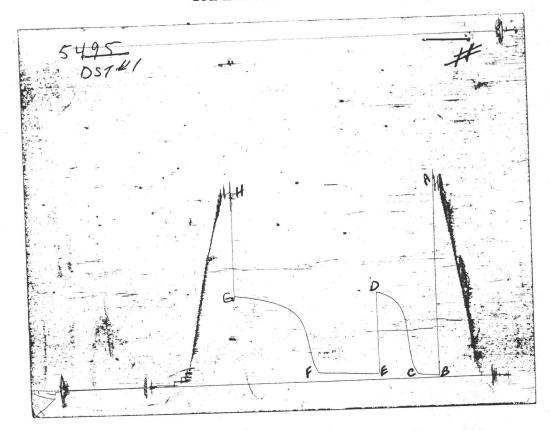
# TRILOBITE TESTING, L.L.C. P.O. Box 362 · Hays, Kansas 67601

### **Drill-Stem Test Data**

						1		7/16/02	
	CAMPBEL	L "A" #	2-16		Test N	Vo		Date 7/16/93	
ell Name	MCCOY P	ETROLEU	M CORPO	ORATION	N			Zone MARMATC	N
mpany	110 S M	ATN #50	0 WICI	HITA KS	5 67202		Elev	ation	
ddress	JOHN HA	STINGS		CT	MEETMAN DR	T.G RTG #1		Est Et of Pay	
o. Rep./Geo	16	т	21S	.0111.	_ Rge35W	Co	KEARI	NY State	KS
ocation: Sec		IWp							
		44	479-450	6	Drill Pi	ipe Size	4.5"	ХН	
			27		\/\/t Pi	ipe I.D 2.7 Ft. F	Run		-
nchor Length	pth		4474		Drill C	Collar — 2.25 Ft. F		267	
op Packer De	pth		4479		Mud \	\\/t		9.1	lb/Ga
	Depth				Wind	sity	42	9 . 1 Filtrate	15.2
otal Depth _						Jity			
	10 45 5	nitial C		DIOW D	UILT TO 4.	5"			
ool Open @_	10:45 P	Blow St	URFACE	BLOM B	OILI IO 4.				
ISI: H	BLED OFF. I					THE TALL TO	MIN		
inal Blow					TOM OF BUC	CKET IN /	J MIN		
FSI: I	BLED OFF	BLOW -	NO BLOW	W BACK					
	21								
_		220				Flush Tool? _	NO		
Recovery - 10	tal Feet								
80	0	Feet ofG	AS IN E	PIPE			-		
Rec	_	~	T TO BAT OF	ACCT AT	L-35% GAS	/ 65% OIL			
Pac	5	Foot of	HILLIA OI	1001 01					
^	-	766101	AC C UT	ZV OTT.	CUT MUD-1	5% GAS/30	% OIL/5	55% MUD	
9	5	Feet of G	AS & HV	AA OIT	CUT MUD-1	5% GAS/30	8 OIL/2	55% MUD	
Rec9	5	Feet of	AS & HV	VY OIL	CUT MUD-1:	5% GAS/30	8 OIL/S		
Rec9	5	Feet of	AS & HV	VY OIL	CUT MUD-1:	5% GAS/30	8 OIL/S		
Rec	5	Feet of — Feet of — Feet of —	SAS & HV	VY OIL	CUT MUD-1:	5% GAS/30	6 OIL/S		
Rec	5	Feet of — Feet of — Feet of —	AS & HV	37	CUT MUD-1:	6 72	% OIL/3	°F Corrected Grav	ity <u>36.2                                    </u>
Rec	5	Feet of — Feet of — Feet of —	AS & HV	37	CUT MUD-1:	6 72	% OIL/3	°F Corrected Grav	ity <u>36.2                                    </u>
Rec	5	Feet of Feet of Feet of Grade	avity——°F	37 Chlorides	CUT MUD-1:	@ 72 ppm Recovery	Chlc	°F Corrected Grav orides 7500	ity <u>36 • 2</u> •
Rec	.0 °F	Feet of Feet of Feet of : Gra	avity——°F	37 Chlorides	CUT MUD-1:	@ 72 ppm Recovery	Chlc	°F Corrected Grav orides 7500	ity <u>36 • 2</u> °,
Rec	5	Feet of Feet of Feet of : Gra	avity——°F	37 Chlorides	CUT MUD-1:	@ 72 ppm Recovery	Chlc	°F Corrected Grav orides 7500	ity <u>36 • 2</u> °,
Rec	0 °F	Feet of — Feet of — Grame Grame Grame Grame	avity°F	37 Chlorides	°API  AK1 Recorder No	@ 72 ppm Recovery 5495	Chlo	°F Corrected Grav orides 7500 Range —	ity <u>36.2</u> °/ ppm Syst
Rec	.0 °F	Feet of — Feet of — Grame Grame Grame Grame	avity——°F	37 Chlorides	CUT MUD-1:	@ 72 ppm Recovery 5495	Chlo	°F Corrected Grav orides 7500	ity <u>36 . 2</u>
Rec	0 °F	Feet of _G Feet of Feet of : Gra @2	avity°F	37 Chlorides  _ PSI _ PSI	°API  AK1 Recorder No	@ 72 - ppm Recovery 5495 4482	Chlo	°F Corrected Grav orides 7500 Range — w / Clock No—	ity <u>36.2</u> °, ppm Syst 4200 26199
Rec	drostatic Mud —	Feet of — Feet of — Grame Grame Grame Grame Grame Grame Grame	avity°F	37 Chlorides  _ PSI _ PSI	°API  AK1 Recorder No	@ 72 ppm Recovery 5495 4482	Chlo	°F Corrected Grav orides 7500 Range —	ity <u>36.2</u> °, ppm Syst 4200 26199
Rec	0 °F	Feet of — Feet of — Grame Grame Grame Grame Grame Grame Grame	avity°F	37 Chlorides  _ PSI _ PSI	—— °API  AK1 Recorder No  @ (depth) —  AK1 Recorder No	@ 72 - ppm Recovery  5495 4482  11038	Chlo	°F Corrected Grav orides 7500 Range — w / Clock No— Range —	ity 36.2 °, ppm Syst 4200 26199
Rec	drostatic Mud —	Feet of Feet of Graduation G	avity°F	37 Chlorides  — PSI — PSI	—— °API  AK1 Recorder No  @ (depth) —  AK1 Recorder No	@ 72 - ppm Recovery  5495 4482  11038	Chlo	°F Corrected Grav orides 7500 Range — w / Clock No— Range —	ity 36.2 °, ppm Syst 4200 26199
Rec	drostatic Mud —	Feet of Feet of Graduation G	avity°F	37 Chlorides  — PSI — PSI	—— °API  AK1 Recorder No  @ (depth) —  AK1 Recorder No	@ 72 - ppm Recovery  5495 4482  11038	Chlo	°F Corrected Grav orides 7500 Range — w / Clock No—	ity 36.2 °, ppm Syst 4200 26199
Rec	drostatic Mud — al Flow Pressure — aut-in Pressure —	Feet of	avity°F 2145.9 21.1 46.2	37 Chlorides  — PSI — PSI — PSI	CUT MUD-1:  AK1 Recorder No  @ (depth) —  AK1 Recorder No  @ (depth) —	@ 72 - ppm Recovery b. 5495 4482 c. 11038	Chlo	orides 7500  Range —  w / Clock No	ity 36.2 °, ppm Syst 4200 26199 5075
Rec	drostatic Mud —	Feet of	avity°F	37 Chlorides  — PSI — PSI — PSI	CUT MUD-1:  AK1 Recorder No  @ (depth) —  AK1 Recorder No  @ (depth) —	@ 72 - ppm Recovery b. 5495 4482 c. 11038	Chlo	°F Corrected Grav orides 7500 Range — w / Clock No— Range —	ity 36.2 °, ppm Syst 4200 26199 5075
Rec	drostatic Mud — al Flow Pressure — aut-in Pressure —	Feet of	avity°F 2145.9 21.1 46.2 974.5	37 Chlorides  PSI PSI PSI PSI	— °API  AK1 Recorder No  @ (depth) —  AK1 Recorder No  @ (depth) —  AK1 Recorder No	@ 72 - ppm Recovery b. 5495 4482 b. 11038 4503	Chlo	°F Corrected Grav         7500         Range         w / Clock No         Range _         w / Clock No         Range _         Range _	ity 36.2 °, ppm Syst 4200 26199 5075
Rec	drostatic Mud — al Flow Pressure — aut-in Pressure —	Feet of	avity°F 2145.9 21.1 46.2	37 Chlorides  — PSI — PSI — PSI	— °API  AK1 Recorder No  @ (depth) —  AK1 Recorder No  @ (depth) —  AK1 Recorder No	@ 72 - ppm Recovery b. 5495 4482 b. 11038 4503	Chlo	orides 7500  Range —  w / Clock No	ity 36.2 °, ppm Syst 4200 26199 5075
Rec9 Rec Rec Rec Rec  BHT11 RW  (A) Initial Hy  (B) First Initial  (C) First Fina  (D) Initial Sh  (E) Second I	drostatic Mud — al Flow Pressure — nut-in Pressure —	Feet of	avity°F 2145.9 21.1 46.2 974.5 61.9	37 Chlorides  — PSI — PSI — PSI — PSI — PSI	@ (depth) —  AK1 Recorder No  @ (depth) —  AK1 Recorder No  @ (depth) —  AK1 Recorder No  @ (depth) —	@ 72 -ppm Recovery  5495 4482	Chlo	*F Corrected Grav 7500	ity 36.2 °, ppm Syst 4200 26199 5075
Rec	drostatic Mud — al Flow Pressure — nut-in Pressure — Initial Flow Pressure Final Flow Pressure	Feet of	avity°F 2145.9 21.1 46.2 974.5	37 Chlorides  — PSI — PSI — PSI — PSI — PSI	— °API  AK1 Recorder No  @ (depth) —  AK1 Recorder No  @ (depth) —  AK1 Recorder No	@ 72 -ppm Recovery  5495 4482	Chlo	°F Corrected Grav         7500         Range         w / Clock No         Range _         w / Clock No         Range _         Range _	ity 36.2 °, ppm Syst 4200 26199 5075
Rec	drostatic Mud — al Flow Pressure — nut-in Pressure —	Feet of	avity°F 2145.9 21.1 46.2 974.5 61.9	37 Chlorides  — PSI — PSI — PSI — PSI — PSI	@ (depth) —  AK1 Recorder No  @ (depth) —  AK1 Recorder No  @ (depth) —  AK1 Recorder No  @ (depth) —	@ 72 - ppm Recovery b. 5495 4482 c. 11038 4503	Chlo	*F Corrected Grav 7500	36.2 °, ppm Syst 4200 26199 5075 19960
Rec9 Rec Rec Rec Rec BHT11 RW  (A) Initial Hy  (B) First Initial  (C) First Fina  (D) Initial Sh  (E) Second I  (F) Second I  (G) Final Sh	drostatic Mud — al Flow Pressure al Flow Pressure — Initial Flow Pressure Final Flow Pressure aut-in Pressure —	Feet of	avity°F 2145.9 21.1 46.2 974.5 61.9	37 Chlorides  — PSI	CUT MUD-1:  AK1 Recorder No  @ (depth) —  AK1 Recorder No  @ (depth) —  AK1 Recorder No  @ (depth) —  Initial Opening	@ 72 - ppm Recovery b. 5495 4482 b. 11038 4503	Chlo	*F Corrected Grav 7500	36.2 °, ppm Syst 4200 26199 5075 19960
Rec	drostatic Mud — al Flow Pressure — nut-in Pressure — Initial Flow Pressure Final Flow Pressure	Feet of	avity°F 2145.9 21.1 46.2 974.5 61.9 88.8	37 Chlorides  — PSI — PSI — PSI — PSI — PSI	CUT MUD-1:  AK1 Recorder No  @ (depth) —  AK1 Recorder No  @ (depth) —  AK1 Recorder No  @ (depth) —  Initial Opening	@ 72 - ppm Recovery b. 5495 4482 c. 11038 4503	Chlo	*F Corrected Grav 7500	36.2 °, ppm Syst 4200 26199 5075 19960
Rec	drostatic Mud — al Flow Pressure al Flow Pressure — Initial Flow Pressure Final Flow Pressure aut-in Pressure —	Feet of	2145.9 21.1 46.2 974.5 61.9 88.8 971.4	37 Chlorides  — PSI	CUT MUD-1:  AK1 Recorder No  @ (depth) —  AK1 Recorder No  @ (depth) —  AK1 Recorder No  @ (depth) —  Initial Opening	@ 72 - ppm Recovery b. 5495 4482 b. 11038 4503	Chlo	*F Corrected Grav 7500	36.2 °, ppm Syst 4200 26199 5075 19960

#### CHART PAGE



This is an actual photograph of recorder chart

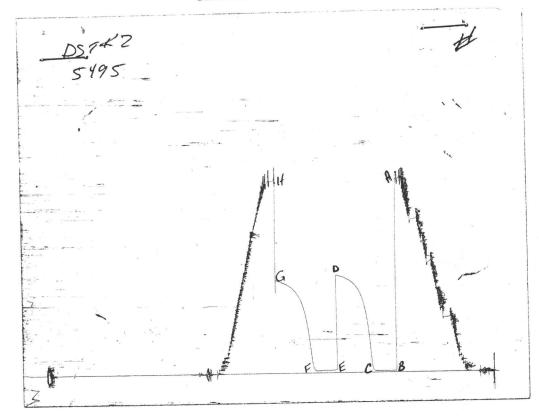
		FIELD READING	OFFICE READING
(A)	INITIAL HYDROSTATIC MUD	2143	2145.9
(B)	FIRST INITIAL FLOW PRESSURE	33	21.1
(C)	FIRST FINAL FLOW PRESSURE	45	46.2
(D)	INITIAL CLOSED-IN PRESSURE	971	974.5
(E)	SECOND INITIAL FLOW PRESSURE	67	61.9
(F)	SECOND FINAL FLOW PRESSURE	89	88.8
(G)	FINAL CLOSED-IN PRESSURE	971	971.4
(H)	FINAL HYDROSTATIC MUD	2122	2102

## TRILOBITE TESTING, L.L.C. P.O. Box 362 · Hays, Kansas 67601

### **Drill-Stem Test Data**

		The second secon	ill rest base			
	CAMPBELL "A	" #2-16	Test No	2	Date _7/17/9:	3
ell Name		LEUM CORPORAT	ION		Zone PAWNEE	
mpany		#500 WICHITA	KS 67202		Elevation 3177	
ldress	JOHN HASTIN	IGS Cont.	SWEETMAN DRLG	RIG #1	Est. Ft. of Pay	7
. Rep./Geo	16 Tv	21S	Rge35W	CO. I	KEARNY State	KS
cation: Sec	Tv	vp	кде	co		
		4550-4578	Drill Pipe Si	ze4	.5" XH	
terval Tested		28				
chor Length _		4545		_ 2.25 Ft. Run _	200	
•	h	4550	Mud Wt		9	lb/Ga
	Depth	4578	Viscosity	4	Filtrate _	10
otal Depth						
ool Open @	8:20 PM Initia	VERY WEAK SU	RFACE BLOW - I	DIED IN 10	MINUTES	
nal Blow	NO BLOW					
	Feet	)	Flu	ush Tool?1	NO	
Rec. ————————————————————————————————————	Feet o' Feet o' Feet o'	ff				
HT11	0°F @	Gravity°F Chlorid	°API	Recovery	°F Corrected Gravit Chlorides 7000	ppm Syst
	ostatic Mud				Range	
	Flow Pressure	21 1	@ (depth)	4553	w / Clock No	26199
(C) First Final F	Flow Pressure	21.1 PSI	AK1 Recorder No. —	11038	Range	5075
(D) Initial Shut	-in Pressure	1088.3 PSI	@ (depth)	4575	w / Clock No	19960
(E) Second Init	tial Flow Pressure	40.3 PSI	AK1 Recorder No. —		Range	
(F) Second Fin	nal Flow Pressure	40.3 PSI	@ (depth)		w / Clock No	
(G) Final Shut	-in Pressure	1037.8 PSI	Initial Opening	30	Final Flow	30
(H) Final Hydr	rostatic Mud	2130.6 PSI	Initial Shut-in	60	Final Shut-in	60
Our Represer	ntativeTOM	HORACEK				

#### CHART PAGE



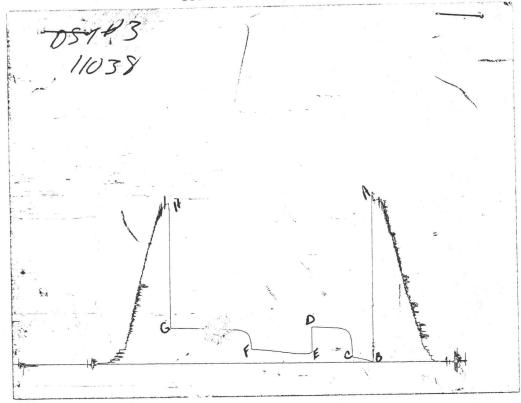
This is an actual photograph of recorder chart

		FIELD READING	OFFICE READING
(A)	INITIAL HYDROSTATIC MUD	2143	2145.9
(B)	FIRST INITIAL FLOW PRESSURE	22	21.1
(C)	FIRST FINAL FLOW PRESSURE	22	21.1
(D)	INITIAL CLOSED-IN PRESSURE	1087	1088.3
(E)	SECOND INITIAL FLOW PRESSURE	33	40.3
(F)	SECOND FINAL FLOW PRESSURE	33	40.3
(G)	FINAL CLOSED-IN PRESSURE	1034	1037.8
(H)	FINAL HYDROSTATIC MUD	2122	2130.6

## TRILOBITE TESTING, L.L.C. P.O. Box 362 · Hays, Kansas 67601

### **Drill-Stem Test Data**

Well Name MCC ompany 110 address JOH to Rep./Geo. 16 ocation: Sec. 17 ocation: Sec. 17 ocation: Sec. 16 ocation: Sec. 17 ocation: Sec. 18 ocat	S MAIN : N HASTING	LEUM CORI #500 WIG GS vp. 21S 4590-46 18 4585 4590 4608	PORATI CHITA Cont	KS 67202 SWEETMAI Rge.	2 N DRLG 35W	RIG	#1 Co	Zone Elevation EKEARNY  4.5" XH	3177 Est. Ft. of Pay State	TT  KS
ompany — 110  ddress — JOH  to. Rep./Geo. — 16  ocation: Sec. — — — — — — — — — — — — — — — — — — —	S MAIN  N HASTING  Two  S MAIN  Two  Blow  FF BLOW	#500 WIGGS  vp. 21S  4590-46  18  4585  4590  4608	CHITA  Cont	KS 67202 SWEETMAI Rge.	2 N DRLG 35W Drill Pipe S	RIG	#1 Co	Elevation E KEARNY 4.5" XH	3177 Est. Ft. of Pay State	KS
nterval Tested	N HASTING Tw  50 AMInitial Blow FF BLOW	GS  vp. 21S  4590-46  18  4585  4590  4608	08	Rge.	N DRLG 35W  Drill Pipe S	Size	#1 Co	KEARNY 4.5" XH	est. Ft. of Pay	KS
o. Rep./Geo	50 AMInitial Blow	4590-46 18 4585 4590 4608	08	Rge	Drill Pipe S	ize	Co	KEARNY 4.5" XH	State	KS
ocation: Sec interval Tested inchor Length op Packer Depth ottom Packer Depth otal Depth fool Open @ ISI: BLED (VER	50 AMInitial Blow	4590-46 18 4585 4590 4608	08		Drill Pipe S	Size		4.5" XH		
nterval Tested anchor Length op Packer Depth ottom Packer Depth otal Depth fool Open @ BLED ( VER	50 AMInitial Blow FF BLOW	4590-46 18 4585 4590 4608	8 0		M/t Pine I	D - 27F				
nchor Length op Packer Depth ottom Packer Depth otal Depth fool Open @ BLED ( VER	50 AMInitial Blow FF BLOW	18 4585 4590 4608			M/t Pine I	D - 27F				
nchor Length  pp Packer Depth  ottom Packer Depth  otal Depth  ool Open @ BLED (  VER	50 AMInitial Blow FF BLOW	4585 4590 4608			Wt. Pipe I.	D 2.7 F	+ Pun			
op Packer Depth ottom Packer Depth _ otal Depth ool Open @ ISI: BLED (	50 AMInitial Blow FF BLOW	4590 4608			Drill Collar		i. Null			
ottom Packer Depth otal Depth  ool Open @ ISI: BLED ( VER	50 AMInitial Blow FF BLOW	4608			Dilli Collai	– 2.25 F	t. Run		367	
otal Depth	50 AMInitial Blow FF BLOW	4608							8.9	lh/G
ool Open @ 11: ISI: BLED (	50 AMInitial Blow FF BLOW				Viscosity .			44	Filtrate	13.6
VER		SURFACE			V.5005.1,					
VER			BLOW	- BUILT	то 3	3/4"				
VER		- NO BLO	W BACI	K				8		
	T WILLIAM D									
	272							NO		
Recovery - Total Feet	372				F	lush Tool?	?	NO		
			_							
Rec	Feet of	FREE OI	ь					7.1		
Rec	FART OT									
	C4 -6	:								
Rec. —————— Rec. ————	Feet of									
Rec. —		f								
Rec. ————	reer or									
111	0.5	Carrita		<b>ο</b> ΔΡΙ	@_			°F Cor	rected Gravi	ty°
0.092		Gravity——— 90——°F	Chlorida	60000	nnn	n Recover	v	Chlorides	8500	ppm Syst
RW	@		Chloride	=3	PPII	111000101	,			
		2145.9		A1/4 D	dan Na	5495	j		Range	4200
(A) Initial Hydrostatic	1ud		PSI	AK1 Record	der No. —				- Narige	п
		10.3				4593		w/G	Clark Na	26199
(B) First Initial Flow Pre	ssure	10.3	PSI	@ (dep	oth)	4333		w/c	LIOCK NO	201)
		70.0				1107				E07E
(C) First Final Flow Pre	sure	72.3	PSI	AK1 Record	der No. —	1103	8		. Range —	5075
(-)										
(D) Initial Shut-in Press	ıre	480.9	PSI	@ (dep	oth)	4605	)	w/	Clock No.—	19960
(D) Illitial State Ill 1 1033	u1 C									
	_	125.6	PSI	AK1 Recor	der No	2			Range _	
(E) Second Initial Flow	Pressure		۲31	AKT NCCOL	uci 110. —					
		187.5		0/1-	- 41-1			w/	Clock No.	
(F) Second Final Flow	Pressure		PSI	@ (de)	ptn)				CIOCK 110.	
		190 3					30		Cinal Class	90
		490.3	PSI	Initial Op	pening				rinai riow	
(G) Final Shut-in Press	ure									
(G) Final Shut-in Press	ure	0111					60			120
,		2111.4	PSI	Initial S	hut-in		60	Fir	nal Shut-in _	120
(G) Final Shut-in Press (H) Final Hydrostatic		2111.4	PSI	Initial S	hut-in	1	60	Fi	nal Shut-in _	120



This is an actual photograph of recorder chart

		FIELD READING	OFFICE READING
(A)	INITIAL HYDROSTATIC MUD	2144	2145.9
(B)	FIRST INITIAL FLOW PRESSURE	14	10.3
(C)	FIRST FINAL FLOW PRESSURE	68	72.3
(D)	INITIAL CLOSED-IN PRESSURE	481	480.9
(E)	SECOND INITIAL FLOW PRESSURE	122	125.6
(F)	SECOND FINAL FLOW PRESSURE	190	187.5
(G)	FINAL CLOSED-IN PRESSURE	494	490.3
(H)	FINAL HYDROSTATIC MUD	2118	2111.4