

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION 1057252

Form ACO-1 June 2009 Form Must Be Typed Form must be Signed All blanks must be Filled

WELL COMPLETION FORM

WEII	HIGTORY	- DESCRIP	NFII &	IFAGE
				LLASL

OPERATOR: License #	API No. 15
Name:	_ Spot Description:
Address 1:	
Address 2:	Feet from North / South Line of Section
City: State: Zip:+	Feet from East / West Line of Section
Contact Person:	Footages Calculated from Nearest Outside Section Corner:
Phone: ()	
CONTRACTOR: License #	
Name:	
Wellsite Geologist:	
Purchaser:	
Designate Type of Completion:	Elevation: Ground: Kelly Bushing:
New Well Re-Entry Workover	Total Depth: Plug Back Total Depth:
New Weil Re-Entry Workover Oil WSW SWD SIOW Gas D&A ENHR SIGW OG GSW Temp. Abd. CM (Coal Bed Methane) Cathodic Other (Core, Expl., etc.): If Workover/Re-entry: Old Well Info as follows:	Amount of Surface Pipe Set and Cemented at: Feel Multiple Stage Cementing Collar Used? Yes No If yes, show depth set: Feel If Alternate II completion, cement circulated from: feet depth to: w/ sx cmt
Operator:	
Well Name:	Drilling Fluid Management Plan (Data must be collected from the Reserve Pit)
Original Comp. Date: Original Total Depth: Deepening Re-perf. Conv. to ENHR Conv. to SWI	Chloride content: ppm Fluid volume: bbls
Plug Back: Plug Back Total Depth	Location of fluid disposal if hauled offsite:
Commingled Permit #:	Operator Name:
Dual Completion Permit #:	Lease Name: License #:
SWD Permit #:	QuarterSecTwpS. R East 🗌 West
ENHR Permit #: GSW Permit #:	- Country Dormit #
Spud Date or Recompletion Date Date Reached TD Completion Date or Recompletion Date	-

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY
Letter of Confidentiality Received
Date:
Confidential Release Date:
Wireline Log Received
Geologist Report Received
UIC Distribution
ALT I II III Approved by: Date:

	Side Two	1057252
Operator Name:	Lease Name:	Well #:
Sec TwpS. R East West	County:	

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken (Attach Additional She	eets)	Yes No)	☐ Log Name	Formatior	n (Top), Depth an		Sample
Samples Sent to Geolog	gical Survey	Yes No)	Name			Тор	Datum
Cores Taken Electric Log Run Electric Log Submitted B (If no, Submit Copy)	Electronically	Yes No Yes No Yes No	>					
List All E. Logs Run:								
		CAS	ING RECORD	New	Used			
		Report all strings	set-conductor, surfa	ace, interm	nediate, productio	on, etc.		
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / F		Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose: Perforate	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
Protect Casing Plug Back TD				
Plug Off Zone				

Shots Per Foot		PERFORATION Specify For	RECOF	RD - Bridge P Each Interval F	lugs Set/Typ Perforated	e			ement Squeeze Record of Material Used)	Depth
TUBING RECORD:	Siz	ze:	Set At:		Packe	r At:	Liner R	un:	No	
Date of First, Resumed	Product	ion, SWD or ENHF	ł.	Producing M	lethod:	ping	Gas Lift	Other (Explain)		
Estimated Production Per 24 Hours		Oil Bb	s.	Gas	Mcf	Wate	er	Bbls.	Gas-Oil Ratio	Gravity
DISPOSITIO	ON OF (BAS:			METHOD	OF COMPLE	TION:		PRODUCTION INT	ERVAL:
Vented Sold		Jsed on Lease		Open Hole	Perf.	Uually (Submit /	Comp. ACO-5)	Commingled (Submit ACO-4)		
(If vented, Sul	bmit ACC)-18.)		Other (Specify)						

Conservation Division Finney State Office Building 130 S. Market, Rm. 2078 Wichita, KS 67202-3802 Kansas Corporation Commission

Phone: 316-337-6200 Fax: 316-337-6211 http://kcc.ks.gov/

Mark Sievers, Chairman Ward Loyd, Commissioner Thomas E. Wright, Commissioner Sam Brownback, Governor

June 06, 2011

Leon Rodak Murfin Drilling Co., Inc. 250 N WATER STE 300 WICHITA, KS 67202-1216

Re: ACO1 API 15-039-21126-00-00 Moore Unit 1-17 SW/4 Sec.17-01S-29W Decatur County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

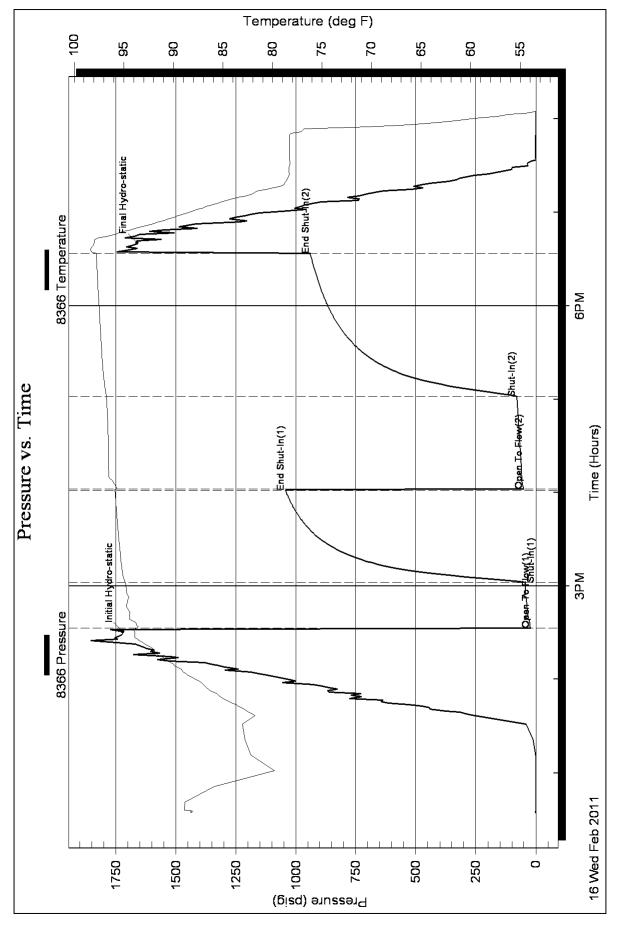
Respectfully, Leon Rodak

	DRILL STEM TE	S	TREP	ORT				
RILOBITE	Murfin Drilling Co., Inc.			Мс	ore Uni	t #1-17		
ESTING , IN				14/	/1s/29w ∣	Decaur K	S	
	Wichita, KS 67202			Job	Ticket: 04	10827	DST#:	1
	ATTN: Paul Gunzelman			Tes	t Start: 20)11.02.16 @	12:34:00	
GENERAL INFORMATION:								
Formation:LKC "A"Deviated:NoWhipstock:Time Tool Opened:14:32:30Time Test Ended:20:05:00	ft (KB)			Tes	ster:	Conventiona James Wind 46		le
Interval:3470.00 ft (KB) ToTotal Depth:3527.00 ft (KB) (Hole Diameter:7.88 inches H				Ref	erence Ele KB t	evations: to GR/CF:	2583.00 2578.00 5.00	ft (CF)
Serial #: 8366InsidePress@RunDepth:78.74 psigStart Date:2011.02.16Start Time:12:34:05	End Date:		2011.02.16 20:04:59	Capacity Last Cal Time On Time Off	ib.: Btm: 2	2011.02.16		
TEST COMMENT: IF: Blow built to ISI: Bled off, N FF: Blow start FSI: Bled off, N	b blow back ed at 3 min., built to 2 1/4"							
Pressure vs	. Time 3386 Temperature	_				RE SUMM		
1750			Time (Min.)	Pressure (psig)	Temp (deg F)	Annotatio	n	
	- 90		0	1720.75	93.86			
			2 32	21.39 44.28	93.66 94.84	· ·	low (1)	
	-i - M\\	Ter	91	1043.89		End Shut-li	n(1)	
			92	50.24		Open To F	low (2)	
	75	nperature (deg F)	151 243	78.74 939.19	96.74 97.78		n(2)	
		gF)	250	1661.55	97.97			
35 rm Sirrime (Hou 18 Wed Feb 2011 Time (Hou	s)							
Recovery					Ga	s Rates		
Length (ft) Description	Volume (bbl)				Choke (i	inches) Pressu	re (psig) G	as Rate (Mcf/d)
3.00 Mud 100%	0.01							
120.00 WM 60%m, 40%w 0.00 Oil Spots in Tool	0.59							
0.00 Oil Spots in Tool	0.00							
Trilobite Testing, Inc	Ref. No: 040827					2011.02.16	0.04.05.5	

Image: State of the state	
Wichita, KS 67202 Job Ticket: 040827 DST#:1 ATTN: Paul Gunzelman Test Start: 2011.02.16 @ 12:34:00 Aud and Cushion Information AtTN: Qushion Type: Oil API: de Aud Yope: Gel Chem Cushion Type: Oil API: de Aud Weight: 9.00 lb/gal Cushion Length: ft Water Salinity: 27000 pp Aud Weight: 9.00 lb/gal Cushion Volume: bbl bbl Vater Salinity: 27000 pp Vater Loss: 5.99 in³ Gas Cushion Pressure: psig salinity: 27000 pp Salinity: 1500.00 ppm Gas Cushion Pressure: psig salinity: 1500.00 ppm Recovery Information Aud 100% O.015 0.015 0.015 Balance Length Description Volume bbl 120.00 WM 60%m, 40%w 0.590 0.000 0.000	
ATTN: Paul Gunzelman Test Start: 2011.02.16 @ 12:34:00 Aud and Cushion Information Aud Yope: Gel Chem Oil API: de Aud Veight: 9.00 lb/gal Cushion Type: Oil API: de Aud Weight: 9.00 lb/gal Cushion Length: ft Water Salinity: 27000 pp Viscosity: 68.00 sec/qt Cushion Volume: bbl Vater Salinity: 27000 pp Vater Loss: 5.99 in ³ Gas Cushion Type: esistivity: psig Salinity: 1500.00 ppm Esistivity: ohn.m Gas Cushion Pressure: psig Salinity: 1500.00 ppm Ecovery Information Recovery Table Ecovery Table Length Description Volume 120.00 WMd 00% m, 40% w 0.590 0.000 0.00 Oil Spots in Tool 0.000 0.000	
Aud Type: Gel Chem Cushion Type: Oil API: de Aud Weight: 9.00 lb/gal Cushion Length: ft Water Salinity: 27000 pp //iscosity: 68.00 sec/qt Cushion Volume: bbl bbl Vater Salinity: 27000 pp Vater Loss: 5.99 in ³ Gas Cushion Volume: bbl bd Vater Salinity: 27000 pp Vater Loss: 5.99 in ³ Gas Cushion Type: Bil Vater Salinity: 27000 pp Salinity: 1500.00 ppm Gas Cushion Pressure: psig Salinity: 1500.00 ppm Filter Cake: 2.00 inches Ecovery Information Ecovery Table Volume Length Description Volume 13.00 Mud 100% 0.015 0.0015 120.00 WM 60%m, 40%w 0.590 0.000	
Aud Type: Gel Chem Cushion Type: Oil API: de Aud Weight: 9.00 lb/gal Cushion Length: ft Water Salinity: 27000 pp //iscosity: 68.00 sec/qt Cushion Volume: bbl bbl Vater Salinity: 27000 pp Vater Loss: 5.99 in ³ Gas Cushion Volume: bbl bd Vater Salinity: 27000 pp Vater Loss: 5.99 in ³ Gas Cushion Type: Bil Vater Salinity: 27000 pp Salinity: 1500.00 ppm Gas Cushion Pressure: psig Salinity: 1500.00 ppm Filter Cake: 2.00 inches Ecovery Information Ecovery Table Volume Length Description Volume 13.00 Mud 100% 0.015 0.0015 120.00 WM 60%m, 40%w 0.590 0.000	
Aud Weight: 9.00 lb/gal Cushion Length: ft Water Salinity: 27000 pp /iscosity: 68.00 sec/qt Cushion Volume: bbl bbl bbl bbl bbl Vater Loss: 5.99 in ³ Gas Cushion Type: bbl	g A Pl
/iscosity: 68.00 sec/qt Cushion Volume: bbl Vater Loss: 5.99 in³ Gas Cushion Type: Resistivity: ohm.m Gas Cushion Pressure: psig Salinity: 1500.00 ppm ilter Cake: 2.00 inches Recovery Information Recovery Table Length Description Volume 120.00 Mud 100% 0.015 120.00 WM 60%m, 40%w 0.590 0.00 Oil Spots in Tool 0.000	-
Resistivity: ohm.m Gas Cushion Pressure: psig Salinity: 1500.00 ppm Filter Cake: 2.00 inches Recovery Information Recovery Table Length Description Volume ft 0.00 0.015 120.00 WM 60%m, 40%w 0.590 0.00 Oil Spots in Tool 0.000	
Balinity: 1500.00 ppm Filter Cake: 2.00 inches Recovery Information Recovery Table Length Description Volume bbl 3.00 Mud 100% 0.015 120.00 WM 60%m, 40%w 0.590 0.00 Oil Spots in Tool 0.000	
Length Description Volume 3.00 Mud 100% 0.015 120.00 WM 60%m, 40%w 0.590 0.00 Oil Spots in Tool 0.000	
Recovery Information Recovery Table Length Description Volume 13.00 Mud 100% 0.015 120.00 WM 60%m, 40%w 0.590 0.00 Oil Spots in Tool 0.000	
Recovery TableLength ftDescriptionVolume bbl3.00Mud 100%0.015120.00WM 60%m, 40%w0.5900.00Oil Spots in Tool0.000	
Length ft Description Volume bbl 3.00 Mud 100% 0.015 120.00 WM 60%m, 40%w 0.590 0.00 Oil Spots in Tool 0.000	
3.00 Mud 100% 0.015 120.00 WM 60%m, 40%w 0.590 0.00 Oil Spots in Tool 0.000	
120.00 WM 60%m, 40%w 0.590 0.00 Oil Spots in Tool 0.000	
0.00 Oil Spots in Tool 0.000	
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:	
Laboratory Name: Laboratory Location:	
Recovery Comments: RW = .317 ohms @ 56.3 deg F	
Chlorides = 27,000 ppm	



14/1s/29w Decaur KS



Printed: 2011.02.16 @ 21:20:36 Page 3

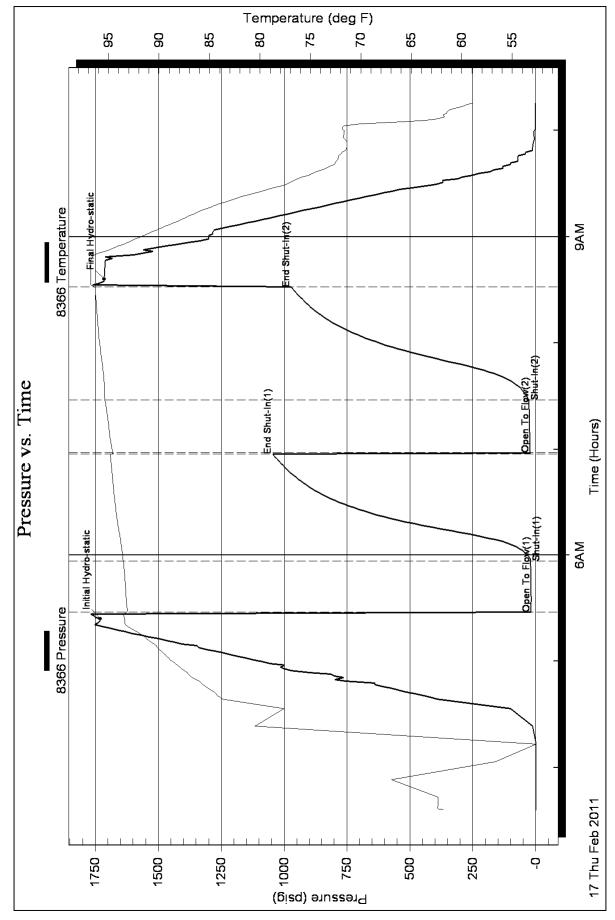
Ref. No: 040827

an-	RILOBITE	DRILL STEM T	ES	TREP	ORT				
		Murfin Drilling Co., Inc.			Мс	ore Uni	t #1-1	7	
	ESTING , INC	250 N. Water Suite 300 Wichita, KS 67202				1s/29w			".0
		ATTN: Paul Gunzelman				Ticket: 04		DST 17 @ 03:36:00	
GENERAL II Formation: Deviated: Time Tool Oper Time Test Ende		ft (KB)			Tes	ter:		itional Bottom Winder	Hole
Interval: Total Depth: Hole Diameter:	3517.00 ft (KB) To 35 3572.00 ft (KB) (TV 7.88 inchesHole				Ref	erence Ele KB t	evations	2578.	00 ft (KB) 00 ft (CF) 00 ft
Serial #: 83 Press@RunDe Start Date: Start Time:		@ 3518.00 ft (KB) End Date: End Time:		2011.02.17 10:15:59	Capacity Last Cali Time On Time Off	b.: Btm: :		8000. 2011.02. 2.17 @ 05:24: 2.17 @ 08:36:	00
TEST COMM	MENT: IF: Blow built to 1 ISI: Bled off, No I FF: Surface blow FSI: Bled off, No	blow back / from 19 min. till close							
	Pressure vs. 1	—			Р	RESSUF	RE SU	MMARY	
1750 1500 1200 100 1	Signification of the second of		- 66 Temperature (deg F) - 75 - 76 - 76 - 76 - 76 - 76 - 76 - 76	Time (Min.) 0 4 33 93 94 124 188 192	Pressure (psig) 1729.25 18.03 20.21 1045.06 21.66 25.86 973.35 1713.79		Initial Open Shut- End S Open Shut- End S	hut-In(1) To Flow (2)	
	Recovery	1	т			-	s Rate		·
Length (ft)	Description	Volume (bbl)	ļ			Choke (i	inches)	Pressure (psig)	Gas Rate (Mcf/d)
3.00 25.00	MCO 73%o, 25%m, 2%g OM 56%m, 41%o, 3%g	0.01							
			ł						
			ţ						
			ļ						
Trilobite Tes		Ref. No: 040828				Drinte	2011.0	2.17 @ 10:47	

		DRILL	STEM TEST F	REPORT	-		FLUID S	UMMAR
	ITE	Murfin Drilling	g Co., Inc.		Moore Un	it #1-17		
EST.	ING , INC	250 N. Wate	r Suite 300		14/1s/29w	Decatur K	5	
		Wichita, KS			Job Ticket: (DST#:2	
		ATTN: Paul	Gunzelman			2011.02.17 @ (03:36:00	
Mud and Cushion Info	ormation							
Mud Type: Gel Chem			Cushion Type:			Oil A PI:		deg API
Mud Weight: 9.00 I	b/gal		Cushion Length:		ft	Water Salinity	:	ppm
Viscosity: 54.00 s	-		Cushion Volume:		bbl			
Water Loss: 5.97 i			Gas Cushion Type:					
Resistivity: c Salinity: 1500.00 p	ohm.m		Gas Cushion Pressure	9:	psig			
	nches							
Recovery Information	n							
	· · ·		Recovery Table	1		Т		
	Length ft		Description		Volume bbl			
		3.00 MCC) 73%o, 25%m, 2%g		0.015	5		
	2	5.00 OM	56%m, 41%o, 3%g		0.123	3		
То	tal Length:	28.00 ft	Total Volume:	0.138 bbl				
Nu	m Fluid Samples	s: 0	Num Gas Bombs:	0	Serial #	:		
	boratory Name:		Laboratory Location	on:				
Re	covery Commer	nts:						



14/1s/29w Decatur KS



Printed: 2011.02.17 @ 10:47:52 Page 3

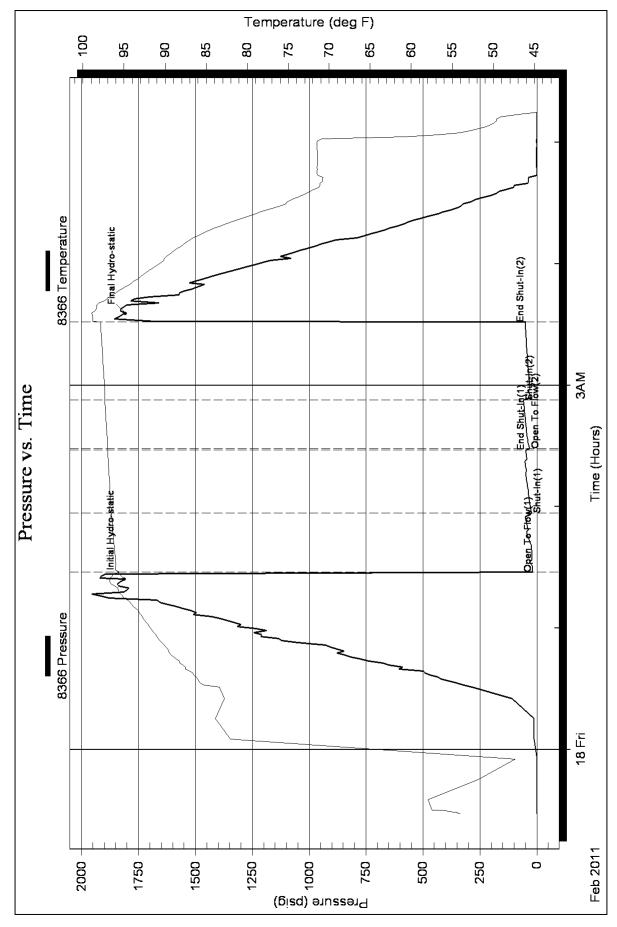
Ref. No: 040828

	DRILL STEM TE	S	TREPO	ORT				
RILOBITE	Murfin Drilling Co., Inc.			Мс	oore Uni	t #1-17		
ESTING , INC	250 N. Water Suite 300 Wichita, KS 67202				/ 1s/29w Ticket: 04		(S DST#:3	
	ATTN: Paul Gunzelman)11.02.17 @		
Serial #: 8366InsidePress@RunDepth:58.37 psigStart Date:2011.02.17Start Time:23:28:05TEST COMMENT:IF: 1/4" Blow at	TVD) le Condition: Fair @ 3621.00 ft (KB) End Date: End Time: open, dead at 16 min.		2011.02.18 05:14:29	Tes Uni	ster: t No: ference Ele KB t KB t Btm:	James Windo 46 evations: to GR/CF:	2583.00 2578.00 5.00 8000.00 2011.02.18 @ 01:24:00	ft (KB) ft (CF) ft
ISI: No blow bao FF: No blow FSI: No blow ba	ck						4.51/	
Pressure vs.	8386 Temperature		Time	Pressure	RESSUF	RE SUMM		
			(Min.)	(psig)	(deg F)			
	- 90		0 4	1811.18 18.24	96.72 95.48	-		
	- 86		33	23.42	96.54	Shut-In(1)		
		Tem	64 65	48.46 32.21		End Shut-Ir Open To Fl		
		nperature (deg F)	89	58.37	97.34	-	10W (2)	
		(deg F)	127 132	50.59 1807.72	97.85 98.91	End Shut-Ir Final Hydro		
18 Fri Feb 2011 Time (Hous	JAM)							
Recovery					Ga	s Rates		
Length (ft) Description	Volume (bbl)				Choke (i		re (psig) Gas	Rate (Mcf/d)
2.00 Mud 100%	0.01		ı		!		ł	
Trilobite Testing, Inc	Ref. No: 040829						@ 08:09:46	

RILOBITE	DRI	ILL STEM TEST REPORT		F	LUID SUMMAR
	Murfin	Drilling Co., Inc.	Moore Uni	it #1-17	
ESTING , INC		Water Suite 300 a, KS 67202	14/1s/29w Job Ticket: 04	Decatur KS	DST#:3
	ATTN:	Paul Gunzelman		011.02.17 @ 23:	:28:00
Mud and Cushion Information					
Mud Type: Gel Chem Mud Weight: 9.00 lb/gal Viscosity: 65.00 sec/qt Water Loss: 5.96 in ³ Resistivity: ohm.m Salinity: 1500.00 ppm Filter Cake: 2.00 inches		Cushion Type: Cushion Length: Cushion Volume: Gas Cushion Type: Gas Cushion Pressure:		Oil API: Water Salinity:	deg API ppm
Recovery Information					
Leng	th	Recovery Table Description	Volume	T	
ft			bbl		
Total Length:	2.00	Mud 100% 2.00 ft Total Volume: 0.010 bbl	0.010	Į	
Num Fluid Sam Laboratory Nar Recovery Com	ne:	Num Gas Bombs: 0 Laboratory Location:	Serial #:		



14/1s/29w Decatur KS



Printed: 2011.02.18 @ 08:09:48 Page 3

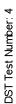
Ref. No: 040829

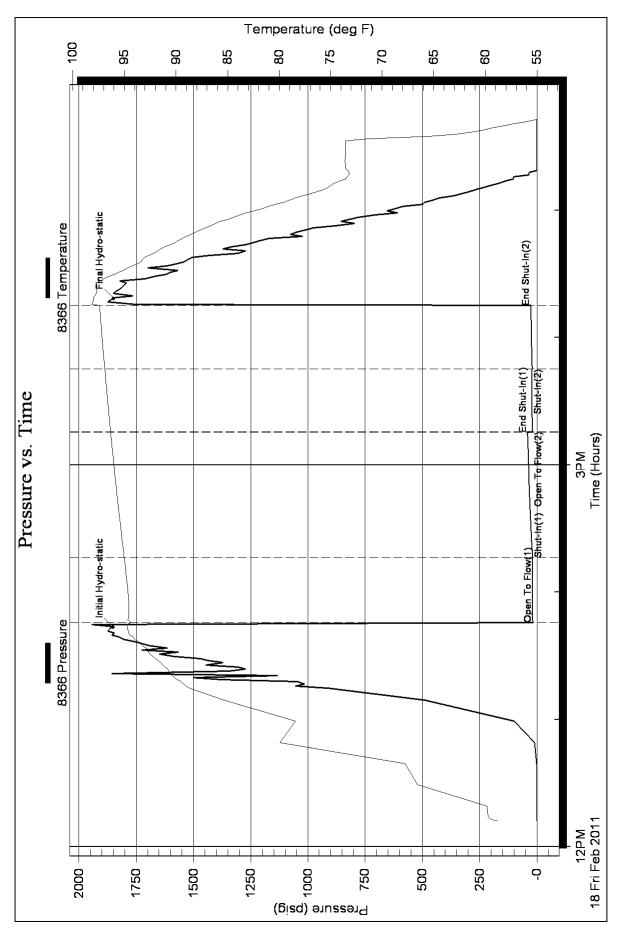
	DRILL STEM TES	T REP	ORT				
RILOBITE	Murfin Drilling Co., Inc.		Мо	ore Uni	t #1-17		
ESTING , INC.	250 N. Water Suite 300 Wichita, KS 67202		-		Decaur I	-	<i>u. a</i>
	ATTN: Paul Gunzelman			Ticket: 04 t Start: 20	0830)11.02.18 (DST @ 12:12:00	
GENERAL INFORMATION: Formation: LKC "K"	(L. (1/D)			4 T	Oti		
Deviated:NoWhipstock:Time Tool Opened:13:45:30Time Test Ended:17:43:00	ft (KB)		Tes	ter:	Conventior James Win 46		HOIE
Interval:3681.00 ft (KB) To37Total Depth:3718.00 ft (KB) (TVHole Diameter:7.88 inches Hole			Ref	erence Ele KB t	evations: o GR/CF:	2578.	00 ft (KB) 00 ft (CF) 00 ft
Serial #: 8366 Inside Press@RunDepth: 20.65 psig Start Date: 2011.02.18 Start Time: 12:12:05	 3682.00 ft (KB) End Date: End Time: 	2011.02.18 17:42:59	Capacity Last Cali Time On Time Off	b.: Btm: 2	2011.02.18 2011.02.18	2011.02. 3 @ 13:43:	30
TEST COMMENT: IF: Blow built to 1 ISI: Bled off, No B FF: No blow FSI: No blow bac	blow back						
Pressure vs. T	—		PI	RESSUR	RE SUMN	/IARY	
2000 19986 Pressure	8380 Tempeature 100 	Time (Min.) 0	Pressure (psig) 1850.47 17.77	Temp (deg F) 94.71	Annotat	ro-static	
	- 96	2 33 92	19.25 40.02		Shut-In(1 End Shut) -ln(1)	
	- 75 (Germanian Control of Contro	92 122	19.72 20.65	96.32 96.89	Open To Shut-In(2		
		152 155	25.91 1848.59	97.41 98.01	End Shut Final Hyd	-ln(2)	
	admitst@Eadmitst@66						
12PM 3PM 18 Fri Feb 2011 Time (Hours)							
Recovery			ļ	Ga	s Rates		
Length (ft) Description	Volume (bbl)			Choke (i		sure (psig)	Gas Rate (Mcf/d)
2.00 Mud 100% w /trace of oil	0.01						
Trilobite Testing. Inc	Ref. No: 040830						:51 Page 1

RILOB		RILL STEM TEST REPOR	Т	FI	LUID SUMMARY
	Mur	fin Drilling Co., Inc.	Moore Un	it #1-17	
) N. Water Suite 300 hita, KS 67202	14/1s/29w Job Ticket: 0	Decaur KS 40830	DST#:4
	AT	TN: Paul Gunzelman		011.02.18 @ 12: ⁻	
Mud and Cushion Info	ormation				
Salinity: 1500.00 p	sec/qt n³ ohm.m	Cushion Type: Cushion Length: Cushion Volume: Gas Cushion Type: Gas Cushion Pressure:		Oil API: Water Salinity:	deg API ppm
Recovery Information	1				
		Recovery Table	_	_	
	Length ft	Description	Volume bbl		
	2.0	0 Mud 100% w /trace of oil	0.010)	
To	tal Length:	2.00 ft Total Volume: 0.010 bbl			
Re	covery Comments:				



14/1s/29w Decaur KS





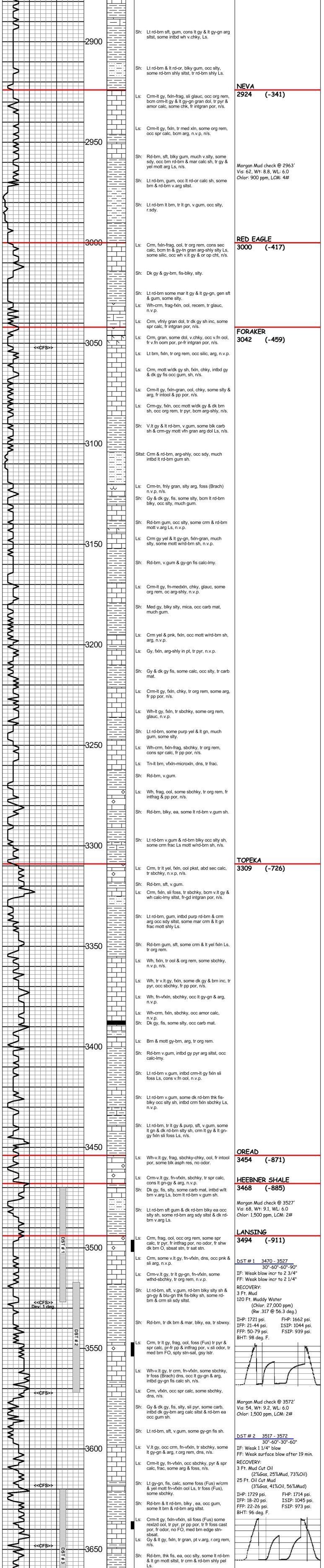
Printed: 2011.02.19 @ 08:24:51 Page 3

Ref. No: 040830

	-1232	3815	-1232	3815	Total Depth
	-1155	3738	-1157	3740	Base/Kansas City
	-1101	3684	-1102	3685	Stark Shale
	-911	3494	-911	3494	Lansing
	-885	3468	-887	3470	Heebner Shale
	-726	3309	-729	3312	Topeka
	-463	3046	-461	3044	Foraker
	-341	2924	-341	2924	Neva
	+278	2305	+279	2304	Base/Anhydrite
Comp Sonic	+311	2272	+311	2272	Stone Corral
Dual Induction		TOP	DATUM	TOP	NAME
Comp. Neutron Density	SAMPI F	SA	104		FORMATION
Log-Tech, Inc.		Ĩ	Paul Gunzelman	Pau	GEOLOGIST ON WELL
ELECTRICAL SURVEYS:	3815	T0	OM 2848	ISION FR	GEOLOGICAL SUPERVISION FROM 2848
	3815	TO	2850	ROM	SAMPLES EXAMINED FROM
Production None	3815	T0	2850	Z	SAMPLES SAVED FROM
	3815	TO	2850	ROM	DRILLING TIME KEPT FROM
		Chemica	MUD TYPE		MUD DISPLACED 2769
Conductor None	. 2011	D 19 Feb	COMPLETED 19 Feb.		COMMENCED 12 Feb. 2011
CASING RECORD	IO <u>.</u> 8	RIG NO.	Murfin Drilling Company	n Drilling	CONTRACTOR
				P	
FROM K.B.	łs	KANSAS	_STATE	UR	COUNTY DECATUR
ALL MEASUBEMENTS	29W	RGE 2		^{SP} 1S	SEC. 17 TWSP
GL 2578 Ft.			00 FWL	SL & 23	LOCATION 2600 FSL & 2300 FWL
KB 2583 Ft.			# 1-17		LEASE MOORE UNIT # 1-17
ELEVATIONS	, INC.	MPANY	MURFIN DRILLING COMPANY, INC		OPERATOR MURFI
``	REPORT		GEOLOGIST'S	GEOI	
		•			
	NY, INC.	LING COMPANY.			
		i.		,	

REMARKS					
API 15-039-21126-00-0	0				
Drilling Fluids: Morgan Mu			nes	s, engineer)	
Drill Stem Testing: Trilobite		Inc.			
Gas Trailer: No Gas Traile	r				
Reserve Pit Chlorides:					
DRILL TIME (MIN/FT)	DEPTH	LITHOLOGY	SHOWS	SAMPLE DESCRIPTIONS	REMARKS
	12250 r				
	12230 []		
4					
E					STONE CORRAL
			1		2272 (+311)
>					
	2200				
5	2300				BASE/ANHYDRITE
					2305 (+278)
2					
	L				
	¹ 2350 ^L		J	L	1

2850	Sh:	Rd-brn & It rd-brn, sft, gum, cons intbd rd- brn It gy & crm sltst, some v.lmy, occ sdy.	2:01 AM, 15 February 2011
	Sh:	Rd-brn v.gum, & rd-or thk fis.	
	Ls:	Crm, fxln-gran, occ slty, tr sbchky, n.v.p.	



						DST # 3 3620 - 3686
				Sh:	Rd-brn, blky, tr slty, some gum.	30"-30"-30"-30" IF: Weak surface blow, died in 16 min. FF: No blow
				Ls:	Crm, vfxln, tr org rem, some spr calc & pyr, tr pr pp por, sli odor, tr v.lt FO, spty	RECOVERY: 2 Ft. Mud
				Ls:	stn. Crm-lt gy-gn, fxln, arg, tr org rem, n.v.p.	IHP: 1811 psi. FHP: 1808 psi. IFP: 18-23 psi. ISIP: 48 psi.
	< <cf\$>></cf\$>			Sh:	Dk gy, fis, slty, pyr, cons carb mat, bcm rd-brn & rd-or thk fis-blky ea, tr slty.	FFP: 32-58 psi. FSIP: 51 psi. BHT: 98 deg. F.
-		DST #	2700	Sh	Lt rd-brn, v.gum, some It brn v.slty sh, occ	
Z.		#	-3700		rd-or & dk rd-brn thk fis sh. Lt gy, fxln, tr pel, sli ool, tr org rem & pyr,	
É					some spr calc, pr pp por, pr-fr intfrag por, faint odor, film shw O, spty It brn stn, tr sbsat stn.	
\geq	<<¢F\$>>				Crm-lt gy, fxln, sli foss (Fus) tr sbchky, occ arg, n.v.p. Rd-brn, tr lt brn, blky, ea, occ slty & gy-gn	
Ś					fis sli pyr. Wh-crm, fxln-gran, some sbchky, tr arg,	Morgan Mud check @ 3718' Vis: 54, Wt: 9.3, WL: 6.0 Chlor: 1,500 ppm, LCM: 2#
				Ls:	n.v.p. Wh-v.lt gy, some pnk & yel, gran, slty, occ arg, tr org rem, n.v.p.	
				Sh:	Rd-brn, tr mar, thk fis, ea, some gn yel &	BASE/KANSAS CITY 3738 (-1155)
			-3750	Ls:	brn vgt slty sh Lt gy, some crm, v.lt rd-brn & pnk, gran- fxln, tr sbchky, occ slty, arg in pt, n/s.	
				Sh:	Lt rd-brn, v.gum, r.slty.	DST # 4 3681 - 3718 30"-60"-30"-30" IF: Weak surface blow, died in 30 min.
				Sh:	Lt gy, some It gn-gy & It rd-brn, sft v.gum, some v.chky Ls.	FF: No blow RECOVERY:
<u>}</u>				Ls:	Lt gy & It gn-gy, fn-vfxln dns, frac, some arg-shly, n/s.	2 Ft. Mud w/oil spots IHP: 1850 psi. FHP: 1849 psi.
2				Sh	Lt rd-brn & v.lt gy, gum v.sft, tr rd-brn shly	IFP: 18-19 psi. ISIP: 40 psi. FFP: 20-21 psi. FSIP: 26 psi. BHT: 97 deg. F. F
>					Ls.	
				Sh:	Rd-brn, some purp & mar, blky, ea, occ slty, intbd It gy & crm fxln dns smwt arg	
S S			-3800		Ls, n /s.	
\leq						
	< <cfs>> Dev: 1 deg.</cfs>					TOTAL DEPTH 3815 (-1232)
						1:13 AM, 19 February 2011
			-3850			
			-0000			
			-3900			

Lease: MOORE UNIT # 1-17
Location: <u>2600 FSL & 2300 FWL</u> SEC. <u>17</u> TWSP <u>1S</u> RGE <u>29W</u>
County: <u>DECATUR</u> State: <u>KANSAS</u>

		26	Moore U 600' FSL Sec. 17-T	DCI Init #1-17 2300' FWL 1S-R29W 3' KB			#1 E SE S Sec. 8-T	9 Drlg. Co. Brady SE SE 1S-R29W 5' KB	
Formation	Sample Top	Datum	Ref	Log tops	Datum	Ref	Log tops	Datum	7
Anhydrite	2272	+311	+16	2272	+311	+16	2310	+295	
B/Anhydrite	2305	+278	+15	2304	+279	+16	2342	+263	
Neva	2924	-341	+22	2924	-341	+22	2968	-363	
Topeka	3309	-726	+21	3312	-729	+18	3352	-747	-
Heebner	3468	-885	+18	3470	-887	+16	3508	-903	-
Lansing	3494	-911	+16	3494	-911	+16	3532	-927	-
Lansing D	3547	-964	+23	3547	-964	+23	3592	-987	
Lansing G	3598	-1015	+25	3597	-1014	+26	3645	-1040	
Lansing H	3634	-1051	+25	3634	-1051	+25	3681	-1076	-
Stark	3683	-1100	+25	3685	~1102	+23	3730	-1125	1
BKC	3738	-1155	+24	3740	-1157	+22	3784	-1179	
RTD	3815	-1232					4200	-1595	
LTD				3815	-1232		4197	-1592	-

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NV0 C

Feb 12, 2011

Invoice Date:

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Page:

126199

Invoice Number:

Voice: (785) 483-3887 Fax: (785) 483-5566 Bill To: Murfin Drtg. Co., Inc. 250 N. Water STE #300 Wichita, KS 67202

Federal Tax I.D.#: 20-5975804

Amount 2,703.75 6,108.72 1,018.00 385.00 6,108.72 349.20 434.40 995.50 5,885.85 222.87 Service Date Due Date 3/14/11 Payment Terms Net 30 Days 1,018.00 7.00 18.10 15.45 58.20 2.40 Unit Price Feb 12, 2011 Q ILA Camp Location Well Name# or Customer P.O. Description Mileage 181 sx @.10 per sk per mi Payment/Credit Applied Total Invoice Amount Moore Unit #1-17 Oakley Sales Tax Pump Truck Mileage TOTAL Subtotal Class A Common Handling Chloride Surface ALL PRICES ARE NET, PAYABLE 30 DAYS FOLLOWING DATE OF 1NVOICE. 1,1/2% CHARGED THEREAETER. IF ACCOUNT VS CURRENT, TAKE DISCOUNT OF ONLY IF PAID ON OR BEFORE Mar 9, 2011 Job Location \$ 7060 04 ltem SER SER SER Customer ID MAT MAT SER KS1-01 Murfin 175.00 6.00 181.00 55.00 1.00 55.00 Quantity

ALLIED CEMENTING	TING CO., LLC. 039778
,665	SERVICE POINT:
DATE DATE MOORE 412T MOORE 412T LEASE OLD OR NEW (Circle one) Note 20 2000	CALLED OUT ON LOCATION JOB START JOB FINISH AN S:30 PM 6:00 PM 6:30 PM (ZN 1/NJ - 2/2 W - 25 - 2/2 COUNTY STATE XS
CONTRACTOR MURE SLEGE LEGE CONTRACTOR MURE SIZE ILL T. 220 HOLE SIZE ILL Z20 CASING SIZE Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	OWNER SAMPE CEMENT SAMP CEMENT SAMP AMOUNT ORDERED 3/6/2 AMOUNT ORDERED 3/6/2 AMOUNT ORDERED 3/6/2 OCOMMON 275 0 J75 SKS COM 3/6/2 POZMIX 0 25/2 POZMIX 0 5/4/9 CHLORIDE 6 5/4/9 ASC 0 5/4/9
EQUIPMENT PUMPTRUCK CEMENTER 1 E K V # 4/3/ HELPER 1 A K S V BULK TRUCK DRIVER MILKE BULK TRUCK BULK TRUCK MILKE # DRIVER MILKE	0 0 0 0
MEX 175 SKS COM 376 CC , DESPIRE TO WEX 200 15 OF BOYLON WEY 13 BAGS FRESH WAFER & 23 BAGS FRESH WAFER & 28 BBS PET OF CERC, 15 BBS PET OF CERC, 7 HANK YOY	TOTAL 4 SERVICE JOB 220' JOB 220' ICK CHARGE 0 OTAGE $@$ 7 0 $@$ 2
CHARGE TO: MUREAU ALLS, CON STREETSTATEZIP	@ TOTAL //シュモ
To Allied Cementing Co., LLC. You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side. PRINTED NAME ACA AMARANCE AMARAN	



Acct.

Invoice Number: 126264 Invoice Date: Feb 19, 2011

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Page:

PO BOX 31 Russell, KS 67665

Voice: (785) 483-3887 Fax: (785) 483-5566 Bill To: Murfin Drlg. Co., Inc. 250 N. Water STE #300 Wichita, KS 67202

Federal Tax I.D.#: 20-5975804 Pay oproper

moc

su	Due Date	3/21/11	Amount	2,039.40	704.00	166.40	137.50	547.20	1,254.00	1,185.00	385.00	40.00			 		6,458.50	471.47	6,929.97		6,929,97	2260.48		NN
Payment Terms	Net 30 Uays	Feb 19, 2011	w		8.00	20.80	2.50	2.40	22.80	1,185.00	7.00	40.00	 		 									
WellNa	Moore Unit #1-1/ Campi_ocation	Oakley			Pozmix	Gel	Flo Seal	Handling	Mileage 228 sx @.10 per sk per mi	Plug to Abandon	Pump truck Mileage						N F Subtotal	OF Sales Tax	Total Invoice Amount	DF Payment/Credit Applied	TOTAL		Ĩ.	
Customer ID	wurnin Job/Location	KS1-03	Quantity	132.00 MAT	88.00 MAT	8.00 MAT	55.00 MAT	228.00 SER	55.00 SER		55.00 SEK				 		ALL PRICES ARF NET PAYAF	30 DAYS FOLL DIAMAG DATE OF	INVOICE. / 1/2% CHARGED	CIRRENT TAKE DISCOUNT OF		2. 2. 2. CO	VONLY IF PAID ON OR BEFORE	

ALLIED CENENTING Edderal Tay 10 # 20-5075800	CO., LLC.	039779
REMIT TO P.O. BOX 31 RUSSELL, KANSAS 67665	SERVICE POINT:	ÊV
- 11 SEC. 7 TWP, RANGE	CALLED OUT ON LOCATION JOB START	
DLD OR NEW Circle one)	11/1 22/20-25-24/5-14	STATE
TN 1869 RE	OWNER SAME	
РИА 7781 Т.D.	CEMENT	
CASING SIZE DEPTH TUBING SIZE DEPTH	AMOUNT ORDERED	o-SrA
DRILL PIPE 4/2 DEPTH TOOL DEPTH		
MAX LINE VT LEFT IN CSG.	COMMON $/32$ 55 0 $/5$ 15 45 POZMIX 38 565 0 3 45 GEL 37 565 0 20 32	2039 40 704 40 166 40
PERFS. DISPLACEMENT	88	
EQUIPMENT		
CK	<u> 1/0-564 55 @ 250</u>	13750
HELPER		
# メロイ DRIVER JERRY BUILK TRUCK		
# DRIVER	228	54720
REMARKS:	MILEAGE LEADER SK / M2/5 TOTAL	12545
	SERVICE	Ŷ
	JOB JCK CHARGE	1185 %
	MILEAGE <u>SSMr</u> @77	585 2
THANK You	00	
CHARGE TO: MURFIN SRLG, CON	IVLUT	1570 2
ET		
CITYSTATEZIP	PLUG & FLOAT EQUIPMENT $J_{-} = A \rho V = \frac{1}{2} \rho f_{-} = \frac{1}{2} \int_{-\infty}^{\infty} q$	TT ZZA ST
	Mart de 1 mart	
To Allied Cementing Co., LLC. You are hereby requested to rent cementing equipment and furnish comenter and helper(c) to assist owner or	© © ©	
contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or	TOTAL	40 %
contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.	SALES TAX (If Any)	******
	TOTAL CHARGES	

4.4 PRINTED NAME CO SIGNATURE

DISCOUNT

IF PAID IN 30 DAYS

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