APR 0 9 1992

FROM CONFIDENTIAL

STATE CORPORATION COMMISSION OF KANSAS OIL & GAS CONSERVATION DIVISION	API RU. 15
WELL COMPLETION FORM	County Meade ~
ACO-1 WELL HISTORY DESCRIPTION OF WELL AND LEASE	SW NE NE Sec. 22 Twp. 33S Rge. 29 X West
Operator: License # 04782	4280' V Ft. North from Southeast Corner of Section
Name: Ensign Operating Co.	1000' V Ft. West from Southeast Corner of Section
Address 621 17th Street	(NOTE: Locate well in section plat below.)
Suite 1800	Lease Name Calhoon Well # 1-22
	Field Name Mohler N.E.
city/state/zip <u>Denver, Colorado 80293</u>	Producing FormationMorrow
Purchaser: Spot Sales	
Operator Contact Person: J. C. Simmons	Elevation: Ground 2534' KB 2545'
Phone (303) 293-9999	Total Depth 5900' PBTD 5861'
-	5280
Contractor: Name: Gabbert-Jones, Rig #8	PCRATION COMMISSION 4620
License: STATE COR	
Wellsite Geologist: John D. Pruit	R 2 9 19 91
Designate Type of Completion X New Well Re-Entry Workover	hchita, Kansas
Dil SWD Temp. Abd. X Gas sr Inj Delayed Comp. Dry Other (Core, Water Supply, etc.)	990
	330 PICE
If OMNO: old well info as follows: Operator:	23.00 20 20 20 20 20 20 20 20 20 20 20 20 2
Well Name:	Amount of Surface Pipe Set and Cemented at 1610 Feet
Comp. DateOld Total Depth	Multiple Stage Cementing Collar Used? Yes X No
Drilling Method:X _ Mud Rotary Air Rotary Cable	If yes, show depth set Feet
12/26/90 1/5/91 1/14/91	If Alternate II completion, cement circulated from
Spud Date Date Reached TD Completion Date	feet depth to w/ sx cmr.
Derby Building, Wichita, Kansas 67202, within 120 days 82-3-106 apply. Information on side two of this form will writing and submitted with the form. See rule 82-3-	be held confidential for a period of 12 months if requested in 107 for confidentiality in excess of 12 months. One copy of all this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP 4 Il temporarily abandoned wells. Any recompletion, workover or
All requirements of the statutes, rules and regulations promule with and the statements herein are complete and correct to t	gated to regulate the oil and gas industry have been fully complied he best of my knowledge.
Signature Conni Smith Title Sr Engineering Tech. Date 3	K.C.C. OFFICE USE ONLY F Letter of Confidentiality Attached C Wireline Log Received
subscribed and swort to before me this 6 day of Mar	C Drillers Timelog Received
NOTE OF ELECTION STEELS STEELS	KCC SWD/Rep NGPA COTHER

My Commission expires October 21, 1991
621 17th St. Suite 1800
Denver, Colorado 80293

(Specify)

	Ensign Op	erating Co.	Lease Name	Calh	oon	Well # .	1-22
Sec. <u>22</u> Twp. <u>3</u>	<u>35</u> Rge. <u>29</u>	□ _{East} - [X] _{West}	County	Mead	<u>. </u>		
interval tested, t	ime tool ope es, bottom ho	ops and base of formation and closed, flowing an le temperature, fluid rec a copy of log.	d shut-in pres	sures, wheth	ner shut-in pre	ssure read	hed static level,
Drill Stem Tests Taken (Attach Additional Sheets.)		☐ Yes ☐ No			Formation Desc	ription	
Samples Sent to Ge	logical Surv		•		□ Log □	Sample	7-
Cores Taken		Yes X No	Name		Тор	Bott	οπ
Electric Log Run (Submit Copy.)		X _{Yes} No	5	See Attac	hed		
See	Attached						•
			<u> </u>				
	Repor	CASING RECORD	New U		production, et	c	
Purpose of String	Size Hol Drilled	1	Weight Lbs./Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives 1/4#/Sx Floce
Surface		4 8-5/8	24	1610'	HLC Class "C"	450 150	2% CaCl2 2% CaCl2
Production	7-7/	8 4-1/2	10_5	5900'	Class "H"		3% KCl, .7% H 322, .25% CBL
		TION RECORD ptage of Each Interval Pe	erforated	Acid, (Amount an	Fracture, Shot, d Kind of Mater	Cement Sq ial Used)	
		742'		None			
4 JSPF							
				\ 			
	·						
							
4 JSPF	Size 2-3/8"	Set At 5743'	Packer At	Liner Run	☐ _{Yes} 🗶		CAA
4 JSPF	2-3/8"	5743'		İ			
4 JSPF	2-3/8" fuction Prod			as Lift -			

ORIGINAL RECEIVED STATE CORPORATION COMMISSION APR 0 9 1992

Ensign Operating Company #1-22 Calhoun. Page 2

MAR 2 9 1991 FROM CONTIDENTIAL

RELEASED

CONSERVATION DIVISION Wichita, Kansas

WELL HISTORY	: (con	tinued)
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<u>Date</u>	<u>Depth</u>	<u>Formation</u>	Operation
12-29-90	2390'		Drilling. Made 780' in 24 hrs. VIS 34, MW 9.1. Drilling with water WOB 35, RPM 80, PP 1250
12-31-90	3165'	Council Grove	Drilling. Made 780' in 24 hrs. VIS 33, MW 9.3, Cl 1300, pH 7.5 WL 50+, FC 3/32, LCM 3# WOB 40, RPM 80, PP 1250
01-01-91	4633'	Lansing	Drilling. Made 688' in 24 hrs. VIS 34, MW 9.2, LCM 4# WOB 40, RPM 80, PP 1250
01-02-91	5099'	Lansing	Circulating For Samples. Made 466' in 24 hrs. VIS 37, MW 9.1, Cl 5500, pH 9.8 WL 9.0, FC 1/32, LCM 4#
01-03-91	5323'	Marmaton	Drilling. Made 224' in 24 hrs. VIS 38, MW 9.0, Cl 4000, pH 9.5 WL 7.6, FC 1/32, LCM 3# WOB 40, RPM 75, PP 1250
01-04-91	5620'	Atoka	Drilling. Made 297' in 24 hrs. VIS 35, MW 9.0, LCM 4# WOB 40, RPM 75, PP 1250
01-05-91	5764'	Morrow	DST #1. Made 154' in 24 hrs. VIS 60, MW 8.6, Cl 3500, pH 9.3 WL 6.8, FC 1/32, LCM 4#
01-06-91	5900'	Mississippian	Logging. Made 136' in 24 hrs. VIS 52, MW 8.7, LCM 5#

FORMATION TOPS:

<u>Formation</u>	<u>Sample</u>	<u>Datum</u>	E. Log	<u>Datum</u>
Council Grove			3029'	(- 4841)
Shawnee Group			3867'	(-1322')
Heebner	4379'	(-1834')	4380'	(-1835')
Toronto	4404'	(-1859')	4406'	(-1861')
Lansing	4522'	(-1977 ')	4522'	(-1922')
Marmaton	5172'	(-2627')	5172'	(-2627')

ORIGINAL REGERVED STATE CORPORATION COMMISSION

Ensign Operating Company #1-22 Calhoun

MAR 2 9 1991

CONSERVATION DIVISION Wichita, Kansas

FORMATION TOPS: (Conti	inued)	Wichita,	Kansas	FROM CONFIDENTIAL		
<u>Formation</u>	<u>Sample</u>	Datum	E. Log	Datum		
Cherokee	5367'	(-2822')	5373'	(-2828')		
Atoka	5500'	(-2955')	5510'	(-2965')		
Morrow	5681'	(-3136')	5694	(-3149')		
Morrow Sand	5723'	(-3178')	5728'	(-3183')		
Mississippian	5792'	(-3247')	5801'	(-3256')		
Chester Tidal Bar	5836'	(-3291')	5843'	(-3298')		
Chester Shale Marker	5862'	(-3317')	5859'	(-3314')		

SHOW DESCRIPTION:

Page 3

<u>Formation</u>	<u>Interval</u>	Description
Marmaton	5178'-5189'	Limestone, light brown-buff, wackestone-packstone, fine to medium grain, micritic matrix, slightly to very chalky, oolites, tight to poor oomoldic and vuggy porosity, no visible porosity. 82 units gas. POOR SHOW.
Marmaton	5283'-5287'	Limestone, light brown, wackestone, micritic, dolomitic in part, chalky, shell fragments, spotty very light brown oil stain, tight to poor vuggy porosity, spotty bright gold fluorescence, no cut, no crush cut, fair ring. 50 units gas. POOR SHOW.
Atoka	5528'-5530'	Trace limestone, brown, packstone, fine grain, micritic matrix, oolites, tight to fair oomoldic and vuggy porosity, brown oil stain, bright yellow fluorescence, slow streaming cut, fair ring. No gas. POOR SHOW.
Atoka	5568'-5570'	Trace dolomite, brown, microcrystalline, dense, shell fragments, limy, brown oil stain, tight, bright yellow fluorescence, instant streaming cut, good ring. 5-7 units gas. POOR SHOW.
Atoka	5624'-5626'	Trace limestone, gray-dark brown, mottled, mudstone, micritic, shell fragments, slightly dolomitic, tight, spotty mottled gold fluorescence, very slow streaming cut, fair ring. No gas. POOR SHOW.

ORIGINAL P.O. Box 362 • Hays, Kansas 67601

RELEASED

Drill-Stem Test Data

FROM CONFIDENTIAL

	THOON #			Test No	1 Date	1/5/	⁷ 91
_	OPERATI	NG CO				พมหหมด	V SAND
Company Address621_17th	#1800	DENVER (:ni _80	293	Zone Tested		
					Elevation	. -	
Co. Rep./Geo. MR JOH							
Location: Sec. 22	Twp	335	R	ge29W	coMEAD	EState_	KANSAS
Interval Tested	5669-5	745		Brill Dine Siz	e	4.5" XH	
Anchor Length	76				- 1" <u> </u>		· 5//"
Top Packer Depth	5664				7 ⁷ /8"		
Bottom Packer Depth		-5745			2.7 Ft. Run		
Total Depth				Drill Collar —	- 2,25 Ft, Run		
Mud Wt							
Tool Open @ 3:59 A							
BLOW-PICKED							
Final Blow GAUGED							
Fillal Blow	<u> </u>				1		
Recovery Total Feet	130				Flush Tool?	RECE	VED
Rec10		CONDENS	SATED	MUD-2%CONZ		STATE CORPCHAT	ION CH. MISON
Rec115						O GAME GUI	9 10 01
Rec5						-	
						COMSERVA	10 - D7 - 5 0N 1. Kansas
A.	_ Feet of						
BHT124or					% Corrected	f Gravity	•API
RW@							
(A) Initial Hydrostatic Mud							
(B) First initial Flow Pressu	7	778.3	PSI	@ (depth)	RT /" "" 1 4		17652
(C) First Final Flow Pressur		796.3	PSI	AK1 Recorder No.		Range	3350
	•	006.7	PSI			w/Clock No	17639
(D) Initial Shut-in Pressure		000.7		W (UCPU)			
						Range	4575
(E) Second Initial Flow Pre	ssure			AK1 Recorder No.		Range	4575
(E) Second Initial Flow Pre (F) Second Final Flow Pres	ssure		PSI	AK1 Recorder No.	13615	Range	4575
(E) Second initial Flow Pre (F) Second Final Flow Pres (G) Final Shut-In Pressure	ssure	660.1	PSI PSI PSI	AK1 Recorder No. @ (depth) Initial Opening	13615 5761 30	Range	4575
 (D) Initial Shut-In Pressure (E) Second Initial Flow Pres (F) Second Final Flow Pres (G) Final Shut-In Pressure (H) Final Hydrostatic Mud 	ssure		PSI PSI PSI	AK1 Recorder No. @ (depth) Initial Opening Initial Shut-in	13615 5761 30 120	Range	4575
(E) Second initial Flow Pre (F) Second Final Flow Pres (G) Final Shut-In Pressure	ssure		PSI PSI PSI	AK1 Recorder No. @ (depth) Initial Opening	13615 5761 30 120 0	Range	4575

MR ROGER SELLS

1500

Our Representative

TOTAL PRICE \$ __

INVOICE

P.O. BOX 951046 DALLAS, TX 75395-1046

ORIGINA HALLIBURTON SERVICES PRO 1992

A Halliburton Company CONFIDENTIAL INVOICE NO. DATE

043187 12/27/1990 WELL LEASE NO./PLANT NAME WELL/PLANT LOCATION WELL/PLANT OWNER STATE CALHOON 1-23 MEADE KS SAME SERVICE LOCATION CONTRACTOR JOB PURPOSE TICKET DATE GABBERT & JONES 8 12/27/1990 CEMENT SURFACE CASING

LIBERAL ACCT, NO. **CUSTOMER AGENT** VENDOR NO. CUSTOMER P.O. NUMBER FILE NO. SHIPPED VIA 273943 | WILLIE HESKETT COMPANY TRUCK 08085

> ENSIGN OPERATING COMPANY P O BOX 937 GARDEN CITY, KS 67846

DIRECT CORRESPONDENCE TO:

FIRST OKLAHOMA TOWER 210 WEST PARK AVENUE SUITE 2050 OKLAHOMA CITY, OK 73102-5601

PRICE REF. NO.	DESCRIPTION	QUANTITY	U/M	UNIT PRICE [[AMOUNT
	EA - MID CONTINENT	1			,
000-117	EA - MID CONTINENT	2.3	MI	2.35	77.55
		1	ll	2.33	17,55
000-118	MILEAGE SURCHARGE-CEMENT-LAND	33		.40	13.20
		1	UNT		
001-016	CEMENTING CASING	1610	FT	945.00	945.00
		1	TNU		
030-018	CEMENTING PLUG 5W, PLASTIC TOP	1505 F8 5/8	IN	100.00	100.00
4 4 5	CASING SHOE - 8 5/8" 8RD THD.	RECRATION COMMISS	"EA		a e a · E··
16A 830.2171	CASING SHOE - 8 5/8" 8RD THD.	1	EA	161.00	161.00
830.2171 24A	INSERT FLOAT VALVE - 8 5/8"8Rb	IAR 2.9 1991 .1	EA	171.00	171.00
815.1950	2	الماليد يور ي	1 1	1/1.00	111.00
27	FILL-UP UNIT 7"- 8 5/8" CO	Suf yaltur oli sida Violita, futdas 1	EA	29.00	29.00
815.19414	N. Control of the con	Vicinia, name	1		-
40	CENTRALIZER 8-5/8" MODEL S-4	2	EA	53.00	106.00
807.9305	T I	1	!	}	
66	FASGRIP LIMIT CLAMP 8 5/8"	1	EA	13.75	13.75
807.64050	T I		'		
350 890.1080	HALLIBURTON WELD-A	1	LB	11.00	11.00
504-050	PREMIUM PLUS CEMENT	150	SK	2 00	1.062.00
	HALL. LIGHT -PREMIUM PLUS	150 450		7.08 6.29	1,062.00 2,830.50
507-210	FLOCELE	113	I I	1,30	146.90
509-406	ANHYDROUS CALCIUM CHLORIDE	13		25.75	334.75
500-307	MILEAGE SURCHARGE-CEMENT MAT.	1702.56	1 1	.10	170.26
500-207	BULK SERVICE CHARGE	634		1.10	697.40
500-306	MILEAGE CMTG MAT DEL OR RETURN	1702.56	TMI	.75	1,276.92
			۱ <u> </u>		
	TMIOTOE GURMONT		'	 -	0 4/2 22
	INVOICE SUBTOTAL	1	۱	\	8,146.23
			1		
		1	¹		
	**** CONTINUED	ON NEXT PAG	E **	***	
	TERMO		 +		

TERMS
INVOICES PAYABLE NET BY THE 20TH OF THE FOLLOWING MONTH AFTER DATE OF INVOICE. UPON CUSTOMER'S DEFAULT IN PAYMENT OF CUSTOMER'S ACCOUNT BY THE LAST DAY OF THE MONTH FOLLOWING THE MONTH IN WHICH THE INVOICE IS DATED, CUSTOMER AGREES TO PAY INTEREST THEREON AFTER DEFAULT AT THE HIGHEST LAWFUL CONTRACT RATE APPLICABLE BUT NEVER TO EXCEED 18*, PER ANNUM. IN THE EVENT IT BECOMES NECESSARY TO EMPLOY AN ATTORNEY TO ENFORCE COLLECTION OF SAID ACCOUNT. CUSTOMER AGREES TO PAY ALL COLLECTION COSTS AND ATTORNEY FEES IN THE AMOUNT OF THE UNPAID ACCOUNT.

ORIGINAL

INVOICE

273943 WILLIE HESKETT

ACCT. NO.

WELL LEASE NO./PLANT NAME

CUSTOMER AGENT

ORIGINAL HALLIBURTON SERVICE

RELEASED P.O. BOX 951046

INVOICE NO.

DALLAS, TX 75395-1046

A Hailiburton Company

WELL/PLANT

TION

12/27/1990 043187

DATE

WELL/PLANT OWNER

ENSIGN OIL & CALHOON 1-23 MEADE SERVICE LOCATION CONTRACTOR TICKET DATE JOB PURPOSE LIBERAL **GABBERT & JONES 8**

CEMENT SURFACE CASING 12/27/1990

FILE NO. VENDOR NO. CUSTOMER P.O. NUMBER SHIPPED VIA

08085 COMPANY TRUCK

ENSIGN OPERATING COMPANY P O BOX 937 GARDEN CITY, KS 67846

DIRECT CORRESPONDENCE TO:

FIRST OKLAHOMA TOWER 210 WEST PARK AVENUE SUITE 2050 OKLAHOMA CITY, OK 73102-5601

PRICE REF. NO.	DESCRIPTION	QUANTITY	U/M	UNIT PRICE	AMOUNT
	DISCOUNT-(BID) INVOICE BID AMOUNT				1,629.24- 6,516.99
	*-KANSAS STATE SALES *-SEWARD COUNTY SALE				235.96 55.54
		Stati	OER ¥80≪90P E	EIVED TION COMMISSION	
				0 1001	
		C	Wichia	.C. Chr.aUN . Konsas	
	LOE W/O				
	CAP APPROV	/AL			
				_	
				Colhoon	1-22
				KWACK	
	INVOICE TOTAL - PLEASE PAY THI	S AMOUNT =	=====	========>	\$6,808.49



INVOICE

ORIGINALLIBURTON SERVICES

REMIT TO:
RELEASED P.O. BOX 951046
DALLAS, TX 75395~1046

APR 0 9 1992

INVOICE NO. DATE

			A Halliburton Co	ompany	FROM CONF	IDENT	IAL 043603	01/0	6/1991
	WELL LEASE NO./PLANT NAME		WELL/F	WELL/PLANT LOCATION			WELL/	PLANT OWNE	R
CALHOON	1 1-22		MEADE			кs	SAME	NENTI	Commence of the Commence of th
SEF	ERVICE LOCATION CONTRA		RACTOR	CTOR JOB PURI			POSE		DATE
LIBERAL	•	G & J #8		CEMI	ENT PRODUCT	ION C	ASING	01/0	6/1991
ACCT, NO.	CUSTOMER A	GENT	VENDOR NO.		CUSTOMER P.O.	NUMBER	SHIPPE	O VIA	FILE NO.
273943	B.J. MCGRIFF						COMPANY	TRUCK	08403

ENSIGN OPERATING COMPANY P O BOX 937 GARDEN CITY, KS 67846 DIRECT CORRESPONDENCE TO:
FIRST OKLAHOMA TOWER
210 WEST PARK AVENUE
SUITE 2050
OKLAHOMA CITY, OK 73102-5601

PRICE REF. NO.	DESCRIPTION	QUANTITY	U/M	UNIT PRICE	AMOUNT	
		GONATITE	0	3,777 77402	7.1100/11	
	A - MID CONTINENT	3.6	M -	^ 35	1	
000-117	MILEAGE	30		2.35	70.50	
		1	UNT		1	
000-118	MILEAGE SURCHARGE-CEMENT-LAND	30	MI	.40	12.00	
		1	UNT	l	1	
001-016	CEMENTING CASING	5909		1,400.00	1,400.00	
}		1	UNT	1	1	
	SUPER FLUSH	OEIVED 18		74.00	1,332.00	
218-738	CLAYFIX II	DATION COMMISSION	GAL	1	40.00	
12A	GUIDE SHOE ~ 4 1/2" 8RDSTHDCORPC	1	EA	83.00	83.00	4
023.201			1	}		
593	3-WIPER L-D PLUG - 4 1/2" MAR	291001 1	EA	159.00	159.00	•
801.0373				1	· \	
		VATION DIVISION 1	EA	100.00	100.00	
801.03734		nta, Kansas			 	
	FLUIDMASTER CENTRALIZER 4 1/2"	10	EA	42.00	420.00	1
807.93504				ļ	1	
66	FASGRIP LIMIT CLAMP 4 1/2"	1	EA	9.60	9.60	•
807.64021						
350	HALLIBURTON WELB-A	1	LB	11.00	11.00	•
890.10802						
504-043	PREMIUM CEMENT	425	SK	6.85	2,911.25	٠
508-002	POTASSIUM CHLORIDE	550	LB	. 25	137.50	ť
507-775	HALAD-322	280	LB	5.95	1,666.00	4
500-959	SUPER CBL	106	LB	21.50	2,279.00	
500-307	MILEAGE SURCHARGE-CEMENT MAT.	1226.58	ι.	.10	122.66	
I	BULK SERVICE CHARGE		CFT	i i	467.50	
1	MILEAGE CMTG MAT DEL OR RETURN			Į l	919.94	
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1)	L	
	INVOICE SUBTOTAL				12,140.95	
	~ 1. 7 V A V M — M V M A V P 44 M					
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	**** CONTINUED	אר אורציד פאני מא אורציד פאני	F 4*	***		
		OH MEYI LAG			<u> </u>	
	TERMS INVOICES PAYABLE NET BY THE 20TH OF THE F	OLLOWING MONTH AFTER	DATE OF	F INVOICE, UPON	<u> </u>	

ORIGINAL

INVOICE

ORIGINALIBURTON SPORTS A Halliburton Grany JAN 2 2 1990

P.O. BOX 951046 DALLAS, TX 75395-1046

043603 01/06/1991

WELL LEASE NO./PLANT NAME ALC: METERNA WELL/PLANT OWNER MATE & GAS SAME ONFIDENTIA CALHOON 1-22 MEADE KS TICKÉT DÁTE " SERVICE LOCATION CONTRACTOR JOB PURPOSE LIBERAL G & J #8 CEMENT PRODUCTION CASING 01/06/1991 CUSTOMER P.O. NUMBER SHIPPED VIA FILE NO. ACCT, NO. **CUSTOMER AGENT** VENDOR NO. B.J. MCGRIFF COMPANY TRUCK 08403 273943 RELEASED

APR 0 9 1992

DIRECT CORRESPONDENCE TO:

ENSIGN OPERATING COMPANY

FIRST OKLAHOMA TOWER

P O BOX 937 GARDEN CITY, KS 67846 FROM CONFIDENTIALO WEST PARK AVENUE

SUITE 2050

OKLAHOMA CITY, OK 73102-5601

PRICE REF. NO.	DESCRIPTION	QUANTITY	U/M	UNIT PRICE	TAMOUNT
	DISCOUNT-(BID) INVOICE BID AMOUNT				2,428.18- 9,712.77
	*-KANSAS STATE SALES *-SEWARD COUNTY SALES	j .			311.58
			المراجعة المراجعة		
		STATE CORPC.		HOISSIMMAC	
		MAR	291	1991	
		COMSERV Wieh	VATION C Ita, Kan		
	LOE				
	W/O				
	APPROVAL			Calhoon RWacke	1-22
				Rwarke	#
	INVOICE TOTAL - PLEASE PAY THI	S AMOUNT ==	====	=======>	\$10,097.66

2