

#### Kansas Corporation Commission Oil & Gas Conservation Division

1055940

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

# WELL COMPLETION FORM WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 33002 ·	API No. 15
Name: Kerr-McGee Oil & Gas Onshore LP	Spot Description:
Address 1: PO BOX 1330	N2_SW_SW_NW Sec. 21 Twp. 29 S. R. 41 ☐ East  West
Address 2: REGULATORY GROUP	
City: HOUSTON State: TX Zip: 77251 + 133	
Contact Person: Joyce Martens	Footages Calculated from Nearest Outside Section Corner:
Phone: ( 832 ) 636-7978	NE ☑NW ☐SE ☐SW
CONTRACTOR: License # 30606	· · · · · · · · · · · · · · · · · · ·
Name: Murfin Drilling Co., Inc.	Lease Name: Bird Well #: 21-1
Wellsite Geologist: Ed Bucher	Field Name: Arroyo
Purchaser: NCRA	Producing Formation: Morrow
Designate Type of Completion:	Elevation: Ground: 3420 Kelly Bushing: 3430
✓ New Well Re-Entry Workover	Total Depth: 5900 Plug Back Total Depth:
☑ Oil	Amount of Surface Pipe Set and Cemented at: 1650 Feet
☐ Gas ☐ D&A ☐ ENHR ☐ SIGW	Multiple Stage Cementing Collar Used? ☐ Yes ☑ No
OG GSW Temp. A	.bd. If yes, show depth set: Feet
CM (Coal Bed Methane)	If Alternate II completion, cement circulated from:
Cathodic Other (Core, Expl., etc.):	feet depth to:w/sx cmt
If Workover/Re-entry: Old Well Info as follows:	
Operator:	Drilling Fluid Management Plan
Well Name:	
Original Comp. Date: Original Total Depth:	Chloride content: 2100 ppm Fluid volume: 300 bbls
☐ Deepening ☐ Re-perf. ☐ Conv. to ENHR ☐ Conv. to	
Conv. to GSW	
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 #:	Ouarter Sec Two S R Fast West
ENHR Permit #:	County: Permit #:
GSW Permit #:	Territor.
02/24/2011 03/03/2011 03/19/2011 03/19/2011	
Spud Date or Pate Reached TD Completion Date or Recompletion Date Recompletion Date	

#### **AFFIDAVI**

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: Dearns Garrison Date: 05/19/2011

Side Two

1055940

Operator Name: Kerr	<u>r-McGee Oil &amp; G</u> a	s Onshore LF		_ Lease	Name: _	Bira		Well #:21	-1	
Sec. 21 Twp.29	s. R. <u>41</u>	☐ East 🗸 We	st	Count	y: Stant	ton				
INSTRUCTIONS: Sho time tool open and clos recovery, and flow rate line Logs surveyed. At	sed, flowing and shut is if gas to surface tes	in pressures, what, along with fina	ether sh	nut-in pre	ssure read	ched static level,	hydrostatic pressi	ures, bottom I	nole temp	erature, fluid
Drill Stem Tests Taken (Attach Additional S		_ Yes ✓	] No		<b>√</b> L	og Formatio	n (Top), Depth and	I Datum		Sample
Samples Sent to Geolo	,	✓ Yes	No		Nam Attach	-		Top Attached		Datum ttached
Cores Taken Electric Log Run Electric Log Submitted (If no, Submit Copy)	Electronically	☐ Yes ✓ Yes ☐	No No No No		Allacii	eu		-macrieu		tached
List All E. Logs Run: Attached										
	Material des			RECORD	_		ion etc			
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.	3	We	eight i. / Ft.	ermediate, producti Setting Depth	Type of Cement	# Sacks Used		and Percent
Surface	12.250	8.625		24		1650	Varicem/Halcem	650	3% CC	5 .5 Flake
Production	7.875	5.500		15.5		5900	Poz Prem 50/50	360	5% CC	.5 Halad
		ADDI	TIONAL	CEMENT	ING / SQL	JEEZE RECORD		·		<del></del>
Purpose:  —— Perforate  —— Protect Casing  —— Plug Back TD  —— Plug Off Zone	Depth Top Bottom	Type of Ceme			ks Used		Type and Po	ercent Additives		
Shots Per Foot	PERFORATION Specify F	ON RECORD - Bri	dge Plugs	s Set/Type	)		cture, Shot, Cement		rd	Depth
4	5368'-5390'	<u> </u>				Frac w/42,00	00# 16/30 Brady	Snd		5368'-5390'
						80,000# Res	sin Coated 16/30	Brady		
	<u> </u>				·	Snd & 44,68	8 Gals xl lg w/4°	% KCL		-
TUBING RECORD: 2	Size: .375	Set At: 5344'		Packer 5313'	At:	Liner Run:	Yes   ✓ No			·
Date of First, Resumed I 03/19/2011	Production, SWD or ENI	1 —	oing Meth wing	nod: Pump	ing	Gas Lift C	Other (Explain)			
Estimated Production Per 24 Hours	Oil E 72		as 35	Mcf	Wat	er B	bls. G	as-Oil Ratio		Gravity
DISPOSITIO	Used on Lease	Open Ho	le ✓	METHOD C	DF COMPLI Dually (Submit	Comp. Cor	mmingled 53	PRODUCTI 68'-5390'	ON INTER	VAL:

Form	ACO1 - Well Completion
Operator	Kerr-McGee Oil & Gas Onshore LP
Well Name	Bird 21-1
Doc ID	1055940

## All Electric Logs Run

Cement Bond Log	
Array Compensated Induction Log	
Spectral Density Dual Spaced Neutron Microlog	
Directional Six Arm Caliper Log	
Wave Sonic Delta-T Log	
Sonic Waveform Analysis Log	

Form	ACO1 - Well Completion
Operator	Kerr-McGee Oil & Gas Onshore LP
Well Name	Bird 21-1
Doc ID	1055940

Tops

Neme	Tap	Deltain
Base Stone Corral	1605	
Chase	2179	
Council Grove	2437	
Wabaunesee	2875	
Shawnee	3262	
Lansing	3708	·
Cherokee	4464	
Morrow Group	5004	
Morrow "F"	5277	
Lower Morrow	5364	
St. Genevieve	5420	
St. Louis	5506	
Spergen	5669	

## Cementing Job Summary

The Road to Excellence Starts with Safety Sales Order #: 7988602 Quote #: Ship To #: 2838763 Sold To #: 300466 Customer Rep: Almanza, Abraham Customer: ANADARKO PETROLEUM CORP - EBUS API/UWI #: 15-187-21191 Well #: 21-1 Well Name: Bird County/Parish: Stanton State: Kansas City (SAP): JOHNSON Field: ARROYO Legal Description: Section 21 Township 29S Range 41W Long: E 101.815 deg. OR E 101 deg. 48 min. 55.188 secs. Lat: N 37.514 deg. OR N 37 deg. 30 min. 49.392 secs. Rig/Platform Name/Num: #22 Contractor: Murfin Job Purpose: Cement Surface Casing Well Type: Development Well Job Type: Cement Surface Casing MBU ID Emp #: 456246 Srvc Supervisor: KLAUSE, JOHN Sales Person: HESTON, MYRON Job Personnel **HES Emp Name** Exp Hrs Emp# **HES Emp Name** Exp Hrs Emp# **HES Emp Name** Exp Hrs Emp# FARNUM, GORDON 477892 CHAVEZ, ANTHONY 479869 226567 ARNETT, JAMES Ray KLAUSE, JOHN 456246 David Equipment HES Unit # Distance-1 way 10286731 85 mile 10741245 85 mile 10244148 85 mile 10025025 85 mile Job Hours Operating On Location Operating Date On Location Operating Nate Date On Location Hours Hours Hours Hours Hours Hours 2-26 5 Total is the sum of each column separately TOTAL Job Times Job Date Time Time Zone Formation Name Bottom Called Out Formation Depth (MD) Top On Location BHST Form Type Job Depth TVD Job Started 1650. ft Job depth MD Wk Ht Above Floor Job Completed Water Depth To Departed Loc Perforation Depth (MD) From Well Data Top MD Bottom Bottom Top Weight Thread Grade Size ID Description New / Max MD TVD TVD ft pressure lbm/ft Used in in ft ft ft psig 1650. 12 1/4" Surface 12.25 Hole 8 RD (ST&C) J-55 1650. 8.097 8.625 8 5/8" Surface Unknow Casing Sales/Rental/3rd Party (HES) Qty uom Depth Supplier Qty Description PLUG, CMTG, TOP, 8 5/8, HWE, 7.20 MIN/8.09 MA ĒΑ 1 EA SHOE, GID, 8-5/8 8RD 1 EA CLR.FLT.TROPHY SEAL, 8-5/8 8RD EΑ 1 AUTOFILL KIT, TROPHY SEAL EA 5 CENTRALIZER ASSY - API - 8-5/8 CSG X EΑ CLP,LIM,8 5/8,FRICT,WTH DOGS 1 1 EA BASKET - CEMENT - 8 5/8 CSG X 12 1/4 ĒΑ KIT, HALL WELD-A

Summit Version: 7.20,130

Saturday, February 26, 2011 16:08:00

# Cementing Job Summary

		٠.				4	Too	ls and	Acces											
Ty	pe	Size	Qty	Make	Depth	Type	Siz	ze Q	ity M	ake	Dep		Ту			Size	4-	Qty	Ma	ke
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loat S	Shoe					Bridge Plu	g		, v					Plug	$\downarrow$					
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Stage	Tool		<u> </u>	<u> </u>		<u> </u>						Сеп	trai	zers					L	
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Fluid #	Sta	ge Ty	pe		FI	uid Name			Qty	Qt UO	m I	MixIng Density  bm/gal	/ 1	rield t3/sk	FI	lix uid I/sk		in Flu		
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	0.5	bm		POLY-E	FLAKE	(101216940	))													
	18.09	Gal		FRESH	WATER															
3	Tail :	Siurry		HALCE	M (TM) S	SYSTEM (4	52986	)	Boc		ks	15.6		1.2	5.	22	6.0		5.22	
	2			CALCIL	M CHLC	RIDE - HI T	<b>EST</b> F	PELLET	(10000	5053)										
	0.25	lbm		POLY-E	-FLAKE	(101216940	<del>))</del>					•								
	5.218	Gal		FRESH	WATER															
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T	he Inf	forma	tion	Stated	Hereir	ı is Corre	ct	Custon	er Repre	sentativ	re Sign	vature								

## Cementing Job Log

The Road to Excellence Starts with Safety Sales Order #: 7988602 Ship To #: 2838763 Quote #: Sold To #: 300466 Customer Rep: Almanza, Abraham Customer: ANADARKO PETROLEUM CORP - EBUS API/UWI #: 15-187-21191 Well #: 21-1 Well Name: Bird State: Kansas County/Parish: Stanton City (SAP): JOHNSON Field: ARROYO egal Description: Section 21 Township 29S Range 41W Long: E 101.815 deg. OR E 101 deg. 48 min. 55.188 secs. at: N 37.514 deg. OR N 37 deg. 30 min. 49.392 secs. Rig/Platform Name/Num: #22 Contractor: Murfin Ticket Amount: Job Purpose: Cement Surface Casing Job Type: Cement Surface Casing Well Type: Development Well MBU ID Emp #: 456246 Srvc Supervisor: KLAUSE, JOHN Sales Person: HESTON, MYRON Rate Pressure Volume Comments bbl/ psia Date/Time Cht **Activity Description** ·· bbl min **Total** Tubing | Casing Stage # 02/26/2011 Call Out 05:33 02/26/2011 **Pre-Convoy Safety Meeting** 07:33 02/26/2011 Depart from Service Center or 08:00 Other Site 02/26/2011 Arrive At Loc 12:00 **DISCUSS PINCH** 02/26/2011 Pre-Rig Up Safety Meeting POINTS, TRIPPING 12:10 HAZARDS, WATCH THE RED WHILE **RUNNING CASING** Rig-Up Completed 02/26/2011 13:33 **DISCUSS JOB** 02/26/2011 Pre-Job Safety Meeting PROCEDURES AND 13:33 HAZARDS OF EACH STEP OF THE JOB TEST LINES TO 02/26/2011 **Test Lines** 2000PSI 13:43 PUMP 247 BBLS @ 55.0 247 6 02/26/2011 **Pump Lead Cement** 11.4# 13:46 PUMP 43 BBLS @ 85.0 6 43 02/26/2011 **Pump Tail Cement** 15.6# 14:27 PLUG LEFT HEAD 02/26/2011 Drop Top Plug 14:38

Sold To #: 300466

Pump Displacement

**Displ Reached Cmnt** 

Ship To #:2838763

02/26/2011

02/26/2011

14:40

14:56

Quote #:

Sales Order #:

**PUMPING** 

60 BBLS GONE CAUGHT CEMENT @

**60BBLS GONE** 

-20.0

NO RETURNS WHILE

DISPLACEMENT UNTIL

7988602

SUMMIT Version:

7.20.130

Saturday, February 26, 2011 04:08:00

103

# Cementing Job Log

Activity Description	Date/Time	Cht	Rate bbl/ min		ume bi	1	sig	Comments	
		#		Stage	Total	Tubing	Casing		
Slow Rate	02/26/2011 14:59							SLOW RATE 10BBLS BEFORE TOTAL DISPLACEMENT	
Bump Plug	02/26/2011 15:03						369.0	TOOK PRESSURE 500 OVER DIFF PRESSURE 820PSI	
End Job	02/26/2011 15:07								
Pre-Rig Down Safety Meeting	02/26/2011 15:15							DISCUSS TRIPPING HAZARDS AND PINCH POINTS AND USE PROPPER PPE	
Rig-Down Completed	02/26/2011 16:33								
Depart Location for Service Center or Other Site	02/26/2011 17:33							THANK YOU FOR USING HALLIBURTON JOHN KLAUSE AND CREW	

Sold To #: 300466

Ship To #:2838763

Quote #:

Sales Order #:

7988602

SUMMIT Version:

7.20.130

Saturday, February 26, 2011 04:08:00

#### **Work Order Contract**

Order Number

988602	

TO: HALLIBURTON ENERGY SERVICES, INC. - YOU ARE HEREBY REQUESTED TO FURNISH EQUIPMENT AND SERVICE PERSONNEL TO DELIVER AND OPERATE THE SAME AS AN INTERPOLED TO CONTRACTOR TO CHISTOMERY LISTED BE OWN AND DELIVER AND SELL PRODUCTS. SUPPLIES AND MATERIALS FOR THE PURPOSE OF SERVICING:

	MINOR IO COSTONIEM LIST	ED BETOM WIND DEFINED WIN	BELL PRODUCTO, CONTEND MATERIALIST ON THE	
Well No.	Farm or Louise	County	State	Well Permit Number
21-1	Bird	Stanton	Kansas	15-187-21191
Customer		Well Owner	Job Purpose	
ANADARKO PETI	ROLEUM CORP - EBUS		Cement Surface Casing	

THIS WORK ORDER MUST BE SIGNED BEFORE WORK IS COMMENCED

- A. CUSTOMER REPRESENTATION Customer warrants that the well is in proper condition to receive the services, equipment, products, and materials to be supplied by Halliburton Energy Services, Inc. (hereinsite: "Halliburton").
- B. PRICE AND PAYMENT The services, equipment, products, and/or materials to be supplied hereunder are priced in accordance with Halliburton's current price list. All prices of Halliburton are exclusive of any federal, state or municipal taxes which may be imposed on the said or use of any materials, products or supplies furnished or ervices performed. Customer agrees to pay such taxes in addition to the prices in Halliburton's price list. If Customer does not have an approved open account with Halliburton, all sums due are payable in cash at the time of performance of services or delivery of equipment, products or materials. If Customer has an approved open account, invoices are payable on the twentieth day after the date of invoice. Customer agrees to pay interest on any unpaid balance from the date payable until paid at the highest lawful contract rate applicable, but never to exceed 18% per annum. In the event Halliburton employs an attorney for collection of any account, Customer agrees to pay attorney fees of 20% of the unpaid account, or Halliburton's actual ettomey fees, whichever is greater, plus all collection and court costs. Customer agrees that the amount of attorney fees set out herein are reasonable and necessary.
- C. RELEASE AND INDEMNITY Customer agrees to <u>RELEASE</u> Halliburton Group from any and all liability for any and all damages whatsoever to property of any kind owned by, in the possession of, or leased by Customer and those persons and entitles Customer has the ability to bind by contract or which are co-Interest owners or joint ventures with Customer also agrees to <u>DEFEND, INDEMNIFY, AND HOLD</u> Halliburton Group <u>HARMLESS</u> from and against any and all liability, claims, costs, expenses, afformey fees and damages whatsoever for personal injury, liness, death, property damage and loss resulting from <u>loss of well control services to control a wild well whether underground or above the surface reservoir or underground damage, including loss of oil, gas, other mineral substances or water, surface damage ansain from underground damage, including loss of the well bore subsurface trespass or any action in the nature thereof, fire, exclosion, subsurface pressure; radioactivity and pollution and contamination and its cleanup and control.</u>

CUSTOMER'S RELEASE, DEFENSE, INDEMINITY AND HOLD HARMLESS obligations will apply even if the flability and claims are caused by the sole, concurrent, active or passive negligence, fault, or strict liability of one or more members of the Halliburton Group, the unseaworthiness of any vessel or any defect in the data, products, supplies, materials or equipment furnished by any member or members of the Halliburton Group whether in the design, manufacture, maintenance or marketing thereof or from a failure to warn of such defect. "Halliburton Group" is defined as Halliburton Energy Services, Inc., its parent, subsidiary, and affiliated companies, insurers and subcontractors and all its/their officers, directors, employees, consultants and agents. <u>Customer's RELEASE, DEFENSE, INDEMNITY AND HOLD HARMLESS</u> obligations apply whether the personal injury, liness, death, properly damage or loss is suffered by one or more members of the Halliburton Group, Customer, or any other person or entity. Customer agrees to support such obligations assumed herein with liability insurance with limits of not less than \$500,000. Customer agrees to mame Halliburton Group as named additional insured on all of its general liability policy(s). Customer agrees that its liability under this Contract is not limited by the amounts of its insurance coverage, except where and as may be required by applicable local law for the provisions of this Contract to be enforceable.

- D. EQUIPMENT LIABILITY Customer shall at its risk and expense attempt to recover any Halliburton Group equipment tost or todged in the well. If the equipment is recovered and repairable, Customer shall pay the repair costs, unless caused by Halliburton's sole negligence. If the equipment is not recovered or is irreparable, Customer shall pay the current published replacement rate, unless caused by Halliburton's sole negligence. If a radioactive source becomes lost or lodged in the well, Customer shall meet all requirements of Section 39.15(a) of the Nuclear Regulatory Commission regulations and any other applicable laws or regulations concerning retrieval or abandoment and shall permit Halliburton to monitor the recovery or abandomment efforts all at no risk or liability to Halliburton Group. Customer shall be responsible for damage to or loss of Halliburton group equipment, products, and materials while in transit abound Customer-supplied transportation, even if such is arranged by Halliburton at Customer's request, and during loading and unloading from such transport. Customer will also pay for the repair or replacement of Halliburton group equipment damaged by corrosion or abrasion due to well effluents.
- E. LIMITED WARRANTY Haliburton warrants only title to the equipment, products, and materials supplied under this Contract and that same are free from defects in workmanship and materials for thirty (30) days from the date of delivery. THERE ARE NO WARRANTIES, EXPRESS OR SIPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE BEYOND THOSE STATED IN THE IMMEDIATELY PRECEDING SENTENCE. Haliburton's sole liability and Customer's exclusive remedy in any cause of action (whether in contract, tort, breach of warranty or otherwise) arising out of the sale, lease or use or any equipment, products, or materials is expressly limited to the replacement of such on their return to Haliburton or, at Haliburton's option, to the allowance to Customer of credit for the cost of such items. In no event shall Haliburton be liable for special, inclined, consequential, or purable damages. Because of the uncertainty of variable well conditions and the necessity of relying on faots and supporting services furnished by others, HALLIBURTON IS UNABLE TO GUARANTEE THE EFFECTIVENESS OF THE EQUIPMENT, MATERIALS, OR SERVICE, NOR THE ACCURACY OF ANY CHART INTERPRETATION, RESEARCH ANALYSIS, JOB RECOMMENDATION OR OTHER DATA FURNISHED BY HALLIBURTON GROUP. Halliburton personnel will use their best efforts in gathering such information and their best judgment in interpreting it, but Customer agrees that Halliburton Group shall not be liable for and CUSTOMER SHALL INDEMNIFY HALLIBURTON GROUP AGAINST ANY DAMAGES ARISING FROM THE USE OF SUCH INFORMATION, even for such state transmitted by electronic process, and Haliburton will not be responsible for accidental or intentional interception of such data by third parties.
- F. GOVERNING LAW The validity, Interpretation and construction of this Contract shall be determined by the laws of the jurisdiction where the services are performed or the equipment or materials are delivered.
- G. DISPUTE RESOLUTION Except for Halliburton's statutory rights with regard to collection of past due invoices for services or materials, including the Contractor's statutory rights for perfection and enforcement of mechanics' and materialmen's liens, Customer and Halliburton agree that any dispute that may arise out of the performance of this Contract shall be resolved by binding arbitration by a panel of three erbitrators under the rules or the American Arbitration Association. The arbitration will take place in Houston, TX.
- H. SEVERABILITY If any provision or part thereof of this Contract shall be held to be invalid, vold, or of no effect for any reason, such holding shall not be deemed to affect the validity of the remaining provisions of this Contract which can be given effect, without the invalid provision or part thereof, and to this end, the provisions of this Contract are declared to be severable. Customer and Halliburton agree that any provision of this Contract that is unenforceable or vold under applicable law will be modified to achieve the intent of the parties hereunder to the greatest extent allowed by applicable law.
- MODIFICATIONS Customer agrees that Haliburton shall not be bound by any modifications to this Contract, except where such modification is made in writing by a duly authorized executive officer of Haliburton. Requests for modifications should be directed to the Vice President - Legal, 10200 Bellaire Bivd, Houston, TX 77072-5299.

Date

I HAVE READ AND UNDERSTAND THIS WORK ORDER CONTRACT WHICH CONTAINS RELEASE AND INDEMNITY LANGUAGE WHICH CUSTOMER ACKNOWLEDGES IS CONSPICUOUS AND AFFORDS FAIR AND ADEQUATE NOTICE AND I REPRESENT THAT I AM AUTHORIZED TO SIGN THE SAME AS CUSTOMER'S AGENT. LAM SIGNING THIS WORK ORDER CONTRACT WITH THE UNDERSTANDING THAT ITS TERMS AND CONDITIONS WILL NOT APPLY TO THE EXTENT THEY CONFLICT WITH TERMS AND CONDITIONS OF A SIGNED MASTER SERVICE CONTRACT BETWEEN THE PARTIES.

Customer Acceptance of Terms and Conditions, Materials and Services

CUSTON ER Authorizant Signatory

## Cementing Job Summary

The Road to Excellence Starts with Safety Sales Order #: 8013756 Quote #: Sold To #: 300466 Ship To #: 2838763 Customer: ANADARKO PETROLEUM CORP - EBUS Customer Rep: Almanza, Abraham API/UWI #: 15-187-21191 Well #: 21-1 Well Name: Bird County/Parish: Stanton State: Kansas City (SAP): JOHNSON Field: ARROYO egal Description: Section 21 Township 29S Range 41W Long: E 101.815 deg. OR E 101 deg. 48 min. 55.188 secs. at: N 37.514 deg. OR N 37 deg. 30 min. 49.392 secs. Rig/Platform Name/Num: #22 Contractor: Murfin Job Purpose: Cement Production Casing Job Type: Cement Production Casing Well Type: Development Well MBU ID Emp #: 456565 Srvc Supervisor: SMITH, LLOYD Sales Person: HESTON, MYRON Job Personnel **HES Emp Name** Exp Hrs Emp# HES Emp Name Exp Hrs Emp# **HES Emp Name** Exp Hrs Emp# TORRES, CLEMENTE 344233 6 456565 483764 SMITH LLOYD 6 MONTOYA-MOLLINAS, ARTHUR Thomas Joseph **Equipment** Distance-1 way **HES Unit #** Distance-1 way **HES Unit #** HES Unit# Distance-1 way HES Unit# Distance-1 way 85 mile 10949719 10826273 85 mile 85 mile 10286731 85 mile 10244148 10995007 85 mile Job Hours On Location Operating Date Operating Date On Location On Location Operating Date Hours Hours Hours Hours Hours Hours 3/5/2011 6 1.5 Total is the sum of each column separately TOTAL A STATE OF THE STA STATE SELECTION OF STATE OF ST Time Zone Time Date Formation Name 05 - Mar - 2011 12:00 CST Called Out Formation Depth (MD) Top Bottom 05 - Mar - 2011 18:00 CST BHST 135 degF On Location orm Type 05 - Mar - 2011 21:18 CST Job Depth TVD 5900. ft. Job Started 5900 ft Job depth MD CST 05 - Mar - 2011 22:49 5. ft Job Completed Wk Ht Above Floor Water Depth 06 - Mar - 2011 00:30 CST Departed Loc Τo Perforation Depth (MD) From Well Data **Bottom** Top MD **Bottom** Top Grade Weight Thread Max Size ID Description New / MD TVD TVD ft Used pressure in in ibm/ft ft ft ft psig 1650. 5900. 7.875 7 7/8" Production Hole 5900. J-55 15.5 8 RD (ST&C) 4.95 5 1/2" Production Unknow 5.5 Casing n 1650. J-55 8 RD (ST&C) 8 5/8" Surface Unknow 8.625 8.097 24. Casing n Party (HES) The State of the The second second ( a w ( ) a , Depth Supplier Qty Qty uom Description SHOE,GID,5-1/2 8RD ΕA 1 PLUG ASSY,3 WIPR LTH-DWN,5 1/2 CSG ĒΑ 1 BAFFLE ASSY - 5-1/2 8RD - LATCH-DOWN 20 EΑ CENTRALIZER ASSY - TURBO - API -EA 1 CLAMP - LIMIT - 5-1/2 - HINGED -EA KIT, HALL WELD-A

37637					e fact of the	Teols:						, A	
Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Туре	Size	Qty	Make
Guide Shoe					Packer					Top Plug			

Summit Version: 7.20.130

Saturday, March 05, 2011 23:40:00

# Cementing Job Summary

loat S	hoe		1		Bridge Plug		· · · · · · · · · · · · · · · · · · ·			m Plug					
lost C	olla	r			Retainer					plug set	<u> </u>				
sert f										Containe ralizers					
tage '	<b>Fool</b>						SOUTH A SECURITION OF	e a sies o	and the second second						
1			40		0.00					T		Qty	Conc %		
elling				Conc	Surfacta			Conc		Туре		Size	Qty		
reatm	ent	Fld		Conc	Inhibitor			Conc	Sanc	і Туре	**************************************	202E			
	1				late 200	10 PHB	i Data	1000			44.7	# PO - 19	**************************************		
			50				Print Control			Yield	Mix Fluid	Rate	Total Mix		
luid #	S	tage T	уре		Fluid Name		Qty	Qty	Mixing Density Ibm/gal	ft3/sk	Gal/sk	bbl/min			
i	Wa	ter Pre	Flush				0.00	bbl	8.33	.0	.0	6.0			
		D FLU			1 - SBM (528788)		0.00	bbl	8.4	.0	.0	6.0			
		avenge			A 50/50 - SBM (12		25.0	sacks	10.5	4.32	26.85	6.0	26.85		
' I	Slür		•	. 02		•						<u> </u>			
		5%			BULK (10006402										
		5%		POTASSIUM C	HLORIDE 5% (10	00001585)	,				· · · · · · · · · · · · · · · · · · ·				
		8 lbm		KOL-SEAL, BULK (100064233)											
		0.5 %		HALAD(R)-322	, 50 LB (1000036	46)									
	26.	849 Ga	1	FRESH WATE									T		
•	Ta	il Slum	<u> </u>	POZ PREMIUI	4 50/50 - SBM (12	2302)	335.0	sacks	13.9	1.56	6.57	6.0	6.57		
`		5 %			BULK (10006402										
		5 %		POTASSIUM (	CHLORIDE 5% (1)	00001585	)						- <del></del>		
		8 lbm		KOL-SEAL, BI	JLK (100064233)										
		0.5 %			, 50 LB (1000036	<b>346</b> )	,,,,,,								
	6.5	571 Gal		FRESH WATE	R										
5	KC						139.00	bbl	8.33	.0	.0	6.0			
_	Dis	placem	ent						<u></u>		<u> </u>	<u> </u>	1		
	1.5	gal/Mg	al	CLAYFIX 3, TO	OTETANK (10158					e de la companya de		on care home by a dead			
	( F. 10)	Carlottic .	Service Al	e la rest		per i	948		· Cale	The state of the s					
Displa			139B	BLS Shut In: I	nstant	Lost Re	eturns	0	Cement S	Slurry	112B	BL Pad			
							4 <b>m</b> - 6 · · ·	1.	A més and 1	isplacem		BI Trees	ment		
rop O	rf Ce	ement	2989	FT 5 Min		Cemen	t Returns	0	Actual U	nspiacem	S	DETTEN			
		·· 4	<b> </b>	15 Min		Spacer		0	Load and	Breakdo		Total	Job		
Frac (	rac	nent		is will		- Pace.	ates **				100	120			
					xing	4		ement	The second secon	6	. gvA	The state of the s	4		
Circu			<u>4</u>		ring ft Reason Sh	-	Uispiai			<u></u>					
		t Left ir		7	ring # 2 @	ID	Frac Rin	a#3@		i di	Frac Rin	#4@	ID		
Frac	Rin	g#1@	2	ID Frac	11119 # 2 [22]		ne Repres		·	· <del>·····························</del>					
T	he	Inform	natior	Stated Hero	ein Is Correct	A	DE		- 3		<u></u>				

Summit Version: 7.20.130

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## Cementing Job Log

The Road to Excellence Starts with Safety Sales Order #: 8013756 Ship To #: 2838763 Quote #: Sold To #: 300466 Customer: ANADARKO PETROLEUM CORP - EBUS Customer Rep: Almanza, Abraham APVUWI #: 15-187-21191 Well #: 21-1 Well Name: Bird State: Kansas County/Parish: Stanton City (SAP): JOHNSON Field: ARROYO Legal Description: Section 21 Township 29S Range 41W Long: E 101.815 deg. OR E 101 deg. 48 min. 55.188 secs. Lat: N 37.514 deg. OR N 37 deg. 30 min. 49.392 secs. Rig/Platform Name/Num: #22 Contractor: Murfin Ticket Amount: Job Purpose: Cement Production Casing Well Type: Development Well Job Type: Cement Production Casing Srvc Supervisor: SMITH, LLOYD MBU ID Emp #: 456565 Sales Person: HESTON, MYRON Catal Time CALLED OUT ON THE 03/05/2011 Call Out **ANADARKO BIRD 21-1** 12:00 GO OVER JOURNEY 03/05/2011 **Pre-Convoy Safety Meeting** MANAGEMENT AND 13:00 **CALL IN JOURNEY** 03/05/2011 Crew Leave Yard AND CONVOY TO 14:00 LOCATION ARRIVE AT THE 03/05/2011 Arrive At Loc **ANADARKO BIRD 21-1** 18:00 LOCATION **RIG RUNNING CASING** 03/05/2011 Standby - Other - see 18:01 comments HAVE SAFETY Assessment Of Location 03/05/2011 **HUDDLE WITH ALL** 18:05 **Safety Meeting** PERSONEL AND **DISCUSS PROPER** SPOTTING OF **EQUIPMENT AND ANY** HAZARDS INVOLVED DISCUSS HAZARDS, 03/05/2011 Pre-Rig Up Safety Meeting TRIP, PINCH, LIFTING, 18:15 REDZONE, LINE OF FIRE. GIVEN BY AJ Cartification of the Control of the

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				T		TALK TO COMPANY
Other	03/05/2011				9	
	18:25	]			<b>.</b>	MAN TD-5900FT,TP-
		1				5911.75FT-5.5-15.5#-
						J55,ASSIST 8.625-24#-
				1		J55 AT 1652FT,OH-7
						7/8,SHOE 1FT,MUD
						8.8#. COMPANY MAN
					ŀ	SAID NO WATER OR
					1	MUD FLUSH AHEAD
					ĺ	STRAIGHT TO
						SCAVENGER CEMENT.
						WATER TESTED
						GOOD.
Rig-Up Equipment	03/05/2011			<del>                                     </del>		RAN WATER HOSES,
Mg-Op Equipment	18:30					LAYED IRON TO
	10.00		1			VDOOR AND BUILT
				1		STAND PIPE, HOOKED
		1				UP BULK TRUCKS.
Olera the Others are	03/05/2011			<del> </del>		RIG STILL RUNNING
Standby - Other - see					İ	CASING, WAITING ON
comments	19:10					CASING CREW TO
	ļ.			1 '		FINISH SO WE CAN
	-		1			FINISH RUNNING IRON
				1	ŀ	
						TO PIT AND PICK UP
						STAND PIPE
Casing on Bottom	03/05/2011	ļ.	1			CASING ON BOTTOM,
	20:30			ļ		STABBED HEAD AND
					!	RIG CIRCULATING
				<u> </u>		45SPM AT 226PSI
Rig-Up Completed	03/05/2011		ļ			PULL UP STAND PIPE
·	20:45					AND FINISH WASHUP,
						RIG UP BALES.
Safety Meeting	03/05/2011					DISCUSS HAZARDS
	20:50					WITH ALL PERSONEL
						ON LOCATION,
•				]		ANYONE HAS THE
						RIGHT TO SHUT THE
	<u> </u>	1				JOB DOWN, CLOSES
•						HOSPITAL, STAY
						AWAY FROM RED
						IRON AND BULK
						HOSES.
Start Job	03/05/2011			† · · · · † · ·		
	21:18					
Test Lines	03/05/2011	· ·				TEST LINES TO
. 550 En100	21:20					4000PSI,TEST WAS
	- · · · - ·					GOOD, BLEED BACK
						TO TRUCK
Pump Lead Cement	03/05/2011	4	19	1 1	310.0	PUMP 25SKS=19BBLS
p Loud domon	21:25	'				AT 10.5#
Pump Tail Cement	03/05/2011	4	93	,	53.0	PUMP 335SKS=93BBLS
T with tall collect	21:31	7	35		00.0	AT 13.9#
	121,51		<u> </u>			1

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#### **Work Order Contract**

Order Number

8013756

TO: HALLIBURTON ENERGY SERVICES, INC. - YOU ARE HEREBY REQUESTED TO FURNISH EQUIPMENT AND SERVICE PERSONNEL TO DELIVER AND OPERATE THE SAME AS AN INDEPENDENT CONTRACTOR TO CUSTOMER LISTED BELOW AND DELIVER AND SELL PRODUCTS, SUPPLIES AND MATERIALS FOR THE PURPOSE OF SERVICING:

INDEPENDENT	CONTRACTOR TO CUSTOM	EK LISTED BELOW AND I	DELIVER AND SELL PRO	JUUC 13. SUPPLIES AND MATERIALS FOR THE FOR	Well Permit Number
Well No.	Farm or Lease	-	County	State	AARI Seittit Million
21-1	Bird		Stanton	Kansas	15-187-21191
Customer	10.0	Well Owner		Job Purpose	
	TROLEUM CORP - EBUS			Cement Production Casing	
THE PARTIE F					

THIS WORK ORDER MUST BE SIGNED BEFORE WORK IS COMMENCED

- A. CUSTOMER REPRESENTATION Customer warrants that the well is in proper condition to receive the services, equipment, products, and materials to be supplied by Halliburton Energy Services, Inc. (hereinsther Halliburton).
- B. PRICE AND PAYMENT The services, equipment, products, and/or materials to be supplied hereunder are priced in accordance with Halliburton's current price list. All prices of Halliburton are exclusive of any federal, state or municipal taxes which may be imposed on the sele or use of any materials, products or supplies furnished or services performed. Customer agrees to pay such taxes in addition to the prices in Halliburton's price list. If Customer does not have an approved open account with Halliburton, all sums due are payable in cash at the time of performance of services or delivery of equipment, products or materials. If Customer has an approved open account, invoices are payable on the twentieth day after the date of invoice. Customer agrees to pay interest on any unpaid befance from the date payable until paid at the highest lewful contract rate applicable, but never to exceed 18% per annum. In the event Halliburton employs an attempt for collection of any account, Customer agrees to pay attorney fees of 20% of the unpaid account, or Halliburton's actual attorney fees, whichever is greater, plus all collection and court costs. Customer agrees that the amount of attorney fees set out herein are reasonable and necessary.
- C. RELEASE AND INDEMNITY Gustomer agrees to <u>RELEASE</u> Helliburton Group from any and all itability for any and all damages whatsoever to property of any lond owned by, in the possession of, or leased by Customer and those persons and entitles Customer has the ability to bind by contract or which are co-interest owners or joint ventures with Customer also agrees to <u>DEFENO. INDEMNITY. AND HOLD</u> Hallburton Group <u>HANDLESS</u> from and against any and all itability, claims, costs, expenses, attorney fees and damages whatsoever for personal lighty, lillings, illiness, death, property damage and loss resulting from loss of world control a wild well whether underground or above the surface, reservoir underground damage, including loss of oil; gas, other mineral substances or water, surface democe arising from underground damage. Including loss of oil; gas, other mineral substances or water, surface democe arising from underground damage. Surface or loss of the well from substance from part of the surface.

CUSTOMER'S RELEASE DEFENSE. INDEMNITY AND HOLD HARMLESS obligations will apply even if the liability and claims are caused by the sole, concurrent, active or passive negligence, fault, or strict liability of one or more members of the Halliburton Group, the unessworthness of any vessel or any defect in the data, products, supplies, materials or equipment furnished by any member or members of the Halliburton Group whether in the design, manufacture, maintenance or marketing thereof or from a failure to warm of such defect. "Halliburton Group" is defined as Halliburton Energy Services, inc., its person, subsidiary, and affiliated companies, insurers and subcontractors and all hadder officers, directors, employees, consultants and agents. Customer's RELEASE, DEFENSE, NIDEMENT AND HOLD HARMLESS obligations apply whether the personal injury, liness, death, properly damage or toss is suffered by one or more members of the Halliburton Group, Customer, or any other person or entity. Customer agrees to support such obligations assumed herein with Rability insurance with limits of not less than \$600,000. Customer agrees to name Halliburton Group as named additional insured on all of its general Hability policyls. Customer agrees that its liability under this Contract is not limited by the amounts of its insurance coverage, except where and as mile to required by applicable local law for the provisions of the Contract to be enforceable.

- D. EQUIPMENT LIABILITY Customer shall at its risk and expense attempt to recover any Halliburton Group equipment tost or lodged in the well. If the equipment is recovered and repairable, Customer shall pay the repair costs, unless caused by Halliburton's sole negligence. If the equipment is not recovered or is imperable, Customer shall pay the current published replacement rate, unless caused by Halliburton's sole negligence. If a nadioactive source becomes tost or lodged in the well, Customer shall meet all requirements of Section 39.15(a) of the Nuclear Regulatory Commission regulations and any other applicable laws or regulations concerning retrieval or abandonment and shall permit Halliburton to monitor the recovery or abandonment efforts all at no risk or liability to Halliburton Group. Customer shall be responsible for damage to or loss of Halliburton group equipment, products, and materials while in transit aboard Customer's request, and during loading and unloading from such transport. Customer will also pay for the repair or replacement of Halliburton group equipment damaged by corresion or abrasion due to well effluents.
- E. LIMITED WARRANTY Heliburton warrents only title to the equipment, products, and materials supplied under this Contract and that same are free from defects in workmanship and materials for thirty (30) days from the date of delivery. THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE BEYOND THOSE STATED IN THE IMMEDIATELY PRECEDING SENTENCE. Halliburton's sole liability and Customer's exclusive remedy in any cause of action (whether in contract, tort, breach of warranty or otherwise) arising out of the sale, lease or use or any equipment, products, or materials is expressly limited to the replacement of such on their return to Halliburton or, at Halliburton's option, to the ellowance to Customer of credit for the cost of such items, in no event shall Halliburton be liable for special, incidental, indirect, consequential, or puritive damages. Because of the uncertainty of variable well conditions and the necessity of relying on facts and supporting services furnished by others, HALLIBURTON IS UNABLE TO GUARANTEE THE EFFECTIVENESS OF THE EQUIPMENT, MATERIALS, OR SERVICE, NOR THE ACCURACY OF ANY CHART INTERPRETATION, RESEARCH ANALYSIS, JOB RECOMMENDATION OR OTHER DATA FURNISHED BY HALLIBURTON GROUP, Halliburton personnel will use their best efforts in gethering such information and their best judgment in interpreting it, but Customer agrees that Halliburton GROUP AGAINST ANY DAMAGES ARISING FROM THE USE OF SUCH INFORMATION, even if such its contributed to or caused by the active or passive negligence, fault or strict liability of any member or members of Halliburton Group. Halliburton also does not warrant the accuracy of data transmitted by electronic process, and Halliburton will not be responsible for accidental or imentional interception of such data by third parties.
- F. GOVERNING LAW The validity, interpretation and construction of this Contract shall be determined by the laws of the jurisdiction where the services are performed or the equipment or materials are delivered.
- G. DISPUTE RESOLUTION Except for Halliburton's statutory rights with regard to collection of past due involces for services or materials, including the Contractor's statutory rights for perfection and enforcement of mechanics' and materialmen's' liens, Customer and Halliburton agree that any dispute that may arise out of the performance of this Contract shall be resolved by binding arbitration by a panel of three arbitrators under the rules or the American Arbitration Association. The arbitration will take place in Houston, TX.
- H. SEVERABILITY If any provision or part thereof of this Contract shall be held to be invalid, void, or of no effect for any reason, such holding shall not be deemed to affect the validity of the remaining provisions of this Contract which can be given effect, without the invalid provision or part thereof; and to this end, the provisions of this Contract are declared to be severable. Customer and Hallburton agree that any provision of this Contract that is unenforceable or void under applicable law will be modified to achieve the intent of the parties hereunder to the greatest extent allowed by applicable law.
- I. MODIFICATIONS Customer agrees that Halliburton shall not be bound by any modifications to this Contract, except where such modification is made in writing by a duly authorized executive officer of Halliburton. Requests for modifications should be directed to the Vice President Legal; 10200 Beliaire Blvd, Houston, TX 77072-5299.

I HAVE READ AND UNDERSTAND THIS WORK ORDER CONTRACT WHICH CONTAINS RELEASE AND INDEMNITY LANGUAGE WHICH CUSTOMER ACKNOWLEDGES IS CONSPICUOUS AND AFFORDS FAIR AND ADEQUATE NOTICE AND I REPRESENT THAT I AM AUTHORIZED TO SIGN THE SAME AS CUSTOMER'S AGENT. I AM SIGNING THIS WORK ORDER CONTRACT WITH THE UNDERSTANDING THAT ITS TERMS AND CONDITIONS WILL NOT APPLY TO THE EXTENT THEY CONFLICT WITH TERMS AND CONDITIONS OF A SIGNED MASTER SERVICE CONTRACT BETWEEN THE PARTIES.

Customer Acceptance of Terms and Conditions, Materials and Services

CUSTOMER Authorized Signatory Date

# Cementing Job Log

	i de la compania de			*Välime				CACCONING TO	
		-3	andi	3500	ol   Total	Tabiling	334		
Drop Top Plug	03/05/2011 22:01							SHUTDOWN WASH PUMPS AND LINES AND DROP TOP PLUG	
Pump Displacement	03/05/2011 22:09		6		139		70.0	CALCULATED DISPLACEMENT 139BBLS OF FRESH WATER WITH 3%KCL	
Displ Reached Cmnt	03/05/2011 22:26		3	87			210.0	CAUGHT CMT AT 87BBLS GONE SLOWED RATE PER COMPANY MAN	
Bump Plug	03/05/2011 22:45		3	139			1046. 0	BUMP PLUG AT 139BBLS TOOK IT 1000PSI OVER	
Check Floats	03/05/2011 22:48						2100. 0	HELD FOR FEW MINUTES GOT 1/2BBL BACK	
End Job	03/05/2011 22:49								
Pre-Rig Down Safety Meeting	03/05/2011 22:55							DISCUSS HAZARDS TRIP, LIFTING, LINE OF FIRE, TAKE BREAKS, ASSIGN AREAS TO PERSONEL TO START AND FINISH.	
Rig-Down Equipment	03/05/2011 23:00								
Rig-Down Completed	03/06/2011 00:00								
Pre-Convoy Safety Meeting	03/06/2011 00:15							GO OVER JOURNEY MANAGEMENT, PTI, AND LOGS	
Crew Leave Location	03/06/2011 00:30							THANK YOU FOR CHOOSING HALLIBURTON	

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