

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

1120622

Form ACO-1 August 2013 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. 15
Name:	Spot Description:
Address 1:	SecTwpS. R 🗌 East 🗌 West
Address 2:	Feet from
City: State: Zip:+	Feet from _ East / _ West Line of Section
Contact Person:	Footages Calculated from Nearest Outside Section Corner:
Phone: ()	□NE □NW □SE □SW
CONTRACTOR: License #	GPS Location: Lat:, Long:
Name:	(e.g. xx.xxxxx) (e.gxxx.xxxxx)
Wellsite Geologist:	Datum: NAD27 NAD83 WGS84
Purchaser:	County:
Designate Type of Completion:	Lease Name: Well #:
☐ New Well ☐ Re-Entry ☐ Workover	Field Name:
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:	Producing Formation: Elevation: Ground: Kelly Bushing: Feet Total Vertical Depth: Plug Back Total Depth: Feet Multiple Stage Cementing Collar Used? Yes No 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 ENHR Conv. to SWD Plug Back Conv. to GSW Conv. to Producer Commingled Permit #: Dual Completion Permit #: SWD Permit #:	Drilling Fluid Management Plan (Data must be collected from the Reserve Pit) Chloride content: ppm Fluid volume: bbls Dewatering method used: Location of fluid disposal if hauled offsite:
☐ ENHR Permit #: ☐ GSW Permit #:	Operator Name:
	Lease Name: License #:
Spud Date or Date Reached TD Completion Date or Recompletion Date Recompletion Date	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					
Confidentiality Requested					
Date:					
Confidential Release Date:					
Wireline Log Received					
Geologist Report Received					
UIC Distribution					
ALT I II III Approved by: Date:					

Page Two



Operator Name:				Lease N	Name: _			Well #:		
Sec Twp	S. R	East	West	County	:					
INSTRUCTIONS: Shopen and closed, flow and flow rates if gas to	ing and shut-in pressu	ires, whe	ther shut-in pre	ssure reac	hed stati	c level, hydrosta	tic pressures, bott			
Final Radioactivity Log files must be submitte						gs must be ema	iled to kcc-well-lo	gs@kcc.ks.go	v. Digital elec	tronic log
Drill Stem Tests Taken (Attach Additional S		Ye	es No		L		on (Top), Depth an		Samp	
Samples Sent to Geol	ogical Survey	_ Ye	es No		Nam	е		Тор	Datur	n
Cores Taken Electric Log Run		Y€								
List All E. Logs Run:										
				RECORD	☐ Ne					
				conductor, su	rface, inte	ermediate, producti			T	
Purpose of String	Size Hole Drilled		e Casing (In O.D.)	Weig Lbs./		Setting Depth	Type of Cement	# Sacks Used	Type and P Additiv	
			ADDITIONAL	CEMENTIN	NG / SQL	JEEZE RECORD				
Purpose:	Depth Top Bottom	Туре	of Cement	# Sacks Used Type and Percent Additives						
Perforate Protect Casing	Jop Zollow									
Plug Back TD Plug Off Zone										
1 ag on zono										
Did you perform a hydrau	ılic fracturing treatment o	n this well?	•			Yes	No (If No, ski	p questions 2 ar	nd 3)	
	otal base fluid of the hydra		J	,	0		_ , ,	p question 3)	(# 100 t)	
Was the hydraulic fractur	ing treatment information	submitted	to the chemical o	disclosure re	gistry?	Yes	No (If No, fill	out Page Three	of the ACO-1)	
Shots Per Foot			D - Bridge Plug Each Interval Perf				cture, Shot, Cement			Depth
	. ,							,		
TUBING RECORD:	Size:	Set At:		Packer At	t:	Liner Run:				
							Yes No			
Date of First, Resumed	Production, SWD or ENH	IR.	Producing Meth Flowing	nod:	g 🗌	Gas Lift C	Other (Explain)			
Estimated Production Per 24 Hours	Oil B	bls.	Gas	Mcf	Wate	er Bl	ols. G	as-Oil Ratio	Gr	ravity
DISDOSITIO	ON OF GAS:			METHOD OF	COMPLE	TION:		PRODUCTIO	ON INTERVAL:	
Vented Sold			Open Hole	Perf.	Dually	Comp. Con	nmingled	THODOUTIC	ZIV IIV I LTIVAL.	
(If vented, Sub			Other (Specify)		(Submit)	ACO-5) (Subi	mit ACO-4)			

OPERATOR

Company: MUSTANG ENERGY CORPORATION

Address: PO BOX 1121

HAYS, KANSAS 67601

Contact Geologist: ROD BRIN
Contact Phone Nbr: 785-623-0533
Well Name: HERRMAN # 1-8

Location: SE SW NE NE SEC 8-16S-18W API: 15-165-22,010-00-00

Pool: WILDCAT Field: UNNAMED State: KANSAS Country: USA

Scale 1:240 Imperial

Well Name: HERRMAN # 1-8

Surface Location: SE SW NE NE SEC 8-16S-18W

Bottom Location:

API: 15-165-22,010-00-00

License Number: 33922 Spud Date: 1/25/20

Spud Date: 1/25/2013 Time: 1:00 PM

Region: RUSH COUNTY

Drilling Completed: 1/30/2013 Time: 6:20 AM Surface Coordinates: 1175' FNL & 930' FEL

Surface Coordinates.

Bottom Hole Coordinates:

Ground Elevation: 2009.00ft K.B. Elevation: 2017.00ft

Logged Interval: 2900.00ft To: 3690.00ft

Total Depth: 3690.00ft

Formation: CONGLOMERATE SAND/ARBUCKLE Drilling Fluid Type: CHEMICAL/FRESH WATER GEL

SURFACE CO-ORDINATES

Well Type: Vertical

Longitude: Latitude:

N/S Co-ord: 1175' FNL E/W Co-ord: 930' FEL

LOGGED BY



Company: SOLUTIONS CONSULTING

Address: 108 W 35TH

HAYS, KS 67601

Phone Nbr: (785) 639-1337

Logged By: Geologist Name: HERB DEINES

CONTRACTOR

Contractor: DISCOVERY DRILLING, INC.

Rig #: 1

Rig Type: MUD ROTARY

 Spud Date:
 1/25/2013
 Time:
 1:00 PM

 TD Date:
 1/30/2013
 Time:
 6:20 AM

 Rig Release:
 1/31/2013
 Time:
 2:00 AM

ELEVATIONS

K.B. Elevation: 2017.00ft Ground Elevation: 2009.00ft

K.B. to Ground: 8.00ft

NOTES

RECOMMENDATION TO RUN PRODUCTION CASING BASED ON POSITIVE RESULTS OF DST # 1

OPEN HOLE LOGGING BY: NABORS OPERATIONS AND COMPLETIONS - LOGS RAN WERE DUAL INDUCTION LOG, COMPENSATED DENSITY/NEUTRON LOG, MICRO LOG AND SONIC LOG

DRILL STEM TESTING BY TRILOBITE TESTING INC: ONE (1) CONVENTIONAL TEST

FORMATION TOPS SUMMARY AND CHRONOLOGY OF DAILY ACTIVITY

HERRMAN # 1-8

1175' FNL & 930' FEL, NE/4

Sec. 8-16s-18w

2009' GL 2017' KB

HERRMAN # 1

SE NW NE

Sec. 8-16s-18w

Reference Well

<u>FORMATION</u>	SAMPLE TOPS	LOG TOPS	LOG TOPS
Anhydrite	1177+ 840	1173+844	+ 839
B-Anhydrite	1207+ 810	1206+811	+ 808
Topeka	2986- 969	2984- 967	- 970
Heebner Shale	3257-1240	3255-1238	-1239
Toronto	3275-1258	3274-1257	-1255
LKC	3304-1287	3303-1286	-1285
ВКС	3536-1519	3534-1517	-1519
Conglomerate Sand	3580-1563	3580-1563	-1565
Arbuckle	3585-1568	3587-1570	-1581
Reagan Sand		3647-1630	
RTD	3690-1673		
LTD		3688-1671	-1584

SUMMARY OF DAILY ACTIVITY

1-25-13	RU, spud 1:00 pm
1-26-13	1120', drilling, set 8 5/8" to 1181.48' w/ 450 sxs Common, 2%Gel,
	3%CC, plug down 1:45PM, WOC 12 hrs
1-27-13	1645', drill plug at 1:45 am
1-28-13	2795', drilling, displace mud system
1-29-13	3500', drilling, short trip, CCH, DST # 1 3534'-3600' Cg Sd/Arb
1-30-13	3690', CFS, RTD @ 6:20AM, CCH, logs, LDDP, run casing
1-31-13	3690', finish running casing, cementing bottom stage, RD

DST # 1 ARBUCKLE CONVENTIONAL TEST SUMMARY



DRILL STEM TEST REPORT

Mustang Energy Corp. 8-16-18, Ellis, KS

PO Box 1121 Herman #1-8

Hays KS 67601 Job Ticket: 50267 DST#: 1

Test Start: 2013.01.29 @ 14:50:00 ATTN: Herb Deines

GENERAL INFORMATION:

Cgl Sd-Arb. Formation:

Serial #: 6753

Deviated: Whipstock ft (KB) Conventional Bottom Hole (Initial) No Test Type:

Time Tool Opened: 17:32:30 Tester: Brett Dickinson

Time Test Ended: 22:37:30 Unit No:

2017.00 ft (KB) 3534.00 ft (KB) To 3600.00 ft (KB) (TVD) Reference Bevations: Interval:

Total Depth: 3600.00 ft (KB) (TVD) 2009.00 ft (CF) Hole Diameter: 7.88 inchesHole Condition: Fair KB to GR/CF: 8.00 ft

Inside

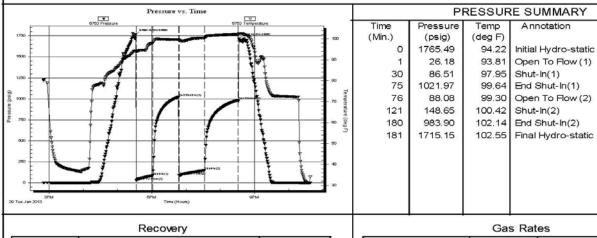
Press@RunDepth: 148.65 psig @ 3535.00 ft (KB) Capacity: 8000.00 psig

Start Date: 2013.01.29 2013.01.29 Last Calib .: 2013.01.29 End Date: Start Time: 14:50:05 End Time: 22:37:29 Time On Btm: 2013.01.29 @ 17:31:30 Time Off Btm: 2013.01.29 @ 20:32:30

TEST COMMENT: IF-BOB in 9.5min

ISI-Very weak surface blow died in 18min

FF-BOB in 9.5min FSI-3/4in blow



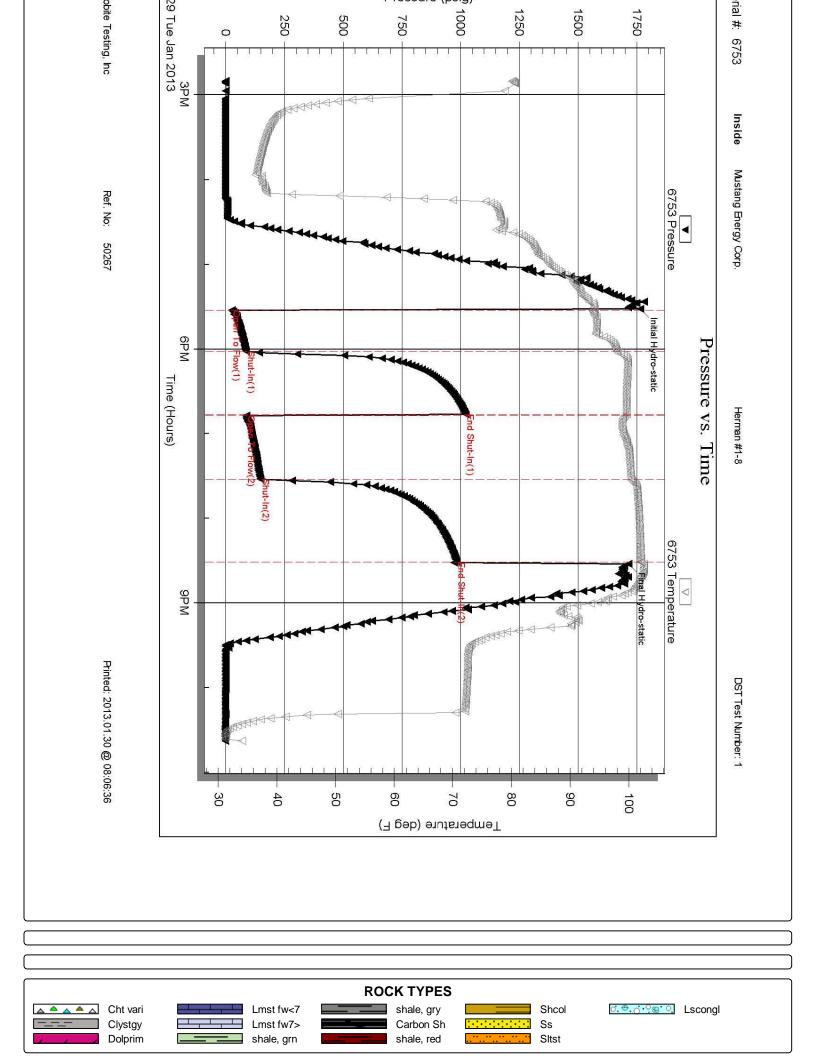
Recovery					
Length (ft)	Description	Volume (bbl)			
125.00	GMCO 20%G 40%O 40%M	1.48			
125.00	GMCO 20%G 50%O 30%M	1.75			
90.00	GO 30%G 70%O	1.26			
0.00	90ft GIP	0.00			

Gas Rat	es	
Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

Trilobite Testing, Inc Ref. No: 50267 Printed: 2013.01.30 @ 08:06:35

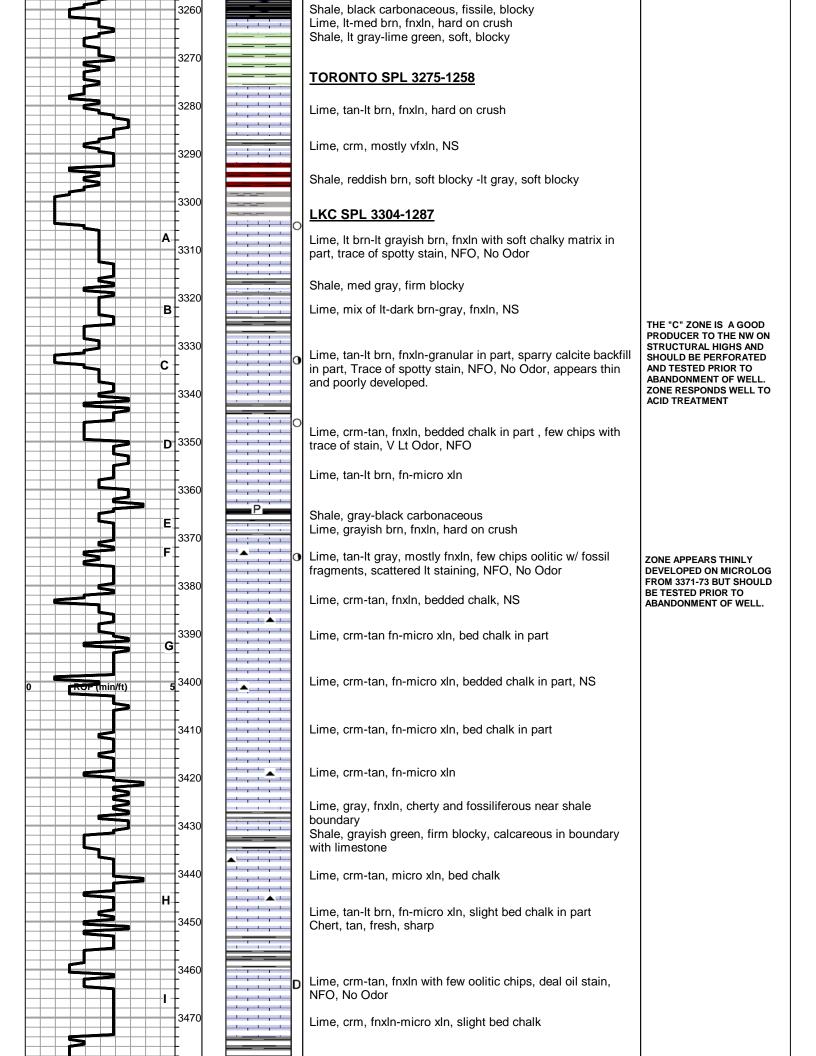
DST # 1 EXPANDED CHART

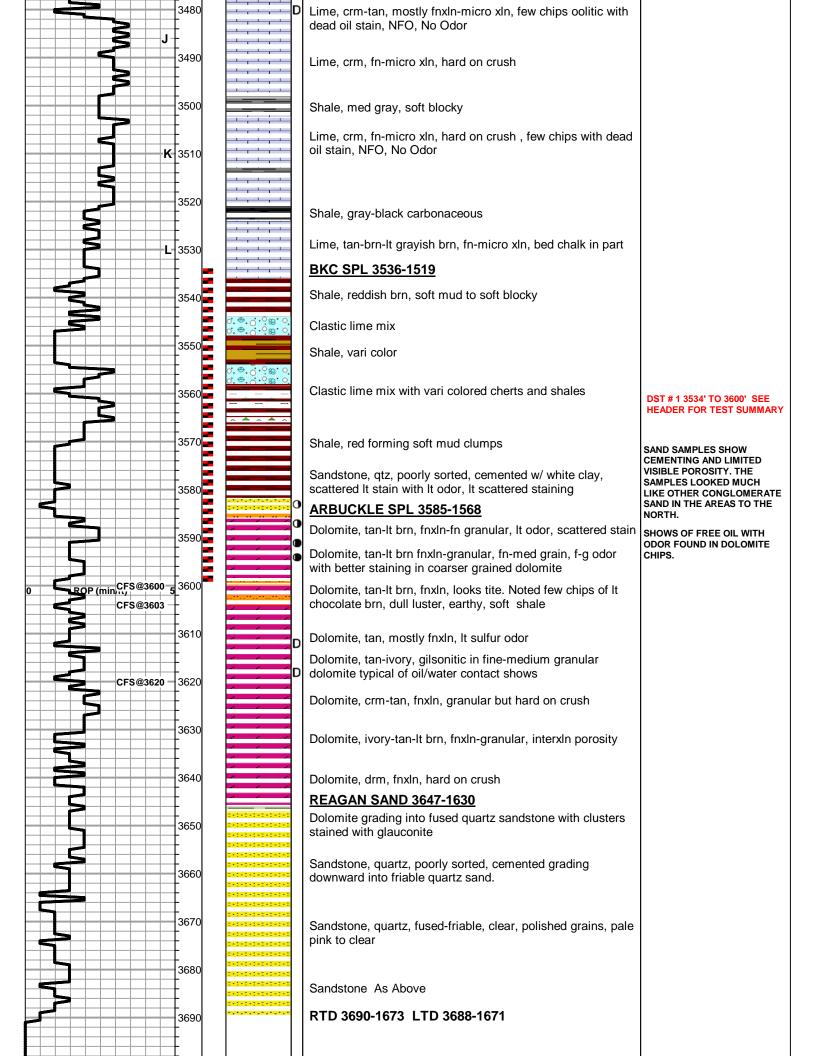
Pressure (nsia)



ACCESSORIES MINERAL ▲ Chert, dark P Pyrite **OTHER SYMBOLS DST** ■ DST Int DST alt Core Printed by GEOstrip VC Striplog version 4.0.7.0 (www.grsi.ca) Curve Track #1 TG, C1 - C5 ROP (min/ft) Depth | Intervals Lithology DST Geological Descriptions Sored Interval DST Interval 240 Imperial 1:240 Imperial ROP (min/ft) BEGIN 1' DRILL TIME FROM 2900' TO RTD 8 5/8' SURFACE CASING SET 2900 TO 1181.48' W/ 450 SXS BEGIN 10' WET AND DRY SAMPLES FROM 2950' TO RTD COMMON, 2%GEL, 3%CC **ANHYDRITE TOP 1173+844** 2910 **ANHYDRITE BASE 1206+811** 2920 Lime, med brn-med gray, fnxln, slightly fossiliferous, shaley in facies transition zones 2930 Shale, It dove gray-med gray soft blocky to soft mud 2940 Lime, It-med brn, fnxln, slightly fossiliferous 2950 Shale, It-med gray, soft blocky 2960 Lime, med brn-grayish brn, fnxln-soft crumbly, slightly fossiliferous 2970 Lime, med brn-dark gray, fnxln, slightly fossiliferous 2980 **TOPEKA SPL 2986-969** Lime, It-dark brn, fnxln, hard on crush in part, slight bed 2990 chalk 3000 Lime, It-dark brn, fnxln, dense and hard on crush in part ROP (min/ft) Lime, It-med brn-grayish brn, fnxln, slightly fossiliferous, scattered fusulinids 3010 Lime, It brn-med grayish brn, fnxln 3020 Lime, It-med brn, fnxln-granular, increasing chalk content, 3030 Lime It hrn-It gravish hrn fn-vfyln

	3040		Enno, it bill it grayion bill, ill vixili
	3050		Lime, It brn-It grayish brn, fnxln, soft on crush, chalk in part
	- - - 3060		Lime, med brn, fnxln
	- - -		Lime, tan-lt brn, fnxln-granular, bed chalk, NS
8	3070	· · · · · · · · · · · · · · · · · · ·	Lime, It brn-It grayish brn, granular, slightly fossiliferous- crinoid segments
5	3080		Lime, It-med brn, fnxln-granular
	3090		Lime-It-med brn, granular, chalk in part with sticky clumps of chalk
	3100		Lime, tan-med brn, granular with chalk with sticky chalk clumps in part
3	3110		Shale, gray-black carbonaceous, fissile
5	- - - 3120 -		Lime, tan-lt brn, fn-vfxln in part
	3130		Lime, crm-tan, fn-vfxln, hard on crush, slightly fossiliferous
	3140 -		Lime, crm-tan, fn-vfxln with micro xln in part, hard on crush
3	3150	- ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	Lime, It-med brn, fn-vfxln
	3160		Lime, It-med brn, fn-vfxln
	3170	P ==	Shale, gray-black carbonaceous Lime, It-med brn-grayish brn, fnxln
5	3180 -		Lime, tan, fn- vfxln in part
2	3190	•	Lime, tan-lt brn, fnxln, Chert, med gray, fresh, sharp
0 P (min/ft) 5	3200		Lime, It-med brn, fnxln, slight bed chalk in part
	3210 -		Lime, It-med brn-micro xln in part
	3220		Lime, tan-lt brn, fnxln-granular in part , bed chalk, NS
	3230 - -		Lime, tan-lt brn, fnxln-granular, bed chalk, slightly
	3240		fossiliferous-fusulinids, chalky matrix in part
	3250 -		Lime, It-med brn, fnxln
			HEEBNER SHALE SPL 3257-1240





QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

6347 Home Office P.O. Box 32 Russell, KS 67665 Phone 785-483-2025 Cell 785-324-1041 Finish State On Location County Sec Twp Range Location Well No. Owner Lease To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed. Type Job Hole Size T.D Depth Street Csg State Tbg. Size Depth City The above was done to satisfaction and supervision of owner agent or contractor. Depth Tool Cement Amount Ordered Shoe Joint Cement Left in Csa Displace Meas Line EQUIPMENT Common Cementer No. Poz. Mix Helper Pumptrk Driver No. Gel. Bulktrk Drive Driver Calcium Bulktrk Driver JOB SERVICES & REMARKS Hulls Salt Remarks: Flowseal Rat Hole Kol-Seal Mouse Hole Mud CLR 48 Centralizers CFL-117 or CD110 CAF 38 Baskets D/V or Port Collar Sand Handling Mileage FLOAT EQUIPMENT Guide Shoe Centralizer Baskets AFU Inserts Float Shoo Latch Down Pumptrk Charge Mileage Tax Discount

Signature

Total Charge

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

No. 6504 Home Office P.O. Box 32 Russell, KS 67665 Phone 785-483-2025 Cell 785-324-1041 On Location Finish State Range Twp. County Sec. Well No. /- 8 Owner Lease To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish Contracto cementer and helper to assist owner or contractor to do work as listed. Hole Size Depth Street Csg. State Tbg. Size Depth City The above was done to satisfaction and supervision of owner agent or contractor. Depth Tool Cement Amount Ordered 190 Com Shoe Joint Cement Left in Csq Meas Line Displace EQUIPMENT Common Cemente Poz. Mix Helper Pumptrk 9 No. Driver D Gel. Bulktrk Driver No. Driver Calcium Bulktrk Driver JOB SERVICES & REMARKS Hulls Salt Remarks: Flowseal Rat Hole Kol-Seal Mouse Hole Mud CLR 48 Centralizers CFL-117 or CD110 CAF 38 **Baskets** Sand D/V or Port Collar Handling Mileage FLOAT EQUIPMENT Guide Shoe Centralizer alizers **Baskets** AFU Inserts Float Shoe Latch Down Pumptrk Charge Tax Discount **Total Charge** Signature

QUALITY CILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Home Office P.O. Box 32 Russell, KS 67665 Phone 785-483-2025 Cell 785-324-1041 On Location Sec. Twp. Range County State Date Location Owner To Quality Oilwell Cementing, Inc. Contractor You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed. Type Job Hole Size To Depth Stree Depth City Tbg. Size The above was done to satisfaction and supervision of owner agent or contractor. Tool Depth Cement Amount Ordered Cement Left in Csg Shoe Joint Meas Line Displace EQUIPMENT Common Cementer Pumptrk Poz. Mix Helper Driver No. Gel. Bulktrk Driver No. Driver Bulktrk / Calcium Driver, JOB SERVICES & REMARKS Hulls Salt Remarks: Flowseal Rat Hole Kol-Seal Mouse Hole Mud CLR 48 Centralizers CFL-117 or CD110 CAF 38 **Baskets** D/V or Port Collar Sand Handling Mileage FLOAT EQUIPMENT Guide Shoe Centralizer Baskets **AFU Inserts** Float Shoe Latch Down Pumptrk Charge Tax Discount **Total Charge** Signature

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



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

Sam Brownback, Governor

Mark Sievers, Chairman Thomas E. Wright, Commissioner Shari Feist Albrecht, Commissioner

March 28, 2013

Rodney Brin Mustang Energy Corporation PO BOX 1121 HAYS, KS 67601

Re: ACO1 API 15-165-22010-00-00 Herrman 1-8 NE/4 Sec.08-16S-18W Rush 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, Rodney Brin