### KOLAR Document ID: 1403608

Confident	tiality Requested:
Yes	No

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION Form ACO-1 January 2018 Form must be Typed Form must be Signed All blanks must be Filled

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

OPERATOR: License #	API No.:
Name:	Spot Description:
Address 1:	
Address 2:	Feet from Dorth / 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 #	GPS Location: Lat:, Long:
Name:	(e.g. xx.xxxx) (e.gxxx.xxxx)
Wellsite Geologist:	Datum: NAD27 NAD83 WGS84
Purchaser:	County:
Designate Type of Completion:	Lease Name: Well #:
New Well Re-Entry Workover	Field Name:
	Producing Formation:
	Elevation: Ground: Kelly Bushing:
☐ Gas ☐ DH ☐ EOR ☐ OG ☐ GSW	Total Vertical Depth: Plug Back Total Depth:
CM (Coal Bed Methane)	Amount of Surface Pipe Set and Cemented at: Feet
Cathodic Other (Core, Expl., etc.):	Multiple Stage Cementing Collar Used?
If Workover/Re-entry: Old Well Info as follows:	If yes, show depth set: Feet
Operator:	If Alternate II completion, cement circulated from:
Well Name:	feet depth to:w/sx cmt.
Original Comp. Date: Original Total Depth:	
Deepening Re-perf. Conv. to EOR Conv. to SWD	Drilling Fluid Management Plan
Plug Back Liner Conv. to GSW Conv. to Producer	(Data must be collected from the Reserve Pit)
	Chloride content: ppm Fluid volume: bbls
Commingled Permit #:	Dewatering method used:
Dual Completion Permit #: SWD Permit #:	
SWD Permit #:      EOR Permit #:	Location of fluid disposal if hauled offsite:
GSW Permit #:	Operator Name:
	Lease Name: License #:
Spud Date or Date Reached TD Completion Date or	Quarter Sec TwpS. R East _ West
Recompletion Date Reached TD Recompletion Date of Recompletion Date	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					
Confidentiality Requested					
Date:					
Confidential Release Date:					
Wireline Log Received Drill Stem Tests Received					
Geologist Report / Mud Logs Received					
UIC Distribution					
ALT I II III Approved by: Date:					

### KOLAR Document ID: 1403608

Operator Nam	ne:			Lease Name:	Well #:
Sec	Twp	S. R	East West	County:	

Page Two

**INSTRUCTIONS:** Show important tops 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.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken (Attach Additional Sheets)		Y	′es 🗌 No		Log Formation (Top), Depth and Datum			Sample	
			⁄es 🗌 No	1	Name	Э		Тор	Datum
Cores Taken Electric Log Run Geologist Report / Mud List All E. Logs Run:		□ Y □ Y	Yes ☐ No Yes ☐ No Yes ☐ No						
		Rep	CASING ort all strings set-c		] Ne	w Used rmediate, productio	on. etc.		
Purpose of String	Size Hole Drilled	Siz	ze Casing et (In O.D.)	Weight Lbs. / Ft.		Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
[			ADDITIONAL	CEMENTING /	SQU	EEZE RECORD			
Purpose: Depth Perforate Protect Casing		Туре	Type of Cement # Sacks		Used Type and			d Percent Additives	
Plug Back TD Plug Off Zone									
<ol> <li>Did you perform a hydra</li> <li>Does the volume of the</li> <li>Was the hydraulic fracture</li> </ol>	total base fluid of the	hydraulic fr	acturing treatment		-	☐ Yes ns? ☐ Yes ☐ Yes	No (If No, s	kip questions 2 ar kip question 3) ill out Page Three	
Date of first Production/Inj Injection:	jection or Resumed Pr	oduction/	Producing Meth	iod:		Gas Lift 🗌 O	ther <i>(Explain)</i>		
Estimated Production Per 24 Hours	Oil	Bbls.	Gas	Mcf	Wate	er Bb	ls.	Gas-Oil Ratio	Gravity
DISPOSITIO	N OF GAS:		Ν	IETHOD OF COM	MPLE	TION:		PRODUCTIC Top	DN INTERVAL: Bottom
Vented Sold (If vented, Subn	Used on Lease		Open Hole Perf.		Dually Comp. Commingled (Submit ACO-5) (Submit ACO-4)		•	юр	Bollom
Shots Per Perforation Perforation Bridge Foot Top Bottom Type		Bridge Plug Type	Bridge Plug Set At		Acid,		ementing Squeezend of Material Used)		
TUBING RECORD:	Size:	Set At:		Packer At:					

Form	ACO1 - Well Completion	
Operator	Merit Energy Company, LLC	
Well Name	HMU 205W	
Doc ID	1403608	

All Electric Logs Run

ANNULAR HOLE VOLUME
ARRAY COMPENSATED TRUE RESISTIVITY LOG 1
ARRAY COMPENSATED TRUE RESISTIVITY LOG 2
ARRAY COMPENSATED TRUE RESISTIVITY LOG 5
BOREHOLE SONIC ARRAY LOG
MICROLOG
QUAD COMBO LOG
REPEAT LOG

Form	ACO1 - Well Completion		
Operator	Merit Energy Company, LLC		
Well Name	Vell Name HMU 205W		
Doc ID	1403608		

## Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.625	24	1830	CLASS A	680	SEE ATTACH ED
Production	7.875	5.5	17	4963	CLASS A	230	SEE ATTACH ED

ClientMERIT ENERGY COMPANYWellHMU 205WJob DescriptionSurfaceDateNovember 14, 2017

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Field Ticket # FT-00932-Y8W0M00202-21390

 Field Ticket #
 FT-00932-Y8W0M00202-21390
 Credit Approval #

 Client
 MERIT ENERGY COMPANY
 Purchase Approval #

 PO BOX 1293, LIBERAL, 67905-1293
 Invoice #

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Field Rep	James Peppin	Well	HMU 205W
Field Client Rep	Rodney Gonsalez	Well API #	15-055-22470
District	Liberal, KS	Well Type	
Job Type	Surface	Well Classification	
Job Depth (ft)	1,847.00	County	USA
Gas Used On Job	Yes	State/Province	KS
		Field	

Lease

Client MERIT ENERGY COMPANY

Well HMU 205W

Job Description Surface

Date November 14, 2017

BJ

Field Ticket # FT-00932-Y8W0M00202-21390

MATERIALS

1

2

Product Code	Description	UOM	Quantity	List Price	Gross Amount	Disc (%)	Net Amount
L488168	CEMENT, ASTM TYPE I	SK	680.0000	\$44.11	\$29,994.80	76.00	\$7,198.75
L100404	SALT, SODIUM CHLORIDE, A-5	LB	1,239.0000	\$1.04	\$1,288.56	76.00	\$309.25
L100120	EXTENDER, BENTONITE	LB	1,899.0000	\$2.08	\$3,949.92	76.00	\$947.98
L100318	CEMENT EXTENDER, GYPSUM, A-10	LB	950.0000	\$0.72	\$684.00	76.00	\$164.16
L100295	IntegraSeal CELLO	LB	340.0000	\$5.76	\$1,958.40	76.00	\$470.02
L013156	Cement Nose, 8-5/8 in.	EA	1.0000	\$460.00	\$460.00	76.00	\$110.40
L100275	CEMENT EXTENDER, SODIUM METASILICATE, A-2	LB	950.0000	\$3.28	\$3,116.00	76.00	\$747.84
L100112	ACCELERATOR, SALT, CHLORIDE, CALCIUM, A-7P, PELLETS	LB	1,754.0000	\$2.40	\$4,209.60	76.00	\$1,010.30
L016033	Float Collars with aluminum flapper, 8-5/8 in.	EA	1.0000	\$1,214.00	\$1,214.00	76.00	\$291.36
L017068	CENTRALIZER,8-5/8"NON- WELD	EA	10.0000	\$246.40	\$2,464.00	76.00	\$591.36
L86718	PLUG,CEMENT 8.6 TOP BJPL	EA	1.0000	\$287.04	\$287.04	76.00	\$68.89
L015399	Float collars with poppet valve, 8-5/8 in.	EA	1.0000	\$0.00	\$0.00	76.00	\$0.00
1000101	THREAD LOCK, 8-5/8 IN.	EA	6.0000	\$195.00	\$1,170.00	76.00	\$280.80
			Product Mater	ial Subtotal:	\$50,796.32		\$12,191.11

#### SERVICES

Product Code	Description	UOM	Quantity	List Price	Gross Amount	Disc (%)	Net Amount
S-100049	Cement pump charge, 1,001- 2,000 feet/ 301-600 m	4/HR	1.00	\$4,680.00	\$4,680.000	91.00	\$421.200
S-100001	Mileage - vehicle heavy weight	MI	50.00	\$18.96	\$948.000	91.00	\$85.320
S-100004	Cement Crew Mobilization- Demobilizaton Fee	EA	1.00	\$10,880.00	\$10,880.000	91.00	\$979.200
S-100475	Cement head	EA	1.00	\$2,656.00	\$2,656.000	91.00	\$239.040

			Servi	ce Subtotal:	\$19,700.00		\$1,773.00
S-100002	Milea	ge - vehicle light weight MI	50.00	\$10.72	\$536.000	91.00	\$48.240
Date		November 14, 2017		Field Ticket #	FT-00932-Y8V	V0M0020	2-21390
Job Descr	iption	Surface				2	
Well		HMU 205W				B	
Client		MERIT ENERGY COMPANY					



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3 of 4

Client MERIT ENERGY COMPANY

Well HMU 205W

Job Description Surface

Date November 14, 2017



Field Ticket # FT-00932-Y8W0M00202-21390

#### **FIELD ESTIMATES**

TOTAL GROSS AMOUNT	\$70,496.320
TOTAL % DISC	80.192
TOTAL NET AMOUNT	\$13,964.117

HMy 205W (Ref 205 Well AFE 83001075 Office Date

## Client Rep.

**Arrive Location** 

#### Service Order

I authorize work to begin per service instructions in accordance with the terms and conditions printed on the following pages of this form and represent that I have authority to accept and sign this order.

#### Service receipt

I certify that the materials and services listed were received and all services performed in a workmanlike manner.

#### **BJ REPRESENTATIVE**

James Peppin

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#### **CLIENT AUTHORIZED AGENT**

Rodney Gonsale**z** S

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Start Date	10/14/2017	Well	HMU 205W
End Date	12/30/2017	County	Finney
Client	MERIT ENERGY COMPANY	State/Province	KS
Client Field Rep	Rodney Gonsalez	API	15-055-22470
Service Supervisor		Formation	
Field Ticket No.	8.625" Surface	Rig	
District	Liberal, KS	Type of Job	Surface

### WELL GEOMETRY

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Туре	ID (in)	OD (in)	Wt. (lb/ft)	MD (ft)	TVD (ft)	Excess(%)	Grade	Thread
Open Hole	12.25			1,847.00	1,847.00	0.00	- T	
Open Hole	12.25			1,347.00	1,347.00	130.00		
Casing	8.10	8.63	24.00	1,847.00	1,847.00		J-55	LTC

Shoe Length (ft): 42

#### HARDWARE

No	Тооі Туре		
BJ	Tool Depth (ft)		
	Max Tubing Pressure - Rated (psi)		
Yes	Max Tubing Pressure - Operated (psi)		
BJ	Max Casing Pressure - Rated (psi)	2,950.00	
8.625	Max Casing Pressure - Operated (psi)	2,360.00	
No	Pipe Movement	None	
	Job Pumped Through		
	Top Connection Thread	8 rd	55
1,805	Top Connection Size	8.625	
	BJ Yes BJ 8.625 No	BJTool Depth (ft)Max Tubing Pressure - Rated (psi)YesMax Tubing Pressure - Operated (psi)BJMax Casing Pressure - Rated (psi)8.625Max Casing Pressure - Operated (psi)NoPipe MovementJob Pumped ThroughTop Connection Thread	BJTool Depth (ft)Max Tubing Pressure - Rated (psi)YesMax Tubing Pressure - Operated (psi)BJMax Casing Pressure - Rated (psi)8.625Max Casing Pressure - Operated (psi)NoPipe MovementJob Pumped ThroughTop Connection Thread8 rd

### **CIRCULATION PRIOR TO JOB**



Well Circulated By	Rig	Solids Present at End of Circulation	No
<b>Circulation Prior to Job</b>	Yes	10 sec SGS	
Circulation Time (min)		10 min SGS	
Circulation Rate (bpm)		30 min SGS	
Circulation Volume (bbls)		Flare Prior to/during the Cement Job	No
Lost Circulation Prior to Cement Job	No	Gas Present	No
Mud Density In (ppg)		Gas Units	
Mud Density Out (ppg)			
PV Mud In			
PV Mud Out			
YP Mud In			
YP Mud Out			

#### TEMPERATURE

14

Ambient Temperature (°F)	Slurry Cement Temperature (°F)
Mix Water Temperature (°F)	Flow Line Temperature (°F)

### **BJ FLUID DETAILS**

Fluid Type	Fluid Name	Density (ppg)	Yield (Cu Ft/sk)	H2O Req. (gals/sk)	Vol (sk)	Vol (Cu Ft)	Vol (bbls)
Lead Slurry	Multi Density Cement	12.1000	2.5410	14.71	505	1,278.0000	227.5000
Tail Slurry	Class A Cement	15.2000	1.2692	5.74	175	222.0000	39.4000

Fluid Type	Fluid Name	Component	Concentration	UOM
Lead Slurry	Multi Density Cement	CEMENT, ASTM TYPE I	100.00	РСТ
Lead Slurry	Multi Density Cement	CEMENT EXTENDER, GYPSUM, A-10	2.00	BWOB
Lead Slurry	Multi Density Cement	CEMENT EXTENDER, SODIUM METASILICATE,	2.00	BWOB



		A-2	
Lead Slurry	Multi Density Cement	SALT,SODIUM CHLORIDE, A-5	2.00 BWOW
Lead Slurry	Multi Density Cement	EXTENDER, BENTONITE	4.00 BWOB
Lead Slurry	Multi Density Cement	ACCELERATOR, SALT, CHLORIDE, CALCIUM, A- 7P, PELLETS	3.00 BWOB
Lead Slurry	Multi Density Cement	IntegraSeal CELLO	0.50 LBS/SK
Tail Slurry	Class A Cement	IntegraSeal CELLO	0.50 LBS/SK
Tail Slurry	Class A Cement	CEMENT, ASTM TYPE I	100.00 PCT
Tail Slurry	Class A Cement	ACCELERATOR, SALT, CHLORIDE, CALCIUM, A- 7P, PELLETS	2.00 BWOB

## TREATMENT SUMMARY

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Time	Fluid	Rate (bpm)	Fluid Vol. (bbls)	Pipe Pressure (psi)	Annulus Pressure (psi)	Comments
	Multi Density Cement	0.00	227.50			
	Class A Cement	0.00	39.40			

	Min	Max	Avg
Pressure (psi)	200.00	300.00	200.00
Rate (bpm)	5.00	5.00	5.00

### DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	Amount of Cement Returned/Reversed	73.00
Calculated Displacement Volume (bbls)	114.00	Method Used to Verify Returns	Visual
Actual Displacement Volume (bbis)	116.00	Amount of Spacer to Surface	
Did Float Hold?	Yes	Pressure Left on Casing (psi)	300.00
Bump Plug	No	Amount Bled Back After Job	0.00
Bump Plug Pressure (psi)		Total Volume Pumped (bbis)	393.00
Were Returned Planned at Surface	Yes	<b>Top Out Cement Spotted</b>	No



Cement returns During Job	Full	Lost Circulation During Cement Job	Νο
CEMENT PLUG			
Bottom of Cement Plug?	No	Wiper Balls Used?	No
Wiper Ball Quantity		Plug Catcher	No
Number of Plugs			
SQUEEZE			
Injection Rate (bpm)		Fluid Density (ppg)	
Injection Pressure (psi)		ISIP (psi)	
Type of Squeeze		FSIP (psi)	
Operators Max SQ Pressure (psi)			
COMMENTS			

#### **Treatment Report**

time	psi 2500	rate	bbls	name test lines
610 pm		-	10	
612	110	5	10	h20
615	210	5	228	lead cmt
728	267	6	39	tail cmt
745				drop plug
747	100	5		disp plug
757	120	5.5		50 bbl gone on disp
806	320	5.5		100 bbl gone on disp
808	290	3	10	last 10 bbl slow rate down to bump plug
810	310			no bump

#### Job Summary

safety meeting with rig crew and customer test lines to 2500 psi pump 10 bbls h20 ahead pump 228 bbls of lead cmt slurry @ 12.1 wt = 505 sks pump 39 bbls of tail cmt slurry @ 15.2 wt = 175 sks shut down drop top rubber plug disp plug with 114 bbls of h20 from the rig frac tank last 10 bbls of disp we slow rate down to bump plug



we didnt bump plug we went 2 bbl over as per customer and still no bump we check float and it held and customer had us put 300 psi on it and close the head in

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Client MERIT ENERGY COMPANY

Well HMU 205W

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Job Description Long String

Date November 18, 2017



Field Ticket # FT-01068-B0M7X40202-07259

 Field Ticket #
 FT-01068-B0M7X40202-07259
 Credit Approval #

 Client
 MERIT ENERGY COMPANY
 Purchase Approval #

 PO BOX 1293, LIBERAL, 67905-1293
 Invoice #

Field Rep	Erik Chavez	Well	HMU 205W
Field Client Rep	Rodney Gonsalez	Well API #	15-055-22470
District	Liberal, KS	Well Type	
Job Type	Long String	Well Classification	
Job Depth (ft)	6,600.00	County	USA
Gas Used On Job	No	State/Province	KS
		Field	
		Lease	

1 of 4

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Client	MERIT ENERGY COM	PANY					
Well HMU 205W Job Description Long String							
Date	November 18, 2017			Field Ticket	# FT-01068-BOI	M7X4020	2-07259
	5,000 feet/1,201 -1,500 m						
S-100475	Cement head	EA	1.00	\$2,656.00	\$2,656.000	91.00	\$239.040
S-100002	Mileage - vehicle light weight	МІ	100.00	\$10.72	\$1,072.000	91.00	\$96.480
S-100001	Mileage - vehicle heavy weight	МІ	100.00	\$18.96	\$1,896.000	91.00	\$170.640
S-100004	Cement Crew Mobilization- Demobilizaton Fee	EA	2.00	\$10,880.00	\$21,760.000	91.00	\$1,958.400
			Serv	ice Subtotal:	\$36,047.04		\$5,492.88

Client MERIT ENERGY COMPANY

Well HMU 205W

Job Description Long String

Date November 18, 2017



Field Ticket # FT-01068-B0M7X40202-07259

### MATERIALS

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Product Code	Description	UOM	Quantity	List Price	Gross Amount	Disc (%)	Net Amount
L100022	CEMENT, CLASS H	SK	86.0000	\$50.27	\$4,323.22	76.00	\$1,037.57
L100495	SALT, Sodium Chloride, Medium	LB	1,795.0000	\$0.57	\$1,023.15	76.00	\$245.56
L100120	EXTENDER, BENTONITE	LB	495.0000	\$2.08	\$1,029.60	76.00	\$247.10
20000018	CFL-210	LB	124.0000	\$22.72	\$2,817.28	76.00	\$676.15
L100294	LOST CIRCULATION, LCM-1	LB	1,405.0000	\$4.00	\$5,620.00	76.00	\$1,348.80
L100295	IntegraSeal CELLO	LB	71.0000	\$5.76	\$408.96	76.00	\$98.15
L100318	CEMENT EXTENDER, GYPSUM, A-10	LB	1,339.0000	\$0.72	\$964.08	76.00	\$231.38
2000002	CD-100	LB	29.0000	\$9.35	\$271.15	76.00	\$65.08
L101196	FP-25, Dry Foam Preventer (BJS Only)	LB	50.0000	\$14.52	\$726.00	76.00	\$174.24
L100317	CEMENT, FLY ASH (POZZOLAN)	SK	86.0000	\$25. <b>68</b>	\$2,208.48	76.00	\$530.04
L398117	IntegraGuard ULTRA II	BBL	24.0000	\$234.85	\$5,636.40	76.00	\$1,352.74
L100019	CEMENT, CLASS A	SK	110.0000	\$43.34	\$4,767.40	76.00	\$1,144.18
L014007	Float Shoe - circulating diff. type, 5-1/2 in.	EA	1.0000	\$545.00	\$545.00	76.00	\$130.80
L017421	Latch Down Plug & Assembly, 5-1/2 in.	EA	1.0000	\$660.00	\$660.00	76.00	\$158.40
L017348	STAGE TOOL,CEM,5- 1/2"N80,8RD-L	EA	1.0000	\$11,495.00	\$11,495.00	76.00	\$2,758.80
L017116	Collars and Cement Baskets, 5-1/2 in.	EA	1.0000	\$395.00	\$395.00	76.00	\$94.80
			Product Mater	rial Subtotal:	\$42,890.72		\$10,293.79

#### SERVICES

Product Code	Description	UOM	Quantity	List Price	Gross Amount	Disc (%)	Net Amount'
S-100282	Cementing - Job Site Cancel Chg	HR	6.00	\$411.84	\$2,471.040	0.00	\$2,471.040
S-100052	Cement pump charge, 4,001	6/HR	1.00	\$6,192.00	\$6,192.000	91.00	\$557.280

Client MERIT ENERGY COMPANY

Well HMU 205W

Job Description Long String

Date November 18, 2017



Field Ticket # FT-01068-B0M7X40202-07259

#### FIELD ESTIMATES

TOTAL GROSS AMOUNT	\$78,937.760
TOTAL % DISC	80.001
TOTAL NET AMOUNT	\$15,786.653

Well Hr	MU 205W	
AFE	55333	
GL	83001075	
Office	GArden City	
Date	11-18-17	

## Service Order

**Arrive Location** 

**Client Rep.** 

I authorize work to begin per service instructions in accordance with the terms and conditions printed on the following pages of this form and represent that I have authority to accept and sign this order.

#### Service receipt

I certify that the materials and services listed were received and all services performed in a workmanlike manner.

#### **BJ REPRESENTATIVE**

**Erik Chavez** 

**CLIENT AUTHORIZED AGENT** 

Rodney Gonsalez Jegole



Start Date	11/18/2017	Well	HMU 205W
End Date	11/18/2017	County	Finney
Client	MERIT ENERGY COMPANY	State/Province	KS
Client Field Rep	Rodney Gonsalez	ΑΡΙ	15-055-22470
Service Supervisor		Formation	
Field Ticket No.	Production	Rig	
District	Liberal, KS	Type of Job	Long String

### WELL GEOMETRY

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Туре	ID (in)	OD (in)	Wt. (lb/ft)	MD (ft)	TVD (ft)	Excess(%)	Grade	Thread
Open Hole	7.88			5,000.00	5,000.00	30.00		
Casing	4,89	5.50	17.00	4,963.00	4,963.00		J-55	LTC
Previous Casing	8,10	8.63	24.00	1,430.00	1,430.00		J-55	LTC

Shoe Length (ft): 42

### HARDWARE

Bottom Plug Used?	Yes	Tool Type	DV Tool		
Bottom Plug Provided By	BJ	Tool Depth (ft)	4,178.67		
Bottom Plug Size	5.500	Max Tubing Pressure - Rated (psi)			
Top Plug Used?	Yes	Max Tubing Pressure - Operated (psi)			
Top Plug Provided By	BJ	Max Casing Pressure - Rated (psi)			
Top Plug Size	5.500	Max Casing Pressure - Operated (psi)			
Centralizers Used	No	Pipe Movement	None		
Centralizers Quantity		Job Pumped Through	Manifold		
Centralizers Type		Top Connection Thread	LTC		
Landing Collar Depth (ft)	4,958	Top Connection Size	5.5		

### **CIRCULATION PRIOR TO JOB**

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Final	Displacement			
Displacement Final	2nd Stage Displacement	8.3400	0.0000	97.6000

Fluid Type	Fluid Name	Component	Concentration UOM
Spacer / Pre Flush / Flush	UltraFlush	IntegraGuard ULTRA II	100.00 PCT
Spacer / Pre Flush / Flush	UltraFlush	IntegraGuard ULTRA II	100.00 PCT
Tail Slurry	Second Stage Tail	CEMENT, CLASS A	100.00 PCT
Tail Slurry	Second Stage Tail	LOST CIRCULATION, LCM-1	5.00 LBS/SK
Tail Slurry	Second Stage Tail	SALT, Sodium Chloride, Medium	10.00 BWOW
Tail Slurry	Second Stage Tail	IntegraSeal CELLO	0.25 LBS/SK
Tail Slurry	Second Stage Tail	EXTENDER, BENTONITE	2.00 BWOB
Tail Slurry	Second Stage Tail	CFL-210	0.50 BWOB
Tail Slurry	Second Stage Tail	CEMENT EXTENDER, GYPSUM, A-10	6.00 BWOB
Tail Slurry	Second Stage Tail	FP-25, Dry Foam Preventer (BJS Only)	0.20 BWOB
Tail Slurry	First Stage Tail	CEMENT, CLASS H	50.00 PCT
Tail Slurry	First Stage Tail	SALT, Sodium Chloride, Medium	10.00 BWOW
Tail Slurry	First Stage Tail	LOST CIRCULATION, LCM-1	5.00 LBS/SK
Tail Slurry	First Stage Tail	IntegraSeal CELLO	0.25 LBS/SK
Tail Slurry	First Stage Tail	EXTENDER, BENTONITE	2.00 BWOB
Tail Slurry	First Stage Tail	CEMENT EXTENDER, GYPSUM, A-10	5.00 BWOB
Tail Slurry	First Stage Tail	CFL-210	0.50 BWOB
Tail Slurry	First Stage Tail	CD-100	0.20 BWOB
Tail Slurry	First Stage Tail	FP-25, Dry Foam Preventer (BJS Only)	0.20 BWOB
Tail Slurry	First Stage Tail	CEMENT, FLY ASH (POZZOLAN)	50.00 PCT
Top-Out / Scavenger Slurry	Mouse hole/Rat hole Plug	SALT, Sodium Chloride, Medium	10.00 BWOW
Top-Out / Scavenger	Mouse hole/Rat hole	CEMENT, CLASS H	50.00 PCT



Displaced By	BJ	Amount of Cement Returned/Reversed					
Calculated Displacement Volume (bbls)	120.00	Method Used to Verify Returns					
Actual Displacement Volume (bbls)	120.00	Amount of Spacer to Surface					
Did Float Hold?	Yes	Pressure Left on Casing (psi)	0.00				
Bump Plug	No	Amount Bled Back After Job	0.50				
Bump Plug Pressure (psi)		Total Volume Pumped (bbls)	228.60				
Were Returned Planned at Surface	No	Top Out Cement Spotted	No				
Cement returns During Job		Lost Circulation During Cement Job	No				
CEMENT PLUG							
Bottom of Cement Plug?	Yes	Wiper Balls Used?	No				
Wiper Ball Quantity		Plug Catcher	No				
Number of Plugs							
SQUEEZE							
Injection Rate (bpm)		Fluid Density (ppg)					
Injection Pressure (psi)		ISIP (psi)					
Type of Squeeze		FSIP (psi)					
Operators Max SQ Pressure (psi)							

## COMMENTS

### Treatment Report

Job Summary