.00	
					2. Trips		
					3. Rig Service		
					4. Deviation Surveys	1.50	
					5. Room & Cond. Hole		
					6. Mix & Cond. Mud	3.50	
					7. Circulation		
					8. Rig Repair		
					9. Run Casing & Cement		
					10. Fishing		
					11. Logging		
					12. Coring		
					13. Formation Testing		
					14. Waiting on:		
					15. Nipple Up & Test BOPS		
					16. Drilling Out		
					17. Lost Circ.		
					18. Laying Down DP & BOP's		
					19. Plug & Abandon		
					20. Rig up -	5.00	
					21. SAFETY MEET	1.00	
					TOTAL	24	

COSTS

DAILY 27746

CUMMULATIVE

\$433,906

GR ELEV 567.9M

SUPERVISOR

ROD MACEACHERN

DRL_RPT.1AA

PARAMOUNT RESOURCES LTD.**DAILY DRILLING REPORT (page 2)**FOR 24 HR PERIOD ENDING **98-01-15-08:00**

Yr - Mon - Day - Time

WELL NAME **PARAMOUNT ET AL ARROWHEAD**LOCATION **N65****OPERATIONS DETAIL:**

08:00-13:00 RIG TO SPUD.

13:00-13:30 PRE SPUD RIG INSPECTION.

13:30-14:00 PRE SPUD SAFETY MEETING.

14:00-15:00 SPUD & DRILL 444 MM SURF HOLE

15:00-15:45 SURVEY @ 27M 3/4 DEG. (ONE MISRUN)

15:45-22:00 DRILL ROCKS, GRAVEL, 28M TO 46

22:00-22:15 SURVEY 46M-1 DEG.

22:15-23:15 DRILL 444MM HOLE LOSING VOL. 46 TO 59M KB.

23:15-24:00 BUILD VOL. MIX MUD.

00:00-02:45 BUILD VOL. MIX MUD

02:45-04:45 DRILL 444MM SURF HOLE FROM 59 TO 65M

04:45-05:00 SURVEY 64M 3/4 DEG.

05:00- 08:00 DRILL 444MM HOLE

LOSS 16 M3 OF MUD TO THE FORMATION 46 TO 59M KB.

STOPPED DRILLING MIXED :2 CAUSTIC, 95 GELL, 20 SAWDUST, 2 QUICK SEAL,

LOSSES HAVE STOPPED DRILLING AHEAD

WANT LIST:WEATHER: **-36****5 WIND**ROAD: **GOOD WINTER COND.****IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)**

DRL_RPT2.98

Wellname : Paramount et al Arrowhead
Location : N65
Date : 01-15-98
Contact : Paul Collens 290 3605

AM REPORT
DFS: 1

Depth @ 08:00 hrs: 90m Progress Last 24 hrs: 90 m

Present operations: drill ahead surface hole

ROP: 2-6m/hr
Drill fluid: water Dens:1070 Visc: 45 WL: pH: 10.5

SURVEYS

FORMATION TOPS			KB:574m
Formation	Prognosis	Sample	Subsea
Scatter	311m	not penetrated yet	
Garbutt	349m		

SHOW SUMMARY:

Formation	Interval	gas show/Bbl	Lith/por/shows/remarks
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Note: Total gas analyzer will be rigged in today.

REMARKS: on location at 1850 hrs 98-01-14;

Geologist: D. Ferguson
phone: 210-2951