KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1137370

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
Name: Kerr-McGee Oil & Gas Onshore LP
Address 1: PO BOX 1330
Address 2: REGULATORY GROUP
City: HOUSTON State: TX Zip: 77251 + 1330
Contact Person: Kim Vincent
Phone: (832) 636-1000
CONTRACTOR: License # 30606
Name: Murfin Drilling Co., Inc.
Wellsite Geologist: Kevin Hae Hae
Purchaser:

Designate Type of Completion:

- [x] New Well
- [ ] Re-Entry
- [ ] Workover

- [x] 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:

Operator:
Well Name:
Original Comp. Date: Original Total Depth:

- [ ] Deepening
- [ ] Re-perf.
- [ ] Conv. to ENHR
- [ ] Conv. to SWD
- [ ] Conv. to GSW
- [ ] Plug Back: Plug Back Total Depth
- [ ] Commingled Permit #:
- [ ] Dual Completion Permit #:
- [ ] SWD Permit #:
- [ ] ENHR Permit #:
- [ ] GSW Permit #:

12/10/2012	12/18/2012	12/27/2012
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-187-21211-00-00
Spot Description:
__ - __ - NW - SE Sec. 21 Twp. 29 S. R. 41 [ ] East [x] West
1980 Feet from [ ] North / [x] South Line of Section
1980 Feet from [x] East / [ ] West Line of Section
Footages Calculated from Nearest Outside Section Corner:
[ ] NE [ ] NW [x] SE [ ] SW
County: Stanton
Lease Name: SANTA FE #21 Well #: 2
Field Name: Arroyo
Producing Formation: Morrow
Elevation: Ground: 3406 Kelly Bushing: 3412
Total Depth: 5661 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 1627 Feet
Multiple Stage Cementing Collar Used? [ ] Yes [x] No
If yes, show depth set: Feet
If Alternate II completion, cement circulated from:
feet depth to: w/ sx cmt.

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)

Chloride content: 2300 ppm Fluid volume: 300 bbls
Dewatering method used: Evaporated
Location of fluid disposal if hauled offsite:
Operator Name:
Lease Name: License #:
Quarter Sec. Twp. S. R. [ ] East [ ] West
County: Permit #:

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 [x] **I** [ ] **II** [ ] **III** **Approved by:** Deanna Garrison **Date:** 05/07/2013

Side Two

[redacted]

1137370

Operator Name: Kerr-McGee Oil & Gas Onshore LP Lease Name: SANTA FE #21 Well #: 2

Sec. 21 Twp. 29 S. R. 41 ☐ East ☑ West County: Stanton

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 ☐ Yes ☑ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☐ Yes ☑ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☐ Yes ☑ No

Electric Log Submitted Electronically ☐ Yes ☐ No
(If no, Submit Copy)

List All E. Logs Run:

☐ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
Lower Morrow A	5376	5386
Lower Morrow A	5408	5410

CASING RECORD ☑ New ☐ Used

Report all strings set-conductor, surface, intermediate, production, etc.

Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	12.25	8.625	24	1627	Varicem/Halcem	700	
Production	7.875	5.5	15.5	5619	Premium	325	

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:
☐ Perforate
☐ Protect Casing
☐ Plug Back TD
☐ Plug Off Zone

Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
-			
-			

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record *(Amount and Kind of Material Used)*	Depth
6	5376 - 5386	All perfs: 48,174 gals 25# x frac 4% kcl, 73,150# 16/30 brown sand.	
3	5408 - 5410		

TUBING RECORD: Size: 2.375 Set At: 5430 Packer At:

Liner Run: ☐ Yes ☑ No

Date of First, Resumed Production, SWD or ENHR. 01/22/2013

Producing Method: ☐ Flowing ☑ Pumping ☐ Gas Lift ☐ Other *(Explain)*

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS:
☐ Vented ☑ Sold ☐ Used on Lease
(If vented, Submit ACO-18.)

METHOD OF COMPLETION:
☐ Open Hole ☑ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*
☐ Other *(Specify)*

PRODUCTION INTERVAL:
5376
5410

Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

HALLIBURTON

Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 300466	**Ship To #:** 2968995	**Quote #:**	**Sales Order #:** 900068309
Customer: ANADARKO PETROLEUM CORP - EBUS		**Customer Rep:** Bingel, Tom	
Well Name: Santa Fe	**Well #:** 21-2		**API/UWI #:** 15-187-21211
Field:	**City (SAP):** JOHNSON	**County/Parish:** Stanton	**State:** Kansas
Legal Description: Section 21 Township 29S Range 41W			
Contractor: Murfin	**Rig/Platform Name/Num:** 21		
Job Purpose: Cement Surface Casing			
Well Type: Development Well	**Job Type:** Cement Surface Casing		
Sales Person: KRANZ, ZACHARY	**Srvc Supervisor:** AGUILERA, FABIAN	**MBU ID Emp #:** 442123	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
AGUILERA, FABIAN J	10	442123	HEIDT, JAMES Nicholas	10	517102	JOHNSON, MATTHEW Warren	10	525955
TORRES, CLEMENTE	10	344233						

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
12/12/2012	1.5		12/13/2012	8.5	1.5			
TOTAL					*Total is the sum of each column separately*			

Job

Formation Name			
Formation Depth (MD)	**Top**		**Bottom**
Form Type		**BHST**	
Job depth MD	1628.3 ft	**Job Depth TVD**	1628.3 ft
Water Depth		**Wk Ht Above Floor**	5. ft
Perforation Depth (MD)	**From**		**To**

Job Times

	Date	Time	Time Zone
Called Out	12 - Dec - 2012	18:30	CST
On Location	12 - Dec - 2012	22:30	CST
Job Started	13 - Dec - 2012	03:49	CST
Job Completed	13 - Dec - 2012	05:17	CST
Departed Loc	07 - Dec - 2012	07:30	CST

Well Data

Description	New / Used	Max pressure psig	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
12 1/4" Surface Hole				12.25				.	1650.		
8 5/8" Surface Casing	Unknown		8.625	8.097	24.	8 RD (ST&C)	J-55	.	1650.		

Sales/Rental/3rd Party (HES)

Description	Qty	Qty uom	Depth	Supplier
PLUG,CMTG,TOP,8 5/8,HWE,7.20 MIN/8.09 MA	1	EA		
SHOE,GID,8-5/8 8RD	1	EA		
VLVASSY,INSR FLOAT,8-5/8 8RD, 24 lbs/ft	1	EA		
FILLUP ASSY - 1.500 ID - 7 IN. - 8-5/8	1	EA		
CENTRALIZER ASSY - API - 8-5/8 CSG X	7	EA		
CLAMP - LIMIT - 8-5/8 - HINGED -	1	EA		
BASKET - CEMENT - 8 5/8 CSG X 12 1/4	1	EA		
KIT,HALL WELD-A	1	EA		

Tools and Accessories

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug			
Float Shoe					Bridge Plug					Bottom Plug			

HALLIBURTON

Cementing Job Summary

Float Collar					Retainer					SSR plug set				
Insert Float										Plug Container				
Stage Tool										Centralizers				

Miscellaneous Materials

Gelling Agt		Conc		Surfactant		Conc		Acid Type		Qty		Conc	%
Treatment Fld		Conc		Inhibitor		Conc		Sand Type		Size		Qty	

Fluid Data

Stage/Plug #: 1

Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft3/sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	Water Pre-Flush		10.00	bbl	8.33	.0	.0	6.0	
2	Lead Slurry	VARICEM (TM) CEMENT (452009)	500.0	sacks	11.4	2.95	18.09	6.0	18.09
	3 %	CALCIUM CHLORIDE, PELLET, 50 LB (101509387)							
	0.1 %	WG-17, 50 LB SK (100003623)							
	0.5 lbm	POLY-E-FLAKE (101216940)							
	18.09 Gal	FRESH WATER							
3	Tail Slurry	HALCEM (TM) SYSTEM (452986)	200.0	sacks	15.6	1.2	5.22	6.0	5.22
	2 %	CALCIUM CHLORIDE, PELLET, 50 LB (101509387)							
	0.25 lbm	POLY-E-FLAKE (101216940)							
	5.218 Gal	FRESH WATER							
4	Displacement		101.00	bbl	8.33	.0	.0	.0	

Calculated Values		Pressures		Volumes					
Displacement	101 BBL	Shut In: Instant		Lost Returns	0	Cement Slurry	319 BBL	Pad	
Top Of Cement	SURFACE	5 Min		Cement Returns	196 BBL	Actual Displacement	101 BBL	Treatment	
Frac Gradient		15 Min		Spacers	10 BBL	Load and Breakdown		Total Job	

Rates

Circulating	5	Mixing	6	Displacement	6	Avg. Job	

Cement Left In Pipe	Amount	42 ft	Reason	Shoe Joint									
Frac Ring # 1 @		ID		Frac ring # 2 @		ID		Frac Ring # 3 @		ID		Frac Ring # 4 @		ID	

The Information Stated Herein Is Correct	Customer Representative Signature

HALLIBURTON

Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 300466	**Ship To #:** 2968995	**Quote #:**	**Sales Order #:** 900079560
Customer: ANADARKO PETROLEUM CORP - EBUS		**Customer Rep:** Bingel, Tom	
Well Name: Santa Fe	**Well #:** 21-2		**API/UWI #:** 15-187-21211
Field:	**City (SAP):** JOHNSON	**County/Parish:** Stanton	**State:** Kansas
Legal Description: Section 21 Township 29S Range 41W			
Contractor: Murfin	**Rig/Platform Name/Num:** 21		
Job Purpose: Cement Production Casing			
Well Type: Development Well	**Job Type:** Cement Production Casing		
Sales Person: KRANZ, ZACHARY	**Srvc Supervisor:** RODRIGUEZ, EDGAR	**MBU ID Emp #:** 442125	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
JOURNAGAN, MICHAEL	5	524224	RODRIGUEZ, EDGAR Alejandro	5	442125	TORRES, CLEMENTE	5	344233

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
12/19/2012	5	3.5	12/20/2012	1	0			
TOTAL			*Total is the sum of each column separately*					

Job

Formation Name			
Formation Depth (MD)	**Top**		**Bottom**
Form Type		**BHST**	
Job depth MD	5661. ft	**Job Depth TVD**	5619. ft
Water Depth		**Wk Ht Above Floor**	4. ft
Perforation Depth (MD)	**From**		**To**

Job Times

	Date	Time	Time Zone
Called Out	19 - Dec - 2012	14:00	CST
On Location	19 - Dec - 2012	19:00	CST
Job Started	19 - Dec - 2012	22:05	CST
Job Completed	19 - Dec - 2012	23:30	CST
Departed Loc	20 - Dec - 2012	01:10	CST

Well Data

Description	New / Used	Max pressure psig	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
7 7/8" Production Hole				7.875				1650.	5580.		
5 1/2" Production Casing	Unknown		5.5	4.95	15.5	8 RD (ST&C)	J-55	.	5580.		
8 5/8" Surface Casing	Unknown		8.625	8.097	24.	8 RD (ST&C)	J-55	.	1650.		

Sales/Rental/3rd Party (HES)

Description	Qty	Qty uom	Depth	Supplier
SHOE,GID,5-1/2 8RD	1	EA		
PLUG ASSY,3 WIPR LTH-DWN,5 1/2 CSG	1	EA		
BAFFLE ASSY - 5-1/2 8RD - LATCH-DOWN	1	EA		
CENTRALIZER ASSY - TURBO - API -	20	EA		
CLAMP - LIMIT - 5-1/2 - HINGED -	1	EA		
KIT,HALL WELD-A	1	EA		

Tools and Accessories

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe	5 ½	1	HES		Packer					Top Plug	5 ½	1	HES
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar	5 ½	1	HES		Retainer					SSR plug set			
Insert Float										Plug Container	5 ½	1	HES
Stage Tool										Centralizers	5 ½	20	HES

HALLIBURTON

Cementing Job Summary

Miscellaneous Materials												
Gelling Agt		Conc		Surfactant		Conc		Acid Type		Qty		Conc %
Treatment Fld		Conc		Inhibitor		Conc		Sand Type		Size		Qty

Fluid Data

Stage/Plug #: 1

Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft3/sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	Water Pre-Flush		5.00	bbl	8.33	.0	.0	6.0	
2	Scavenger Slurry	POZ PREMIUM 50/50 - SBM (12302)	25.0	sacks	10.5	4.32	26.94	6.0	26.94
	5 %	CAL-SEAL 60, 50 LB BAG (101217146)							
	5 %	POTASSIUM CHLORIDE 5% (100001585)							
	8 lbm	KOL-SEAL, 50 LB BAG (100064232)							
	0.5 %	HALAD(R)-322, 50 LB (100003646)							
	26.941 Gal	FRESH WATER							
3	Tail Slurry	POZ PREMIUM 50/50 - SBM (12302)	300.0	sacks	13.9	1.56	6.65	6.0	6.65
	5 %	CAL-SEAL 60, 50 LB BAG (101217146)							
	5 %	POTASSIUM CHLORIDE 5% (100001585)							
	8 lbm	KOL-SEAL, 50 LB BAG (100064232)							
	0.5 %	HALAD(R)-322, 50 LB (100003646)							
	6.647 Gal	FRESH WATER							
4	Displacement		132.00	bbl	8.33	.0	.0	6.0	
	0.8 gal/Mgal	CLA-WEB - TOTE (101985045)							

Calculated Values		Pressures		Volumes					
Displacement	132	Shut In: Instant		Lost Returns		Cement Slurry	102	Pad	
Top Of Cement	2349.9	5 Min		Cement Returns		Actual Displacement	132	Treatment	
Frac Gradient		15 Min		Spacers	5	Load and Breakdown		Total Job	239

Rates

Circulating	5	Mixing	5	Displacement	5	Avg. Job	5

Cement Left In Pipe	Amount	46.31 ft	Reason	Shoe Joint

Frac Ring # 1 @		ID		Frac ring # 2 @		ID		Frac Ring # 3 @		ID		Frac Ring # 4 @		ID	

The Information Stated Herein Is Correct	Customer Representative Signature

HALLIBURTON

Cementing Job Log

The Road to Excellence Starts with Safety

Sold To #: 300466	**Ship To #:** 2968995	**Quote #:**	**Sales Order #:** 900068309
Customer: ANADARKO PETROLEUM CORP - EBUS		**Customer Rep:** Bingel, Tom	
Well Name: Santa Fe	**Well #:** 21-2		**API/UWI #:** 15-187-21211
Field:	**City (SAP):** JOHNSON	**County/Parish:** Stanton	**State:** Kansas
Legal Description: Section 21 Township 29S Range 41W			
Lat: N 0 deg. OR N 0 deg. 0 min. 0 secs.		**Long:** E 0 deg. OR E 0 deg. 0 min. 0 secs.	
Contractor: Murfin	**Rig/Platform Name/Num:** 21		
Job Purpose: Cement Surface Casing			**Ticket Amount:**
Well Type: Development Well	**Job Type:** Cement Surface Casing		
Sales Person: KRANZ, ZACHARY	**Srvc Supervisor:** AGUILERA, FABIAN		**MBU ID Emp #:** 442123

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	12/12/2012 18:30							CREW CALLED OUT FOR ANADARKO PETROLEUM, SANTE FE 21-2, 8 5/8 SURFACE
Pre-Convoy Safety Meeting	12/12/2012 20:00							DISCUSSED ALL POTENTIAL ROAD HAZARDS WITH HES CREW
Crew Leave Yard	12/12/2012 20:30							CALL IN JOURNEY MANAGEMENT, IN ROUTE TO ANADARKO PETROLEUM, SANTE FE 21-2
Arrive At Loc	12/12/2012 22:30							ARRIVE AT LOCATION
Assessment Of Location Safety Meeting	12/12/2012 22:40							ASSESSED THE LOCATION, SPOT IN EQUIPMENT, WATER TESTED GOOD, GOT WITH CM AND WENT OVER JOB DEPTH AND NUMBERS, AT THIS TIME THEY HAVE GOOD RETURNS. RIG CREW IS TRIPPING OUT OF HOLE WITH DP
Pre-Rig Up Safety Meeting	12/12/2012 22:50							DISCUSSED ALL POTENTIAL HAZARDS AND PINCH POINTS WITH HES CREW
Rig-Up Equipment	12/12/2012 23:00							RIG UP IRON AND WATER HOSES
Rig-Up Completed	12/13/2012 00:00							RIG UP WENT WELL AND SAFELY

HALLIBURTON

Cementing Job Log

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Other	12/13/2012 01:30							AT THIS TIME CASING CREW IS RIGGING UP TO START RUNNING CASING DOWNHOLE
Other	12/13/2012 03:00							AT THIS TIME CASING CREW DONE RUNNING CASING DOWNHOLE AND STARTED RIGGING DOWN, CM REQUESTED TO CIRCULATE TIL CASING DONE RIGGING DOWN, HAVE GOOD RETURNS
Pre-Job Safety Meeting	12/13/2012 03:30							DISCUSSED ALL POTENTIAL HAZARDS WHEN PRESSURE IS PRESENT WITH HES AND RIG CREW, WENT OVER JOB SCHEDULE AND NUMBERS WITH CM, AT THIS TIME THEY HAVE GOOD RETURNS
Start Job	12/13/2012 03:49							
Test Lines	12/13/2012 03:50							TEST LINES TO 2000 PSI
Pump Spacer	12/13/2012 03:55		5	10			190.0	PUMP SPACER 10 BBL FW
Pump Lead Cement	12/13/2012 03:58		6	276			277.0	PUMP LEAD CEMENT = 525 SKS = 276 BBL @ 11.4#
Pump Tail Cement	12/13/2012 04:44		6	43			260.0	PUMP TAIL CEMENT = 200 SKS = 43 BBL @ 15.6#
Clean Lines	12/13/2012 04:50							STOP CLEAN LINES AND TUB
Drop Top Plug	12/13/2012 04:51							DROP TOP PLUG
Pump Displacement	12/13/2012 04:52		6	101			130.0	PUMP DISPLACEMENT OF 101 BBL
Displ Reached Cmnt	12/13/2012 05:04		6		58		210.0	DISPLACEMENT REACH CEMENT AT 58 BBL AT 210 PSI
Slow Rate	12/13/2012 05:10		2		91		390.0	SLOW RATE TO 2 BPM TO BUMP PLUG AT 91 BBL GONE

HALLIBURTON

Cementing Job Log

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Bump Plug	12/13/2012 05:14		2		101		500.0	BUMP PLUG AT 500 PSI
Check Floats	12/13/2012 05:15						1000.0	FLOATS HELD GOOD, RELEASE PRESSURE AND GOT BACK 1/2 BBL
End Job	12/13/2012 05:17							
Pre-Rig Down Safety Meeting	12/13/2012 05:20							DISCUSSED ALL POTENTIAL HAZARDS AND PINCH POINTS WITH HES CREW
Rig-Down Equipment	12/13/2012 05:30							RIG DOWN IRON AND WATER HOSES
Rig-Down Completed	12/13/2012 06:30							RIG DOWN WENT WELL AND SAFELY
Pre-Convoy Safety Meeting	12/13/2012 07:00							DISCUSSED ALL POTENTIAL ROAD HAZARDS WITH HES CREW
Crew Leave Location	12/13/2012 07:30							THANK YOU FOR CHOOSING HALLIBURTON, FABIAN AND CREW

HALLIBURTON

Cementing Job Log

The Road to Excellence Starts with Safety

Sold To #: 300466	**Ship To #:** 2968995	**Quote #:**	**Sales Order #:** 900079560
Customer: ANADARKO PETROLEUM CORP - EBUS		**Customer Rep:** Bingel, Tom	
Well Name: Santa Fe	**Well #:** 21-2		**API/UWI #:** 15-187-21211
Field:	**City (SAP):** JOHNSON	**County/Parish:** Stanton	**State:** Kansas
Legal Description: Section 21 Township 29S Range 41W			
Lat: N 0 deg. OR N 0 deg. 0 min. 0 secs.		**Long:** E 0 deg. OR E 0 deg. 0 min. 0 secs.	
Contractor: Murfin	**Rig/Platform Name/Num:** 21		
Job Purpose: Cement Production Casing			**Ticket Amount:**
Well Type: Development Well	**Job Type:** Cement Production Casing		
Sales Person: KRANZ, ZACHARY	**Srvc Supervisor:** RODRIGUEZ, EDGAR		**MBU ID Emp #:** 442125

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	12/19/2012 14:00							DISPATCH CALLED CEMENT CREW OUT FOR JOB. ANADARKO PETROLEUM SANTA FE #21-2 5 1/2 PRODUCTION CASING
Other	12/19/2012 15:00							LOAD EQUIPMENT
Depart Yard Safety Meeting	12/19/2012 15:50							DISCUSSED ALL ROUTES TO TAKE AND THE POSSIBLE HAZARDS ON THE ROAD. DISCUSSED ALL PLANNED STOPS.
Crew Leave Yard	12/19/2012 16:00							
Arrive At Loc	12/19/2012 19:00	à						
Assessment Of Location Safety Meeting	12/19/2012 19:03							RUNNING CASING. GOT NUMBERS FROM CUSTOMER REP. TP=5 1/2 15.5# K-55 5619.73' OH=7 7/8 @5661' PREVIOUS CSN= 8 5/8 24# J-55 @1625' SJ=46.31'
Pre-Rig Up Safety Meeting	12/19/2012 19:10							WENT OVER JSA TO DISCUSS ALL RED ZONES. WHERE TO SPOT EQUIPMENT AND RUN LINES. HAVE SPOTTER AT ALL TIMES
Rig-Up Equipment	12/19/2012 19:20							
Rig-Up Completed	12/19/2012 20:20							

HALLIBURTON

Cementing Job Log

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Wait on Customer or Customer Sub-Contractor Equip	12/19/2012 20:25							RUNNING CASING
Casing on Bottom	12/19/2012 21:00							WILL CIRCULATE WHILE THEY RIG CASING CREW DOWN.
Rig-Up Equipment	12/19/2012 21:45							WILL LOAD TOP PLUG IN PLUG CONTAINER WHILE CUSTOMER REP WITNESSES. WILL RIG UP IRON ON FLOOR AND STAB PLUG CONTAINER.
Pre-Job Safety Meeting	12/19/2012 21:55							DISCUSSED HAZARDS, JOB STEPS WITH ALL ON LOCATION. WENT OVER NUMBERS, PUMPING RATES, AND PRESSURES WITH CUSTOMER REP. HAD EVERYBODY INVOLVED SIGN HES SAFETY SHEET.
Start Job	12/19/2012 22:05							
Test Lines	12/19/2012 22:06						3987.0	PRESSURE TEST TO 4000 PSI.
Pump Spacer 1	12/19/2012 22:09		1	5			412.0	5 BBLS OF FRESH WATER
Pump Lead Cement	12/19/2012 22:11		5.5	19			323.0	25 SKS OF 50/50 POZ CMT @10.5 (19 BBLS)
Pump Tail Cement	12/19/2012 22:15		5.5	83			153.0	300 SKS OF 50/50 POZ CMT @13.9 (83 BBLS)
Shutdown	12/19/2012 22:30							
Clean Lines	12/19/2012 22:31							
Drop Plug	12/19/2012 22:36							5 1/2 LATCH DOWN TOP PLUG
Pump Displacement	12/19/2012 22:36		5	80	80			FRESH WATER WITH 0.8 GAL/MGAL CLA-WEB
Displ Reached Cmnt	12/19/2012 22:36							WILL SLOW TO 3 BPM WHEN DISPLACEMENT REACHES CMT.
Slow Rate	12/19/2012 22:54		3	30	110			

HALLIBURTON

Cementing Job Log

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Slow Rate	12/19/2012 23:05		1	10	120			SLOW TO 1 BPM TO BUMP PLUG
Bump Plug	12/19/2012 23:12		1	12	132		928.0	BUMP PLUG 500 PSI OVER. FINAL PSI 1351
Check Floats	12/19/2012 23:15							FLOATS HELD DID NOT HOLD. 8 BBLS HAD COME BACK UNTIL I CLOSED THE RELEASE LINE. TALKED TO CUSTOMER REP AND HE TOLD ME TO PICK THE RATE TO BUMP PLUG. I TOLD HIM I WOULD PUMP AT 2.5 BPM AND HE AGREED.
Comment	12/19/2012 23:18							PUMPIN ON IT AGAIN.
Bump Plug	12/19/2012 23:21		2.5	8	132		1242. 0	PUMPED THE 8 BBLS BACK IN.BUMP 500 PSI OVER WITH FINAL PSI BEING 1801 PSI.
Check Floats	12/19/2012 23:24							
Comment	12/19/2012 23:27							FLOATS HELD THIS TIME. 3/4 BBL BACK
End Job	12/19/2012 23:30							
Pre-Rig Down Safety Meeting	12/19/2012 23:40							DISCUSSED ALL RED ZONES. PROPER LIFTING. SPOTTING EQUIPMENT OUT OF LOCATION
Other	12/19/2012 23:50							FINISH PAPERWORK AND HAVE CUSTOMER REP SIGN.
Rig-Down Equipment	12/19/2012 23:50							
Rig-Down Completed	12/20/2012 00:50							
Depart Location Safety Meeting	12/20/2012 01:00							DISCUSSED ALL ROUTES AND POTENTIAL HAZARDS ON THE WAY BACK TO THE YARD.
Crew Leave Location	12/20/2012 01:10							THANK YOU EDGAR A. RODRIGUEZ AND HALLIBURTON CREW.

Sold To # : 300466 Ship To # :2968995 Quote # : Sales Order # : 900079560

SUMMIT Version: 7.3.0045 Friday, January 11, 2013 02:31:00