

St. Michael Exploration Co.
COMPANY

LEASE
Monfort
AREA NAME

WELL NO.
#13-30
PROJECT NO.

INDIVIDUAL WELL RECORD

GENERAL INFORMATION

LOCATION SECTION	TWP/BLK	RNG/SURVEY	COUNTY	STATE
Sec. 30	TWP 6N	RGE 65W	Weld	Colorado
FIELD	TYPE COMPLETION			ELEVATION
Greeley	<input type="checkbox"/> OIL <input checked="" type="checkbox"/> GAS <input type="checkbox"/> OTHER			G.L. 7420' KB 7430'
DRILLING CONTRACTOR		COMPLETION CONTRACTOR		PERMANENT DATUM FT. ABOVE G.L.
Toltek Drilg. Co.		Rival Well Service		10'
TOOLS	DATE COMMENCED	DATE COMPLETED	DEPTH	CONTRACT PRICE
			FROM TO	PER FOOT DAY WORK W/D.P. \$ WO/D.P. \$
ROTARY	4-18-84	4-26-84	Surface 7775'	
COMPLETION	5-31-84	6-7-84		

CASING-CEMENT RECORD

HOLE			CASING				CEMENT		
SIZE	DEPTH	SET AT	SIZE	WEIGHT	GRADE	COND	#SX	TYPE	CMT. TOP
12 1/4"	309'	302'	8 5/8"				240	CaCl ₂ +K ₄ O Cellulose	
7 7/8"	7758'	7754'	4 1/2"	11.6	N-80		325	Class "G"	6470'
(Baker Sliding Sleeve @ 1512')									

CORES

INTERVAL	FORMATION	RECOVERY AND DESCRIPTION (Full analysis submitted separately)

DRILL STEM TESTS

INTERVAL	FORMATION	TIME OPEN	RECOVERY & PRESSURE DATA (Full analysis submitted separately)

LOGGING

TYPE LOG	LOGGING COMPANY	INTERVAL LOGGED	REMARKS
DFL - SFL	Schlumberger	303' - 7752'	
CN - Litho Density	"	3600' - 7754'	
Litho. Cyberlook	"	3600' - 7750'	
Cmt. Bond	"	6238' - 7633'	

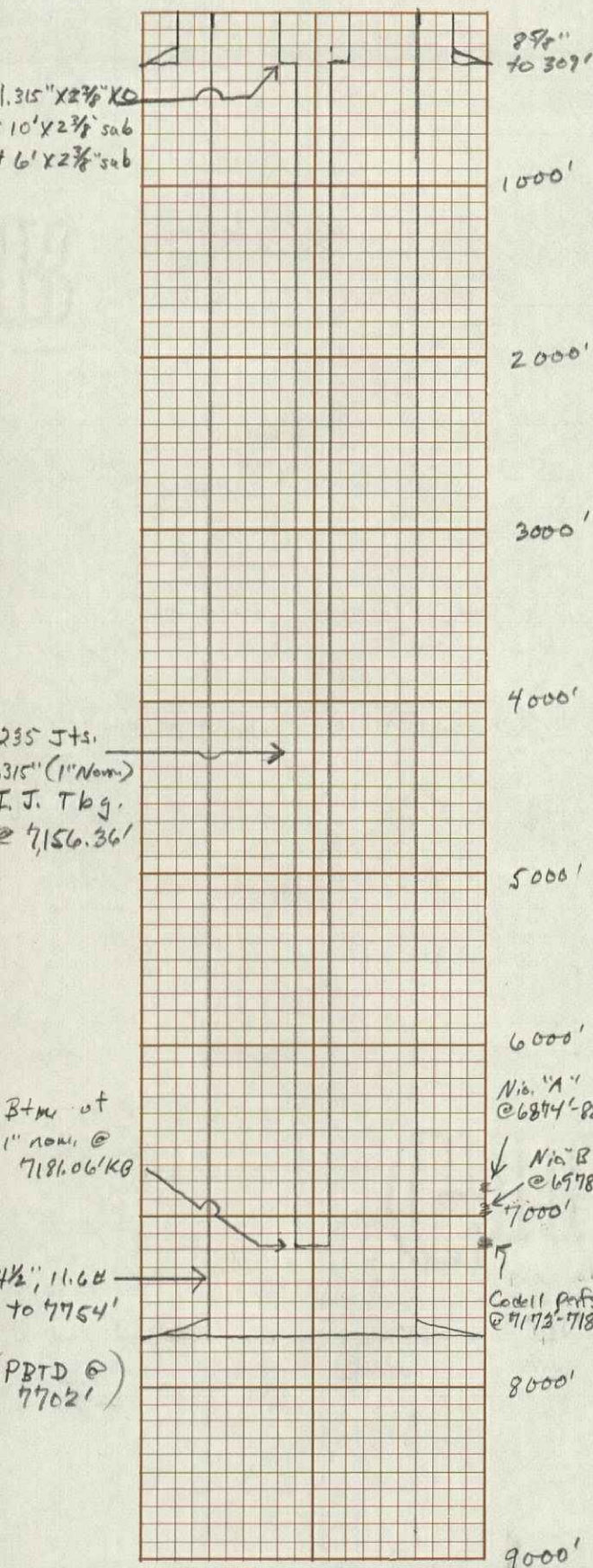
PERFS.

PERFORATED INTERVALS: (1 JSPF) - (4 holes)		(1 JSP 2.5F)
Niobrara "A" @ 6874', 78', 84', 88'		Niobrara "B" @ 6978' - 6992' (12 holes)
PERFORATING COMPANY	TYPE GUN	NO. SHOTS PER FOOT
Welex & Schlumberger	3 1/8" HSC	Code 11 @ 7173-7181 (32 holes)

PRODUCTION

PRODUCING FORMATION(S)		DEPTH, TOP OF FORMATION					
Niobrara "A" & "B"		6854'					
Code 11		7168'					
ZONES TO BE TESTED BEFORE ABANDONMENT:							
DATE FIRST PROD.	ZONE	BOPD	OIL GVTY.	BWPD	GAS MCFD.	GOR	BHP
FLOWING PRESSURE		CHOKE SIZE		SHUT IN PRESSURE			
TUBING:	CASING:			TUBING:		CASING:	
PUMPING							
SPM:		STROKE LENGTH:					

SCHEMATIC OF DOWNHOLE EQUIPMENT



PURCHASER:

OIL

GAS WELL GAS:

CSG. HD. GAS:

BRIEF RESUME ON MUD SYSTEM, LOST CIRCULATION ZONES, FISHING, DRILLING PROBLEMS, MUD COSTS.

Low solids gel mud system.

DRILLING DATA

Deviation: 1° @ 2763', 1/2° @ 4508', 1 1/2° @ 7613'

BRIEF RESUME ON PROCEDURE

Niobrara

- ① Isolated Codell w/ RBP
- ② Perforated Niobrara A & B zones.
- ③ Broke-down perfs w/ 750 gels, 7 1/2" to HCL, 2 3/8" tbg., pkr., rbp., & RCNB.
- ④ Pump-in tracer surveys indicated Nio. "A" is staying in zone & Nio. "B" is channeling down to Ft. Hays/Codell.
- ⑤ P.I.H. w/ 1" nom. tbg. string.

COMPLETION DATA

TUBING	SIZE	TYPE	GRADE
	1.315" (1" Nom.)	I.J.	
	NO. JOINTS	DEPTH	S.N. DEPTH
	235 (7156.36')	7181.06' KB	None
	WAS TUBING RUN OPEN ENDED		
	1.315" X 2 3/8" X.O.	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
PACKER	SIZE	MAKE	
	TYPE		SETTING DEPTH
RODS	SIZE	NO.	SIZE
	SIZE	NO.	SIZE
SUB SURFACE PUMP		MAKE	SIZE
PUMPING UNIT		MAKE	SIZE
PRIME MOVER		MAKE	SIZE/H.P.
SPECIAL EQUIPMENT			

REMARKS

THINK IT OUT! WRITE IT OUT!

DATE 2/10/85 WELL NO. 13-30 LEASE Monfort FIELD ST. MICHAEL

~~2~~ K.B. = 8' (2' wellhead)

1 it. $2\frac{3}{8}$
= 29.25'

4 sub
4 sub
10 sub

10 it. $2\frac{3}{8}$
= 306.77'

1.3 to $2\frac{3}{8}$ c.o.
= .70
225 it. s
of 1.315
= 6818.78'

bot. part
7181'

7181.50

20
TOTAL

33602

1	3285
2	2888
3	2793
4	3093
5	2780
6	3000
7	3428
8	3074
9	3336
10	30—
11	2925
12	
13	
14	
15	
16	
17	
18	
19	

(1") 11 new Jts. = 370' (thirds of 11)

(354.00) L.D. 11 Jts. $2\frac{3}{8}" + 10' + 4' + 4'$

(1") P. 4 10 Jts. = 337.58'

(2") P. 11 10' + 6' = 16.00' (Subs)
353.58'

string will be 0.44' shorter

Blm. & string @ 7181.06 KB

225 it. s of 1.315 = 6818.78

Land @ 7181.50 K.B.

11 it. s of $2\frac{3}{8}$ = 336.02

10, 4, 4' subs $2\frac{3}{8}$ = 18.00

sledge 1.3 to $2\frac{3}{8}$ = .70

K.B. = 8.00

TUBING SIZE AND CAPACITY

SIZE	WEIGHT (LB/FT)	ID	BBL/FT
1.900	2.90	1.610	.0025
2.063	3.25	1.751	.0030
2.375	4.70	1.995	.0039
2.875	6.40	2.441	.0058
2.875	8.60	2.259	.0050
3.500	9.30	2.992	.0087
3.500	10.20	2.922	.0083
3.500	12.95	2.750	.0074
4.500	12.75	3.958	.0152

CASING SIZE AND CAPACITY

OD	WEIGHT (LB/FT)	ID	BBL/FT
4 1/2	9.50	4.090	0.0162
4 1/2	10.50	4.052	0.0159
4 1/2	11.60	4.000	0.0155
4 1/2	12.60	3.958	0.0152
4 1/2	13.50	3.920	0.0149
4 1/2	15.10	3.826	0.0142
5	15.00	4.408	0.0189
5	18.00	4.276	0.0178
5	21.00	4.154	0.0168
5 1/2	14.00	5.012	0.0244
5 1/2	15.50	4.950	0.0238

OD	WEIGHT (LB/FT)	ID	BBL/FT
5 1/2	17.00	4.892	0.0232
5 1/2	20.00	4.778	0.0222
5 1/2	23.00	4.670	0.0212
7	17.00	6.538	0.0415
7	20.00	6.456	0.0405
7	23.00	6.366	0.0394
7	26.00	6.276	0.0383
7	32.00	6.094	0.0361
7	35.00	6.004	0.0350
7	38.00	5.920	0.0340

GUNTER OIL WELL SERVICE, INC.

P.O. BOX 896 • BRIGHTON, COLORADO 80601
• 303/659-5352 •

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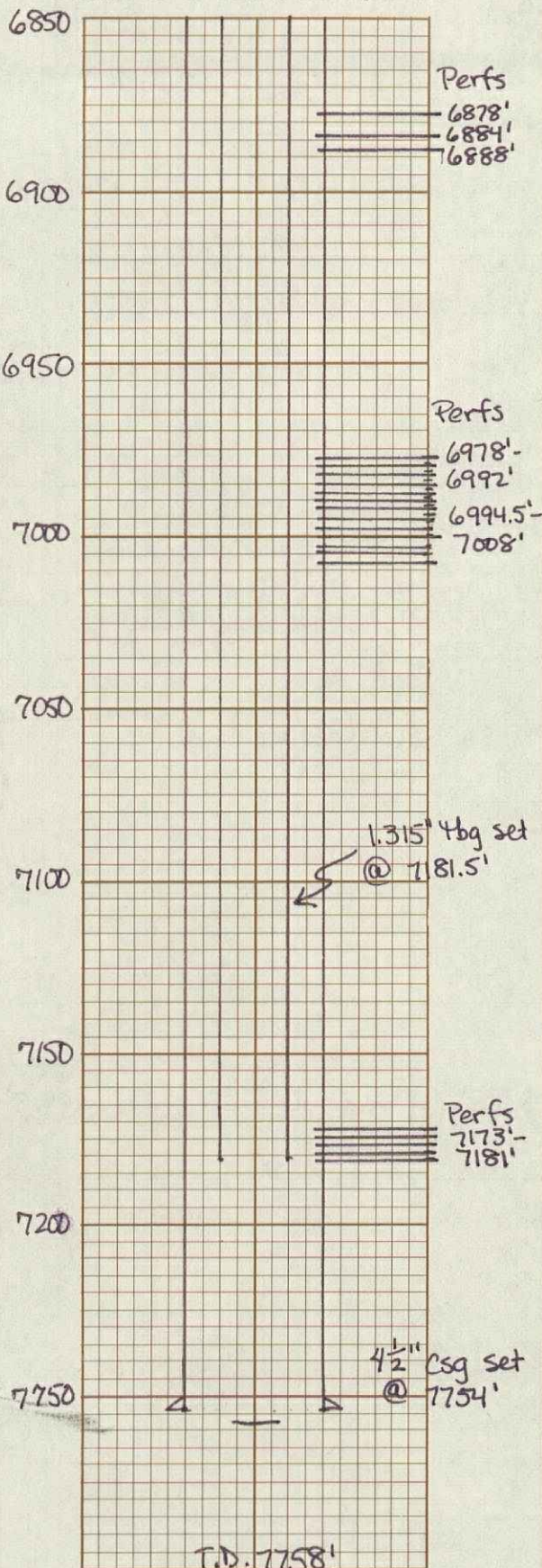
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There is a typo below, it says (4 holes) but only lists 3 for Nio "A" and forgot to list the top/hole perf at 6874' FYI.....

12 holes 1 sp 2 1/2'

Monfort #13-30

SCHEMATIC OF DOWNHOLE EQUIPMENT



PURCHASER:

OIL

GAS WELL GAS:

CSG. HD. GAS:

BRIEF RESUME ON MUD SYSTEM, LOST CIRCULATION ZONES, FISHING, DRILLING PROBLEMS, MUD COSTS.

Once again, the top Nio perf is missing at 6874', but this is likely a typo based on the first ticket!!

DRILLING DATA

BRIEF RESUME ON PROCEDURE

Packer?

COMPLETION DATA

TUBING	SIZE	1.315"		TYPE		GRADE	
	NO. JOINTS			DEPTH	7181.5' KB		
	WAS TUBING RUN OPEN ENDED						
				<input type="checkbox"/> YES		<input type="checkbox"/> NO	
PACKER	SIZE			MAKE			
	TYPE			SETTING DEPTH			
RODS	SIZE	NO.		SIZE	NO.		
	SIZE	NO.		SIZE	NO.		
SUB SURFACE PUMP		MAKE		SIZE	TYPE		
PUMPING UNIT		MAKE		SIZE			
PRIME MOVER		MAKE		SIZE/H.P.			

SPECIAL EQUIPMENT

REMARKS

MONFORT 13-30

NWSW SEC 30 6N 65W

Morning Report By Carl M. Swift

10-27-99 WEDNESDAY

Have Amen(Jeff) install temp. fence. Spot in Key Rig #30 (Russ Albert). To windy to rig up. Had Key truck(Jerry) spot in pump and tank. Have A&W fill tank with 120 bbls of fresh water. Crew drilled dead man holes. SDFN

Rig	\$236.00	Key
Temp. fence	\$137.00	Amen
Trucking	\$180.00e	Key
Water	\$130.00	A&W
Est daily cost	\$652.00	
Cum cost	\$652.00	

10-28-99 THURSDAY

Check well press.blow/430# Blow well down. Pump 30 bbls to kill well. ND well head. NU BOP. Run 94.83' and did not tag. Start to pull pipe, tubing full of water. Had A&W bring 80 bbls for flat tank. Rig up to fish plunger, come up 60' and sand line parted. Finish pulling pipe and tally out. Get swab bar and plunger out of pipe. Well had 230 jts. 2 3/8 eue, 4.7#, J-55 @ 7131.19 add to that 94.83 of tag jts. and SN/NC, and 10' KB for a total of 7237.42. RIH with 4 1/2 scraper from Weatherford(Kurt Herman) and 231 jts to work scraper from 6850' to 7150'. TOOH. SDFN.

Rig	\$1,806.72	Key
Water	\$140.30	A&W
Consultant	\$250.00	Key
Est daily cost	\$2,197.02	
Cum cost	\$2,849.02	

11-1-99 MONDAY

Rig up Bran-dex (Cliff). Run in with 3 1/8 D.M.L gun and collar locator. Gun loaded with 24 shots, 4 spf. 6'. Shot new holes between 7172'-7178'. Come out of hole with gun, all shots fired. Rig down Bran-dex. Rig up Cable (Jayson). Test and run, 4 1/2 x 2 3/8 Arrow set 1-x packer, s/n with sand deflector, 3 jts 2 3/8 eue, 4.7# N-80 tubing, X-over, 224 jts. 2 7/8 eue, 6.5# N-80 tubing, tested to 6500#. Rig down Cable. Set packer @ 7093' KB. Press test casing to 1000# 1/2 bpm. Pump down tubing at a rate of 1 1/2 bpm.@1500#. Istall frac value. A&W delivered 80 bbls of water for the flat tank. SDFN

Rig	\$1,935.00	Key
Tester	\$606.20	Cable
Water	\$110.00	A&W
Preforator	\$1,152.00	Bran-dex
Tools	\$1,623.00	Weatherford
Consultant	\$250.00	Key
Est daily cost	\$5,676.20	
Cum cost	\$8,525.22	

11-2-99 TUESDAY

Rig up BJ Services (Steve Devers) and refrac the Codell with 123,060 gal Vistar 20/22 ppt gel and 258,180 lbs 20-40 Jordan sand. The treatment had an average rate of 12.7 BPM and an average treating pressure of 4708 psi. The job was pumped to completion. The well was opened to flowback on a 14/64" choke 10 min after the end of the treatment. The well was turned over to Schneider Pumping to monitor flowback overnight. Had rig crew unload rods in Gilcrest yard, and load up 84 jts of 2 1/16 ij tubing and un load it at the Kersy plant.

ISDP	1985 psi	after 245 bbls
Frac gradient	.71 psi/ft	
Pressure	1563 psi	after 5 min
Leakoff	422 psi	in 5 min
ISDP	4030 psi	post frac
Net pressure gain	2045 psi	
Total load	2971 bbls	

Rig	\$712.50	Key
Frac	\$65,972.53	BJ Services
Flowback Services	\$300.00	Schneider Pumping
Trucking	\$448.75	Action
Hot Oilier	\$635.00	B&J
Disposal	\$292.00	Conquest
Frac tanks and water	\$4,481.80	A&W
Est. daily total	\$72,842.58	
Cum cost	\$81,367.80	