

DAVE WILSON OILFIELD CONSULTING LTD.
DAILY DRILLING REPORT

WELL	Para et al Netla M-23			REPORT #	23	DATE	7-Jan-99
DEPTH	2080	PROGRESS		OPERATION	800	Trip in with Core Barrel	

DRILLING FLUID / SOLIDS CONTROL

TYPE	Oil Base	TIME CHK	200	ENGINEER	Jody Kereliuk	MOBILE		
LOG BOOK		CHECK	mg/L		ADDITIVES			
DENSITY		1045	SALINITY		MILBAR	305	MUD GRAD. (KPA/M)	9.27
VISCOSITY		50	CHLORIDES	147058	DIESEL		CYCLE MAIN HOLE(MIN)	135
W.L.			CALCIUM	61176	INVERT		BOTTOMS UP (MIN)	38
pH				Vol. Frac.	OILGEL3000	15	PUMP (M3/STROKE)	0.0056
F.C.		2	SAND	0.005	Ca.Chl. Fines	15	MUD TANKS (M3)	57
FANN 600		24	SOLIDS	6	LIME	15	MAIN HOLE (M3)	43
FANN 300		15		UF/OF	MILMICA		TOTAL (M3)	100
P.V.		9	OIL %	77	DFE 418	4	WATER LOADS ON LOC.	
Y.P.		2.87	WATER %	17	CARBOTEC	1	DAILY MUD COST	\$21,754
GELS 1/10		1.5/2.5	CNTFGE		CA. CARB.	10	MUD COST TO DATE	\$113,335

BIT DATA

TIME BREAKDOWN

NO.	2-B	Core #1	BIT NO.	2-B		DRILL		MIRU	
SIZE	156		WEIGHT	9,000		TRIP	11.00	DRL MH/RH	
TYPE	ETD537		RPM	60		RIG SERV	0.25	NIPPLE U/D	
SERIAL NO	136380		STRING WT	46,000		SURVEY		PT BOP'S	
JETS	3 x 18		SPM	120		CIRCULATE	12.75	DRILL OUT	
FROM	2070		M3/MIN	0.67		LOG		S&C LINE	
TO	2080		PRESSURE	3,850		TEST		RIG REPAIR	
BIT METERS	10		DP VEL	54		CORE		LD DP/DC'S	
BIT HOURS	2.25		DC VEL	76		REAM		T.O.ALPIKE	
BIT ROP	4.4		NOZ VEL	29.6		CTB		SFTY MTG	
CUM HOURS	61.25				PUMP	CASING		BOP DRILL	
CONDITION	1-1-1		TYPE		PZ-8	CEMENT		MIX L.C.M	
PULLED FOR	Core Bbl.		LINER/STK		203 x 114	WOC		TOTAL	24.00

SURVEYS

BOTTOM HOLE ASSEMBLY

DEPTH	DEVIATION	DEPTH	DEVIATION	DEPTH	DEVIATION	156mm Core Head,
1986	1.5					9m Core Bbl.
						12 x 4 3/4 Drill Collars
						LENGTH

REMARKS & GENERAL REPORT DETAILS

0800-2100	Circulated and waited on Corehand from Nisku { Increased mud wt. To 1045kg/m3 to shut off fluid influx to well bore}						
2100-0800	Tripped for Core Barrel to cut Core # 1						
					CUT(-) / FILL(+)		
					GR. ELEV. (Corrected)		273.10
					KB - GROUND:		5.15
					ACTUAL KB:		278.25
					REPORT TO:		Wayne Tomm
WEATHER/TEMP	Overcast	- 33	RD/LEASE	Firm	LAST BOP DRILL DL		2-Jan
SUPERVISOR	Dave Wilson		MOBILE	1-600-700-5042	LAST BOP DRILL AN		4-Jan
RIG MANAGER	Greg Beller		MOBILE		LAST BOP DRILL MN		
CONTRACTOR	Precision	379	DAILY COST	\$54,684	CUM. COST	\$1,330,745	

From Jeff Boulter

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To: Paul Collens

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HIGHWOOD WELLSITE SERVICES INC.
DAILY GEOLOGICAL WELL REPORT
1999-01-09

Paramount et al Netla M-23

Report To:	PAUL COLLENS	Report From:	JEFF BOULTER
Spud Date:	December 17	Telephone:	1600 700 5042
Gd. Elevation:	273.1	Days from Spud:	23
Depth @ 6:00:	2130 m	K.B. Elevation:	278.25
Status @ 8:00:	Drilling ahead 156 mm hole	Formation:	Arnica
24 hr Progress:	41 m	Average ROP:	1.6 m/hr

OPERATIONS SUMMARY - Last 24 Hours
Drilled 156 mm hole

SURVEYS
2035.0 m 2.75 degrees

MUD PROPERTIES

Type: Invert
Density: 1045 kg/m³
Viscosity: 48 s/L
Water Loss: cm³/30 min
pH:
Filter Cake: mm

SAMPLE TOPS

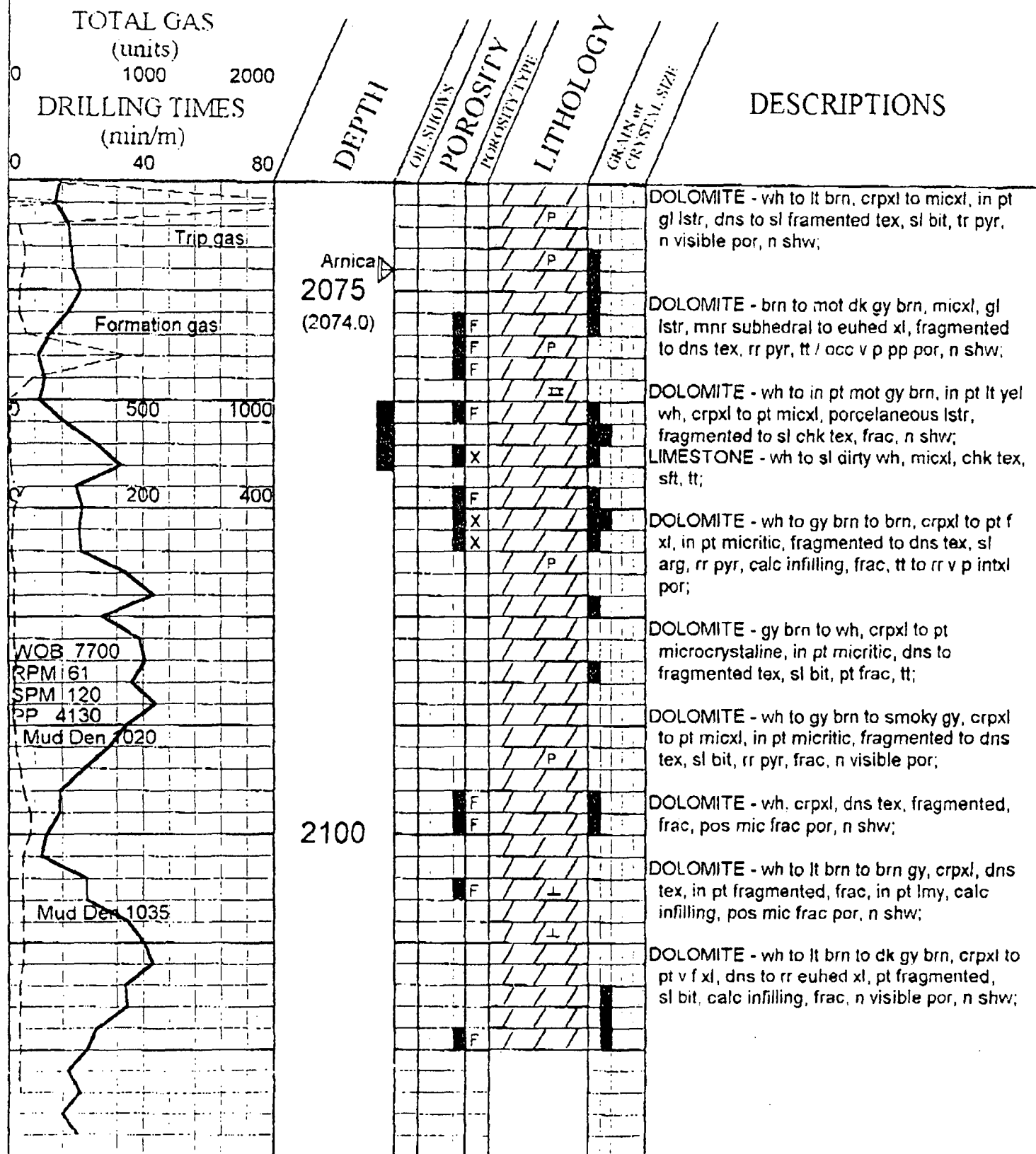
Formation	Sample Depth	TVD	Subsea	Prognosis Subsea	Change
Kakisa	1030.0	1029.4	-751.1	-690.2	-60.9
Fort Simpson	1057.0	1056.3	-778.1	-770.2	-7.9
Muskwa	1790.0	1788.8	-1510.6	-1626.2	115.6
Horn River	1879.0	1877.8	-1599.6		
Nahanni	1891.0	0.0		-1717.2	
Headless	1972.0	0.0		-1830.2	
Landry	2002.0	0.0		-1854.2	
Arnica	2074.0	0.0		-1912.2	

FORECAST ACTIVITIES

Drill ahead 156 mm hole with the possibility of a core.

CANSTRAT SYMBOLS USED FOR LITHOLOGY AND SHOWS

SCALE 1:240



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2150

HIGHWOOD WELLSITE SERVICES INC.
DAILY GEOLOGICAL WELL REPORT
1999-01-08

Paramount et al Netla M-23

Report To: PAUL COLLENS
Spud Date: December 17
Gd. Elevation: 273.1
Depth @ 6:00: 2089 m
Status @ 8:00: Drilling ahead 156 mm hole
24 hr Progress: 12 m

Report From: JEFF BOULTER
Telephone: 1600 700 5042
Days from Spud: 22
K.B. Elevation: 278.25
Formation: Arnica
Average ROP: 1.6 m/hr

OPERATIONS SUMMARY - Last 24 Hours

Finish running in core barrel, cut 3.2 m of Arnica, jammed off due to fracture, pull out of hole, recover core, run in hole with bit, drill ahead 156 mm hole

MUD PROPERTIES

Type: Invert
Density: 1050 kg/m³
Viscosity: 66 s/L
Water Loss: cm³/30 min
pH:
Filter Cake: mm

SAMPLE TOPS

Formation	Sample Depth	TVID	Subsea	Prognosis Subsea	Change
Kakisa	1030.0	1029.4	-751.1	-690.2	-60.9
Fort Simpson	1057.0	1056.3	-778.1	-770.2	-7.9
Muskwa	1790.0	1788.8	-1510.6	-1626.2	115.6
Horn River	1879.0	1877.8	-1599.6		
Nahanni	1891.0	0.0	-1612.75	-1717.2	
Headless	1972.0	0.0	-1693.75	-1830.2	
Landry	2002.0	0.0	-1723.75	-1854.2	
Arnica	2074.0	0.0	-1795.75	-1912.2	

FORECAST ACTIVITIES

Drill ahead 156 mm hole looking for reservoir quality rock to core

CORE STUDY No. 1

FORMATION: ARNICA

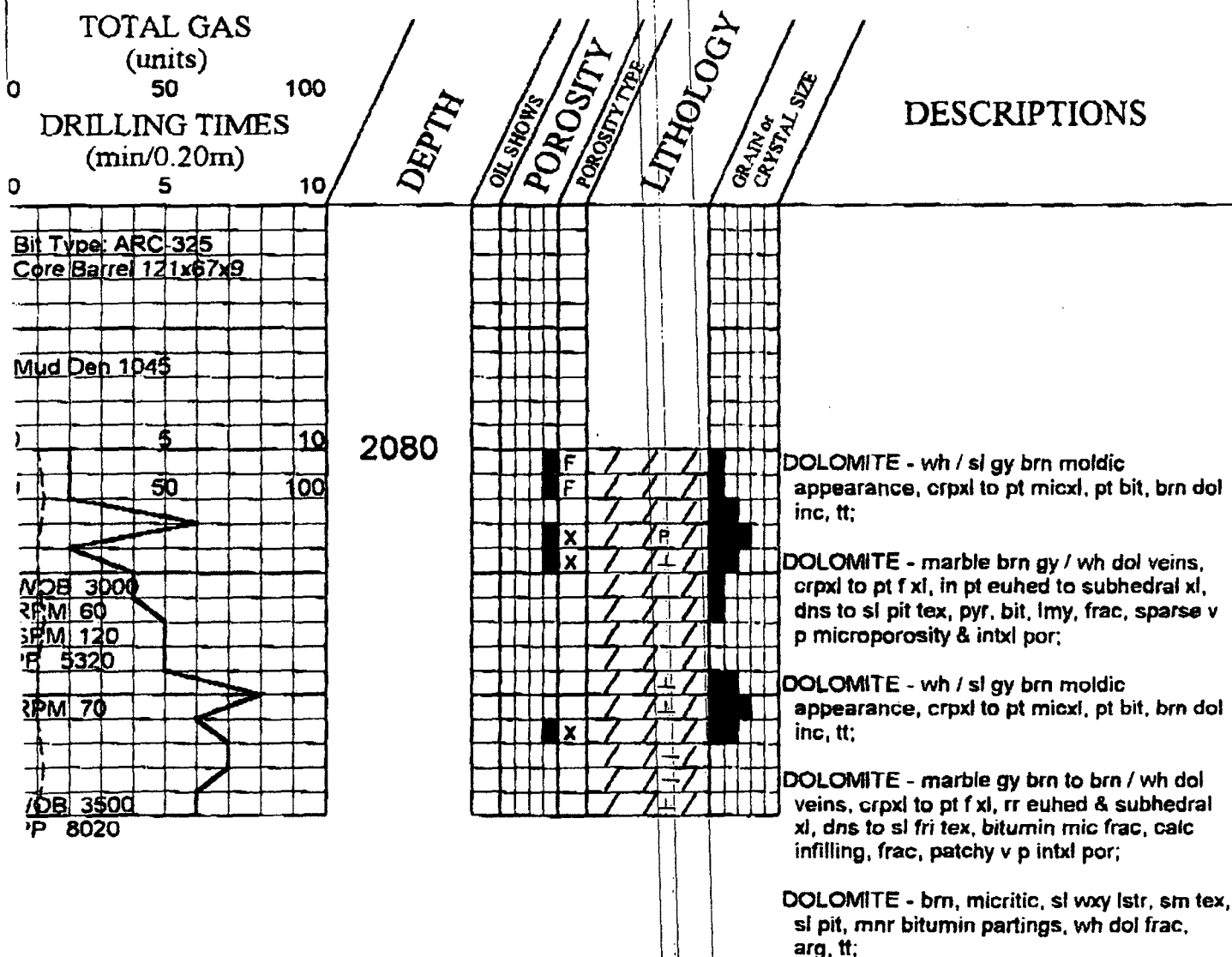
CORE: START 2080.0 m
CUT 3.2 m
SIZE 156 mm

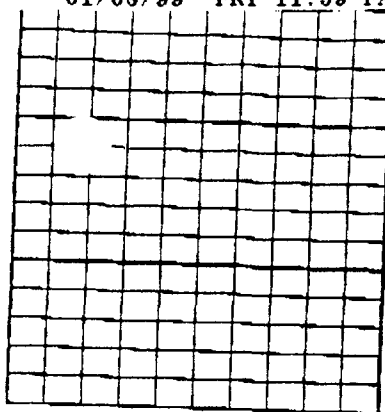
END 2083.2 m
RECOVERED 3.4 m
CORING TIME 1.36
CORE HAND: MIKE TILTGEN

COMPANY: BAKER HUGHES INTEQ

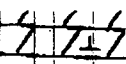
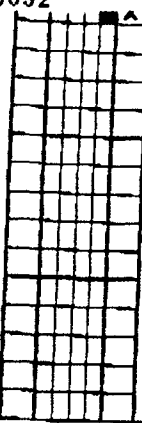
REMARKS: Core jammed off at 2080.0 m

SCALE 1:48





2085



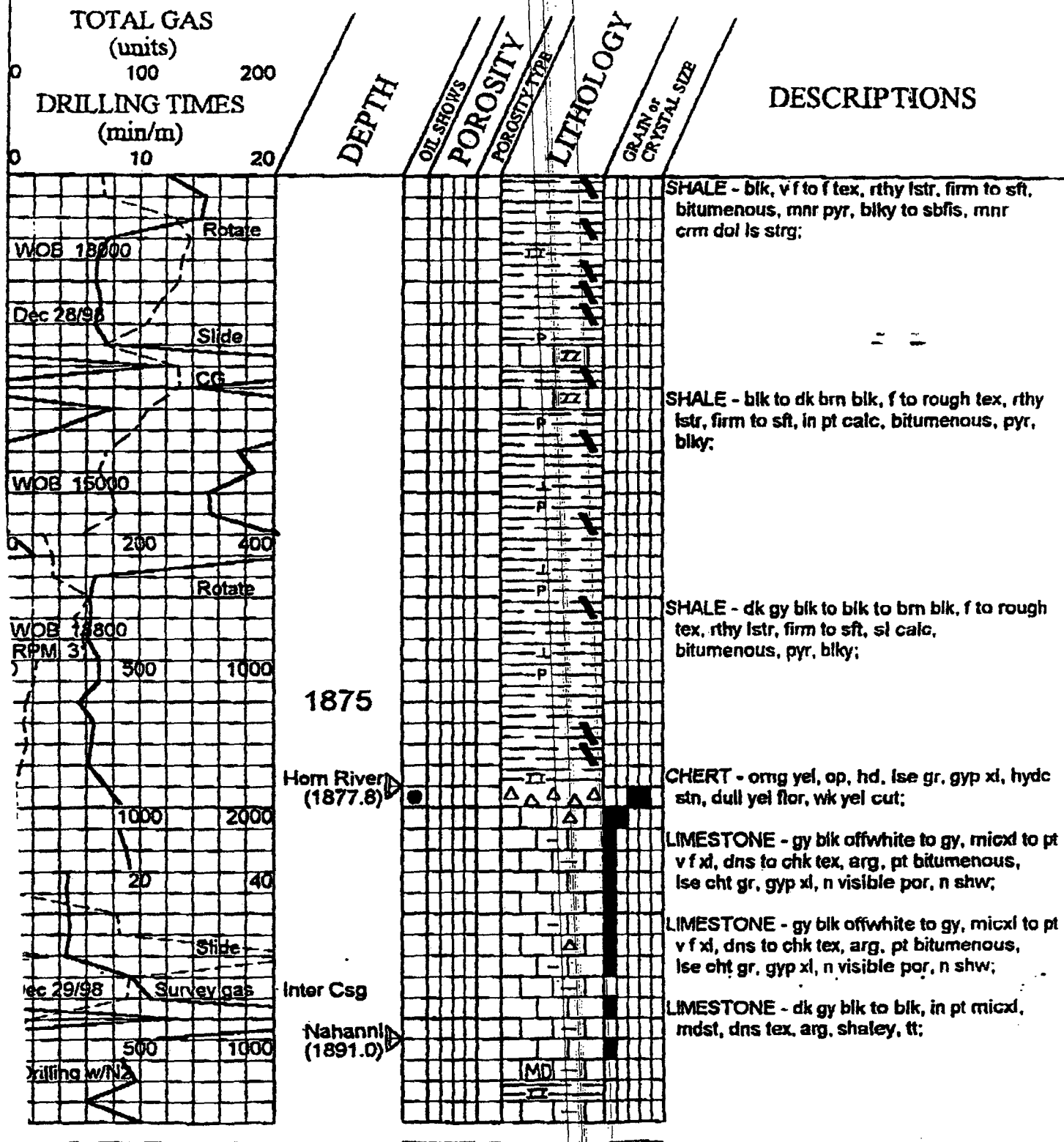
DOLOMITE - marble brn gy & wh dol veins.
crpxl to f xl, in pt subhedral to euhed xl, dns
to sl fri tex, bit, calc infilling, mic fractures,
scat v p intercrystallineporo

HIGHWOOD WELLSITE SERVICES INC. 41 Riverview Circle COCHRANE, Alberta (403) 932-2916		COMPOSITE WELL HISTORY DRILLING TIME LITHOLOGY LOG	
COMPANY: PARAMOUNT RESOURCES LTD. WELL: Paramount et al Netla M-23 FIELD: PROVINCE: NorthWest Ter. LOCATION: M-23 60 Deg 50' 123 Deg 00'			
COORDINATES: ELEVATIONS: GD 273.1 m KB 278.25 m LOG MEASURED FROM KB 5.1 m ABOVE GROUND WELL TYPE: Gas Exploration TOTAL DEPTH: SPUD DATE: December 17, 1998 T.D. DATE: LICENCE No.: WID 1841 AFE No.: 17168			
CONTRACTOR: Precision Drilling MUD TYPE: Invert MUD UP @: 500.0m SAMPLES: 5 meter intervals Paramount: 500.0 - Total Depth N.E.B.: 500.0 - Total Depth DSTs:		CORES: OPEN HOLE LOGS:	
SUPERVISION GEOLOGICAL: JEFF BOULTER		DRILLING: AL IRONSIDE	

CASING DEPTH SURFACE: 499 m INTERMEDIATE: 1840 m MAIN: m	CASING SIZE SURFACE: 320.42 mm INTERMEDIATE: 177 mm MAIN: mm	HOLE SIZE SURFACE: 339.73 mm INTERMEDIATE: 222 mm MAIN: mm	REMARKS:

CANSTRAT SYMBOLS USED FOR LITHOLOGY AND SHOWS

SCALE 1:240



1900



LIMESTONE - blk to dk gy blk, mdst, rthy to sm tex, dns, arg, sh partings, tt;

LIMESTONE - dk brn to tan to gy brn, in pt micxl, mdst, sm to rthy tex, dns, arg, calc veins, shaley, tt;

LIMESTONE - m to dk brn to brn gy to gy, mdst, in pt micxl, rthy to sm tex, dns, arg, shaley, tr pyr, tt;

LIMESTONE - dk gy brn to m to dk brn, mot gy, in pt micxl, mdst, rthy to sl sm tex, dns, arg, shaley, rr calc xl, tr pyr, tt;

LIMESTONE - m to dk gy brn to dk brn, pt mot gy, in pt micxl, pt mdst, rthy to dns tex, arg, shaley, calc xl, tt;

LIMESTONE - mot gy brn, m to dk brn, micxl, in pt mdst, dns to rthy tex, arg, in pt shaley, tr pyr, tt;

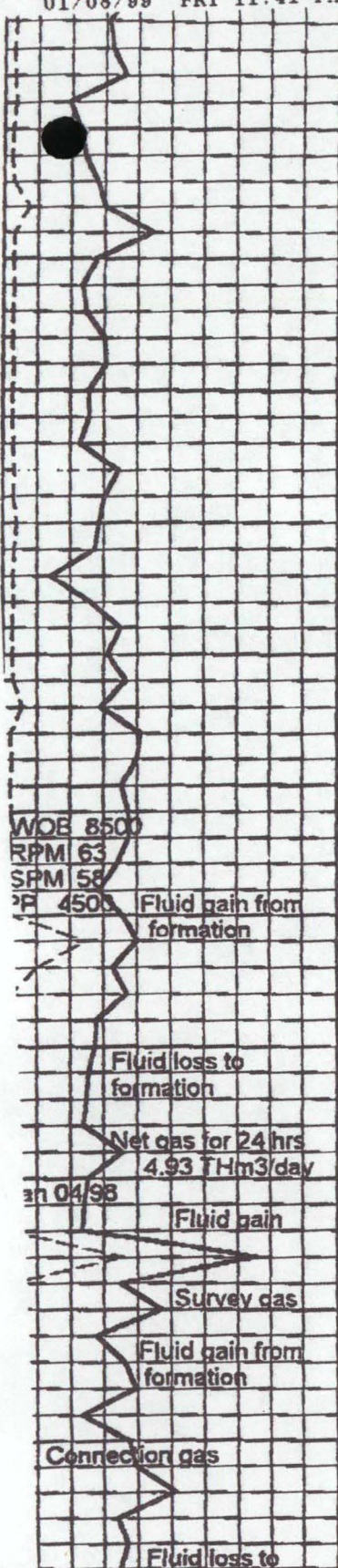
LIMESTONE - dk brn to brn blk, mot gy brn, micxl, mdst, rthy to dns tex, arg, shaley, mnrr calc xl, rr pyr, tt;

LIMESTONE - dk brn blk to m brn, in pt mot brn gy, micxl, mdst, dns to rthy tex, pt sm tex, arg, in pt shaley, rr calc xl, tt;

LIMESTONE - m to dk brn to brn blk, micxl, mdst, rthy to sm tex, dns, arg, shaley, tt;

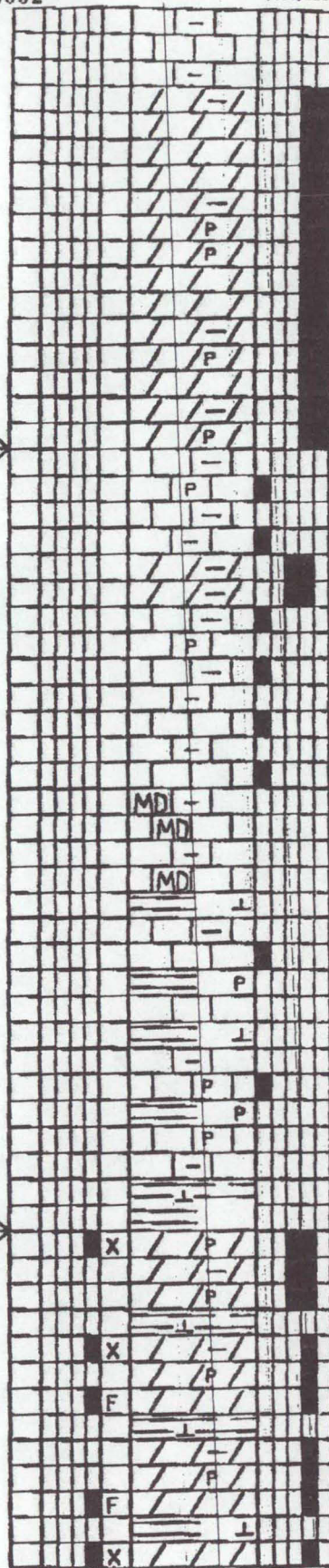
LIMESTONE - m to dk brn to brn blk to mot brn gy, micxl, mdst, rthy to sm tex, dns, arg, shaley, tt;

LIMESTONE - m to dk brn to brn blk to tan, micxl, mdst, rthy to sl sm tex, dns, arg, in pt shaley, tt;

Headless
(1972.0)

1975

2000

Landry
(2002.0)

DOLOMITE - crm to wh to lt gy, m to pt c xl, euhed xl, sl porcelaneous lstr, pt bit, n visible to tr v p intd por, n shw;

DOLOMITE - crm to wh to lt gy, m to pt c xl, euhed xl, sl porcelaneous lstr, pt bit, tr pyr, n visible to tr v p intd por, n shw;

DOLOMITE - crm to wh to lt gy, m to pt c xl, euhed to subhedral xl, sl porcelaneous lstr, pt bit, tr pyr, sh partings, n visible to rr v p intd por, n shw;

LIMESTONE - dk brn to brn blk, in pt micxl, mdst, rthy to sm tex, dns, arg, sh partings, tt;

LIMESTONE - dk brn to brn blk to mot gy brn, in pt micxl, mdst, rthy to sm tex, dns, arg, pyr, sh partings, tt;

DOLOMITE - lt gy to wh to crm, f to m xl, subhedral to ehedral xl, pt bit, sh partings, n visible por, n shw;

LIMESTONE - dk brn to brn blk to mot brn gy, in pt micxl, mdst, rthy to pt sm tex, dns, arg, shaley, tt;

LIMESTONE - lt to dk brn to tan, mdst, sm to rthy tex, dns, tt;

LIMESTONE - lt to dk brn to tan to dk brn gy, pt micxl, mdst, sm to rthy tex, dns, arg, tt;

SHAPE - lt gy, v f tex, sm, sl wxy lstr, firm, pyr, sl calc, blk;

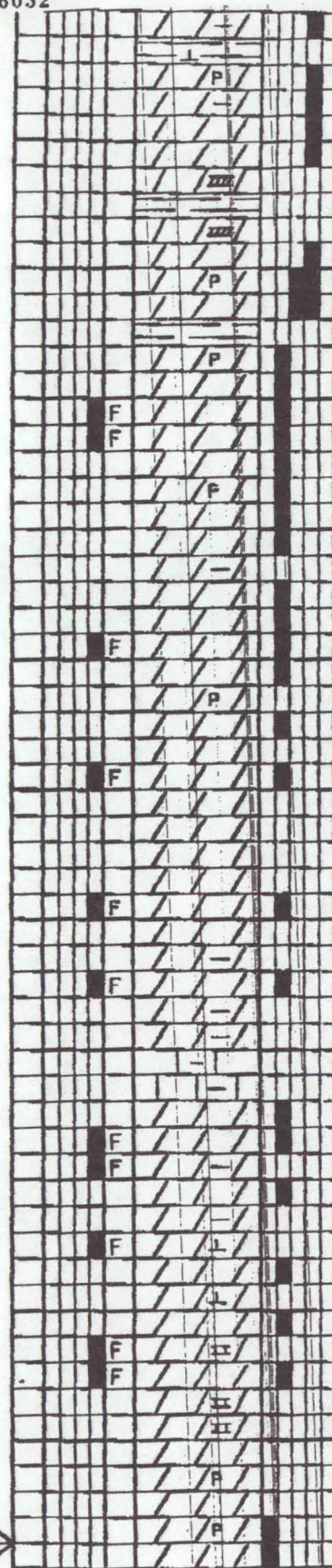
LIMESTONE - lt to dk brn to tan to dk brn gy, pt micxl, mdst, sm to rthy tex, dns, arg, pyr, tt;

SHAPE - lt gy, v f tex, sm, sl wxy lstr, firm, pyr, grd to ls, blk;

DOLOMITE - crm to wh, f to m xl, subhedral to euhed xl, pt bit, shaley, pyr, n visible por to v p intd por, n shw;

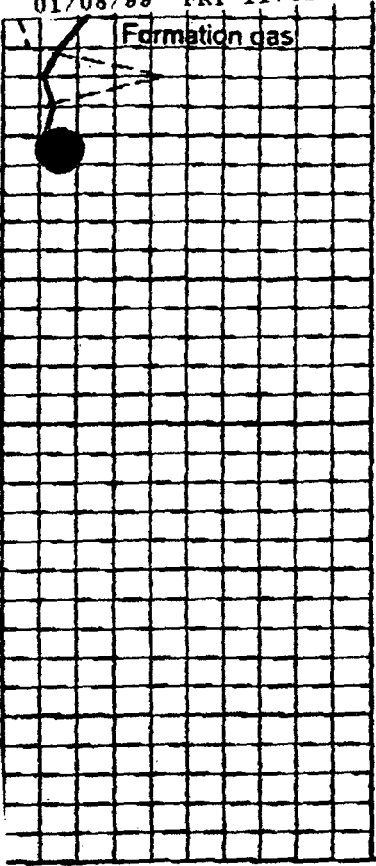
DOLOMITE - crm wh to gy blk to mot wh & blk, in pt m crystalline, subhedral to euhed xl, bit, shaley, pyr, n visible to p intd & frac por, n shw;

DOLOMITE - smoky gy to creamy wh to gy blk to mot wh & blk, in pt m crystalline, subhedral to euhed xl, bit, shaley, pyr, n visible to p intd & frac por, n shw mnr strg of lt gy wxy sh;

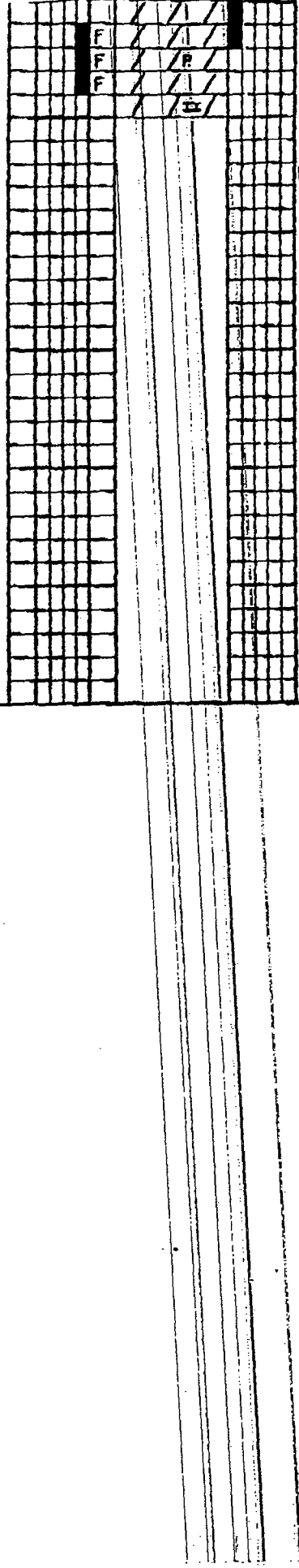


DOLOMITE - wh to lt brn, crpxl to micxl, in pt
gl lstr, dns to sl framented tex, sl bit, tr pyr.
n visible por, n shw;

Arnica 
2075
(2074.0)



2100



DOLOMITE - brn to mot dk gy brn, micxl, gi
lstr, mnr subhedral to euhed xl, fragmented
to dns tex, rr pyr, tt / occ v p pp por, n shw;

DOLOMITE - wh to in pt mot gy brn, in pt lt yel
wh, crpxl to pt micxl, porcelainous lstr,
fragmented to sl chk tex, frac, n shw;
LIMESTONE - wh to sl dirty wh, micxl, chk tex,
sft, tt;