

Form	ACO1 - Well Completion
Operator	Patterson Energy LLC
Well Name	MICHAELIS 'A' SWD
Doc ID	1596467

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	23	835	common	340	2%gel/3%cc
Production	7.875	5.5	17	3400	common	200	10%salt/5%gil

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Home Office P.O. Box 32 Russell, KS 67665

No. 2241

Phone 785-483-1071
Cell 785-324-1041

Date <u>6/9/21</u>	Sec. <u>36</u>	Twp. <u>15</u>	Range <u>14</u>	County <u>Russell</u>	State <u>Kansas</u>	On Location	Finish <u>10:45A</u>
Location <u>Russell South to County Line Rd 2 E 1/4 N W1/4</u>							

Lease <u>Michaelis "A"</u>	Well No. <u>SWD</u>	Owner 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.
Contractor <u>Discovery Drilling</u>		
Type Job <u>Production String</u>		Charge To <u>Rattrerson Energy</u>
Hole Size <u>7 7/8</u>	T.D. <u>3580</u>	
Csg. <u>5 1/2</u>	Depth <u>3400'</u>	Street
Tbg. Size	Depth	City
Tool	Depth	State
Cement Left in Csg. <u>30'</u>	Shoe Joint <u>30</u>	The above was done to satisfaction and supervision of owner agent or contractor.
Meas Line	Displace <u>78</u>	Cement Amount Ordered <u>200 10% salt 5% gilsonite</u>
		<u>10 BBL KCL 500gal mud clear</u>

EQUIPMENT

Pumptrk <u>17</u>	No.	Cementer <u>David</u>
Bulktrk <u>9</u>	No.	Helper <u>Doug</u>
Bulktrk	No.	Driver
Bulktrk	No.	Driver

JOB SERVICES & REMARKS

Remarks:

Rat Hole - 30 SKS

Mouse Hole - 15 SKS

Centralizers

Baskets

D/V or Port Collar

Ran 5 1/2 and est. Circulation

pumped 500gal mud Clear
followed By 10 bbl KCL
Cemented Mouse hole and
Rat hole and cemented
Casing with 155 SKS

Lift Pressure @ 600 ps
Landed plug @ 1400 ps

Flat Held

Common <u>200</u>
Poz. Mix
Gel.
Calcium <u>RCL @ 1 gal</u>
Hulls
Salt <u>14</u>
Flowseal
Kol-Seal <u>750 #</u>
Mud CLR <u>48 500 gal</u>
CFL-117 or CD110 CAF 38
Sand
Handling
Mileage

FLOAT EQUIPMENT

Guide Shoe
Centralizer <u>-5</u>
Baskets <u>-2</u>
AFU Inserts
Float Shoe
Latch Down <u>1</u>
Tri Plex shoe <u>-1</u>

Pumptrk Charge <u>prod string</u>
Mileage <u>15 min</u>

Tax
Discount
Total Charge

X Signature Jim W. ...

THANKS