



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1235660  
OIL & GAS CONSERVATION DIVISION

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 # \_\_\_\_\_

Name: \_\_\_\_\_

Address 1: \_\_\_\_\_

Address 2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

CONTRACTOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Wellsite Geologist: \_\_\_\_\_

Purchaser: \_\_\_\_\_

Designate Type of Completion:

- New Well  Re-Entry  Workover
- 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
- Plug Back  Conv. to GSW  Conv. to Producer
- Commingled Permit #: \_\_\_\_\_
- Dual Completion Permit #: \_\_\_\_\_
- SWD Permit #: \_\_\_\_\_
- ENHR Permit #: \_\_\_\_\_
- GSW Permit #: \_\_\_\_\_

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - \_\_\_\_\_

Spot Description: \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

\_\_\_\_\_ Feet from  North /  South Line of Section

\_\_\_\_\_ Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE  NW  SE  SW

GPS Location: Lat: \_\_\_\_\_, Long: \_\_\_\_\_  
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum:  NAD27  NAD83  WGS84

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Field Name: \_\_\_\_\_

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total Vertical Depth: \_\_\_\_\_ Plug Back Total Depth: \_\_\_\_\_

Amount of Surface Pipe Set and Cemented at: \_\_\_\_\_ Feet

Multiple Stage Cementing Collar Used?  Yes  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: \_\_\_\_\_ ppm Fluid volume: \_\_\_\_\_ bbls

Dewatering method used: \_\_\_\_\_

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

- Confidentiality Requested  
Date: \_\_\_\_\_
- Confidential Release Date: \_\_\_\_\_
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

1235660

Operator Name: \_\_\_\_\_ Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

**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 <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Electric Log Run	<input type="checkbox"/> Yes <input type="checkbox"/> No			
List All E. Logs Run:				

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> 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

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?  Yes  No *(If No, fill out Page Three of the ACO-1)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD: Size: \_\_\_\_\_ Set At: \_\_\_\_\_ Packer At: \_\_\_\_\_ Liner Run:  Yes  No

Date of First, Resumed Production, SWD or ENHR: \_\_\_\_\_ Producing Method:  Flowing  Pumping  Gas Lift  Other *(Explain)* \_\_\_\_\_

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

<b>DISPOSITION OF GAS:</b> <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<b>METHOD OF COMPLETION:</b> <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
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MORNING DRILLING REPORT

SOUTHWIND DRILLING, INC.

For: H&D Exploration

RIG No. 8

Well Name: Michaelis #1  
 Location: 1793' FNL & 2310' FWL  
 Section: 25-15S-15W  
 County: Russell  
 API: 15-167-24007-00-00

Elevation: GL 1903'  
 KB 1912'  
 Est. TD: 3400'

Rig No. 8 (Pusher Darroll Yelt) 620-617-1716  
 Rig No. (Doghouse) 620-666-7052  
 Southwind Drilling Office 620-564-3800



Surface Casing: Ran 9 joints of new 23# 8 5/8" casing, Tally @ 380.15', Set @ 390', used 225 sacks of 60/20 Poz, 3% cc, 2% gel, cement circulated, by Quality (Ticket #6309), plug down @ 3:45 am on 12.05.14.

Production Info: Ran 82 joints of new 15.5#, 5 1/2" casing, Tally @ 3468', Set @ 3477', Port Collar @ 372', used 135 sacks, Common, 10% Salt, 5% Gileonite, 30 sacks for Rat Hole, 15 sacks for Mouse Hole, cemented by Quality (Ticket #738), Job complete @ 12:00 pm on 12.12.14.

Rotary Total Depth: 3480'

Log Total Depth:

Geologist: Jim Musgrove

7:00 A.M. Depth: 3480' 7:00 A.M. Current Operation: TEAR DOWN

Spud Date & Time:	12/04/14 Day 1	12/05/14 Day 2	12/06/14 Day 3	12/07/14 Day 4	12/08/14 Day 5	12/09/14 Day 6	12/10/14 Day 7	12/11/14 Day 8	12/12/14 Day 9	Total
Total Depth (7:00am)	0	390	1601	2615	3192	3345	3395	3408	3480	3480
Daily Progress	390	1211	1014	577	153	50	13	72		3480
FL Per Hr.	52.00	79.41	50.70	36.06	18.00	25.00	17.33	26.18	#DIV/0!	47.84
Current Operation (7:00am)	Rig Up	WOC	Drilling	CFS	Short Trip	Drilling	DST #3	DST #5	LDDP	
Formation	Surface	Surface	Lime / Shale	Lime / Shale	KC	LKC	Arbuckle	Arbuckle	Arbuckle	
Fuel Used (32.4 Gal/inch)	356.40	324.00	421.20	421.20	324.00	259.20	259.20	259.20		2624.40
Survey (degree & depth)	1' @ 390'				1' @ 3192'					

Mud Cost	\$0.00	\$0.00	\$2,216.85	\$2,877.05	\$504.75	\$0.00	\$555.85	\$1,233.00	\$0.00	\$7,387.30
Weight (# / Gal)			8.8					9.1		
Vis (Funnel)			60					48		
Water Loss (cc)								11.2		

Bit #1										
Bit Make / Type	Reed									
Bit Size	12 1/4									
Bit Hours	7.50									7.50
Bit #2										
Bit Make / Type		Reed S52	Reed S52	Reed S52	Reed S52	Reed S52	Reed S52	Reed S52	Reed S52	
Bit Size		7 7/8	7 7/8	7 7/8	7 7/8	7 7/8	7 7/8	7 7/8	7 7/8	
Bit Hours		15.25	20.00	16.00	8.50	2.00	0.75	2.75		65.25
Bit Cumulative Hours	7.50	15.25	20.00	16.00	8.50	2.00	0.75	2.75	0.00	72.75
Weight on Bit (WOB)	15,000	20,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	
RPM	120	75	75	75	75	75	70	80		
Pump Pressure	370	80	700	840	820	800	810	820		
Drilling (Rotating) Hours	7.50	15.25	20.00	16.00	8.50	2.00	0.75	2.75	0.00	72.75

Daywork Hrs. (Operator's time)										
Rat Hole (> .75 Hrs)										0.00
Wait on Cement	3.25	4.75								8.00
Trip				1.25	9.00	10.75	12.25	6.00		39.25
Circulate			0.50	4.00	2.25	4.75	4.25	3.75		19.50
Tool					0.50	1.25	2.50	0.50		4.75
Testing					2.75	5.25	4.25	1.50		13.75
Clean Floor after DST										0.00
Wait on Orders								0.50		0.50
Logging								4.00		4.00
Nipple Down / Jet Cellar									1.25	1.25
LDDP / LDDC								4.00		4.00
Run Casing / Circ / Cement	2.00								3.75	5.75
Set Slips								0.50		0.50
Wait on Loggers										0.00
Lost Circulation (> 2 hrs)										0.00
Billable Hours	5.25	4.75	0.50	5.25	14.50	22.00	23.25	20.25	5.50	101.25

Non-Billable Hours (Southwind's time)										
Rig Up / Tear Down	7.50								10.50	18.00
Wait on Cement (NB)										0.00
Drill Rat Hole (<.75 hrs)	0.50									0.50
Drill Plug										0.00
Circulate / Trip (Surface)	0.75									0.75
Rig Repair		0.75		0.25	0.25			1.00		2.25
Connections	2.00	2.25	2.50	2.25	0.75					9.75
Jet/Displace	0.25	1.00	1.00	0.25						2.50
Surveys	0.25									0.25
Rig Check										0.00
Lost Circulation (< 2 hrs)										0.00
Lay Down Kelly / MH & RH										0.00
Circulate (NB)										0.00
Non-Billable Hrs.	11.25	4.00	3.50	2.75	1.00	0.00	0.00	1.00	10.50	34.00

Footage Cost	\$ 5,460.00	\$ 16,954.00	\$ 14,198.00	\$ 8,078.00		\$ 790.00	\$ 182.00	\$ 1,008.00	\$ -	\$ 46,578.00
Daywork Cost	\$ 1,837.50	\$ 1,662.50	\$ 175.00	\$ 1,837.50	\$ 5,075.00	\$ 7,700.00	\$ 8,137.50	\$ 7,087.50	\$ 1,925.00	\$ 35,437.50
Combined Est. Cost*	\$ 7,297.50	\$ 18,616.50	\$ 14,371.00	\$ 9,915.50	\$ 5,075.00	\$ 8,400.00	\$ 8,319.50	\$ 8,095.50	\$ 1,925.00	\$ 82,015.50

\*Please note that this is estimated footage & daywork cost only. Additional charges will apply on invoice (fuel surcharge, water transfer pump, etc)

<b>DST #1 Info -</b> Footage Interval: 3145' - 3192' Recovery: 78' Mud LKC "A-D"	<b>DST #2 Info -</b> Footage Interval: 3270' - 3370' Recovery: 676' Oil Cut Watery Mud LKC "H-J"
<b>DST #3 Info -</b> Footage Interval: 3360' - 3395' Recovery: 5' Oil Cut Mud "Arbuckle"	<b>DST #4 Info -</b> Footage Interval: 3360' - 3400' Recovery: 1' Oil 29' Oil Cut Mud "Arbuckle"
<b>DST #5 Info -</b> Footage Interval: 3360' - 3408' Recovery: 33' Mud "Arbuckle"	<b>DST #6 Info -</b> Footage Interval: Recovery:

Anhydrite @ 940' - 976'

Displaced @

980'  
 105 SX  
 Per Corral  
 Casey  
 135 SX  
 5 1/2  
 8470  
 top

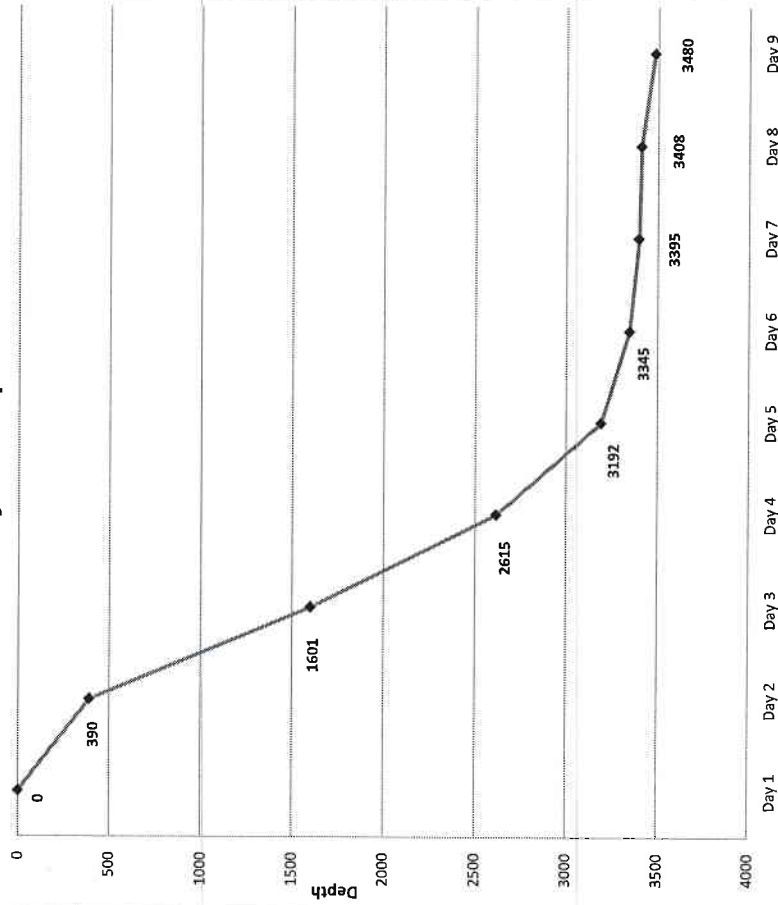


# Job Summary Graphical Report

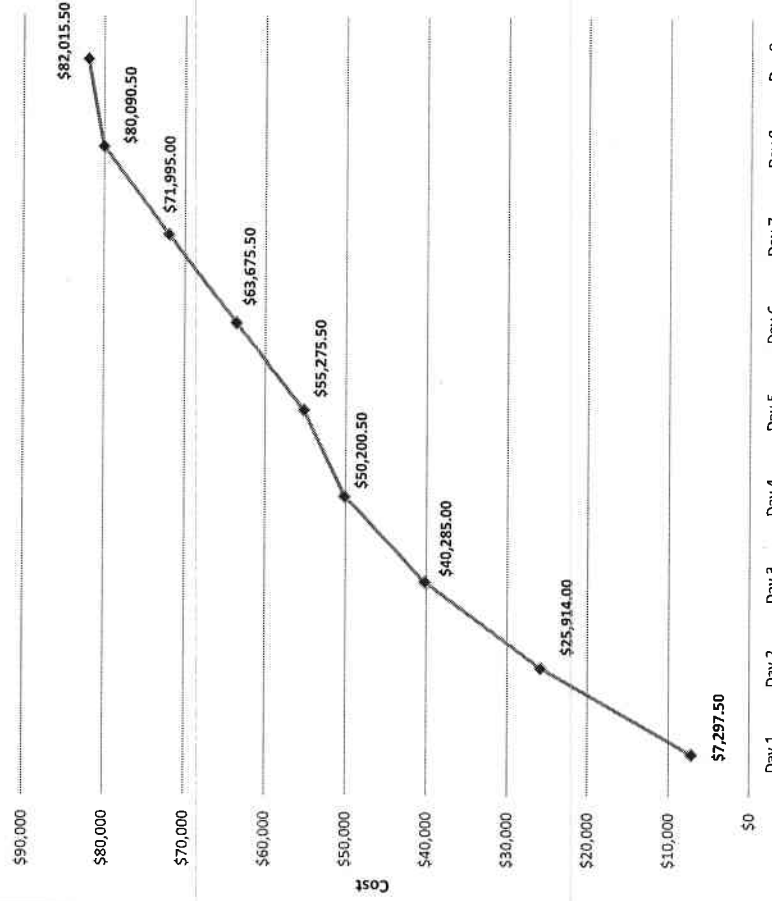
Southwind Rig No. 8

Michaelis #1

### Days vs Depth



### Days vs Cost



# QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025  
Cell 785-324-1041

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

No. 8809

Date <u>12-5-14</u>	Sec. <u>25</u>	Twp. <u>15</u>	Range <u>15</u>	County <u>Russell</u>	State <u>KS</u>	On Location	Finish <u>3:45 Am</u>
				Location <u>Milberger 1W to stick my Rd 1 1/2 W Sinto</u>			
Lease <u>Michaels</u>		Well No. <u>1</u>		Owner			
Contractor <u>Southwind</u>		<u>8</u>		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 <u>Surface</u>				Charge To <u>HD Exploration</u>			
Hole Size <u>12 1/4</u>		T.D. <u>390</u>		Street			
Csg. <u>8 5/8</u>		Depth <u>390</u>		City			
Tbg. Size		Depth		State			
Tool		Depth		The above was done to satisfaction and supervision of owner agent or contractor.			
Cement Left in Csg. <u>15'</u>		Shoe Joint <u>15'</u>		Cement Amount Ordered <u>725 @ 20 3/4 cc 2 1/2 gal</u>			
Meas Line		Displace <u>23 3/4</u>					
<b>EQUIPMENT</b>							
Pumptrk <u>20</u>	No.	Cementer		Common			
		Helper	<u>Nick</u>	Poz. Mix			
Bulktrk <u>15</u>	No.	Driver	<u>Ryan</u>	Gel.			
Bulktrk <u>10</u>	No.	Driver	<u>Billy</u>	Calcium			
<b>JOB SERVICES &amp; REMARKS</b>				Hulls			
Remarks: <u>Cement did circulate</u>				Salt			
Rat Hole				Flowseal			
Mouse Hole				Kol-Seal			
Centralizers				Mud CLR 48			
Baskets				CFL-117 or CD110 CAF 38			
D/V or Port Collar				Sand			
				Handling			
				Mileage			
				<b>FLOAT EQUIPMENT</b>			
				Guide Shoe			
				Centralizer			
				Baskets			
				AFU Inserts			
				Float Shoe			
				Latch Down			
				Pumptrk Charge			
				Mileage			
				Tax			
				Discount			
<b>X</b>				Total Charge			
Signature <u>[Handwritten Signature]</u>							

# QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025  
Cell 785-324-1041

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

No. 738

Date	12-12-14	Sec.	25	Twp.	15	Range	15	County	Russell	State	KS	On Location		Finish	12:00 PM
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Location *Millberger 1N 1 1/2 W S10E*

Lease *Michaelis* Well No. *41* Owner *To Quality Oilwell Cementing, Inc.*

Contractor *Southwind #8* 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 *Production String* Charge To *H-D*

Hole Size *7 7/8* T.D. *3480* Street

Csg. *5 1/2* Depth *3477* City State

Tbg. Size Depth *972* The above was done to satisfaction and supervision of owner agent or contractor.

Tool *Port Collar* Depth *972* Cement Amount Ordered *1800 on 10% Salt, 5% Gilsontite*

Cement Left in Csg. Shoe Joint *19.72* Cement Amount Ordered

Meas Line Displace *82 1/4 bbl*

**EQUIPMENT**

Pumptrk *5* No. *David* Common

Bulktrk *1* No. *Tyson* Poz. Mix

Bulktrk *Pu* No. *Brett* Gel.

**JOB SERVICES & REMARKS**

Remarks: Hulls

Rat Hole *30 gal* Salt

Mouse Hole *15 gal* Flowseal

Centralizers *-1, 3, 5, 7, 9, 11, 13 + 60* Kol-Seal

Baskets *2 + 58* Mud CLR 48 *- 500 gal*

~~Port Collar~~ *5 + 59 @ 972* CFL-117 or CD110 CAF 38 *- 20 bbl KCL*

*Run 5 min at Est circulation*  
*Mix Mud Plug*  
*Plug Rat + Mouse*  
*Mixed 135 down 5 1/2*  
*Displaced 82 1/4 bbl*  
*Lift pressure @ 700 lbs*  
*Landed Plug @ 1400 lbs*

**FLOAT EQUIPMENT**

Guide Shoe

Centralizer *- 8*

Baskets *- 2*

AFU Inserts

Float Shoe *- 1*

Latch Down *- 1*

Port Collar *- 1*

Pumptrk Charge

Mileage

X Signature *[Signature]*

Tax  
Discount  
Total Charge

