



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1194847
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: _____

1194847

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

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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JAMES C. MUSGROVE

Petroleum Geologist
212 Main Street
P.O. Box 215
Claflin, KS 67525

Office (620) 588-4250

Res. Claflin (620) 587-3444

Mai Oil Operations
Wagner #2
E/2-W/2-NW (1320' FNL & 990' FWL)
Section 7-17s-14w
Barton County, Kansas
Page 1

5 1/2" Production Casing Set

Contractor: Southwind Drilling Co. (Rig #3)
Commenced: January 24, 2014
Completed: January 30, 2014
Elevation: 1966' K.B; 1964' D.F; 1958' G.L.
Casing program: Surface; 8 5/8" @ 938'
Production; 5 1/2" @ 3524'
Sample: Samples saved and examined 2800' to the Rotary Total Depth.
Drilling time: One (1) foot drilling time recorded and kept 2800 ft. to the Rotary Total Depth.
Measurements: All depths measured from the Kelly Bushing.
Drill Stem Tests: There were three (3) Drill Stem Tests ran by Trilobite Testing Co.
Electric Log: By Nabors; Dual Induction, Compensated Density/Neutron Log and Micro.

<u>Formation</u>	<u>Log Depth</u>	<u>Sub-Sea Datum</u>
Anhydrite	947	+1019
Base Anhydrite	975	+991
Heebner	3147	-1181
Toronto	3164	-1198
Lansing	3212	-1246
Base Kansas City	3428	-1462
Arbuckle	3453	-1487
Rotary Total Depth	3525	-1559
Log Total Depth	3525	-1559

(All tops and zones corrected to Electric Log measurements).

SAMPLE ANALYSIS, SHOWS OF OIL, TESTING DATA, ETC.

TOPEKA SECTION

3062-3068' Limestone; tan, fossiliferous, poorly developed porosity, dark brown to black spotty stain, no free oil and no odor in fresh samples.
3090-3110' Limestone; gray, white, finely crystalline, sub oomoldic, chalky, poorly developed porosity, no shows.

3147
3164
3212
3428
3453
3525
3525
to Ele

Limestone; as above.

Limestone; white, gray, finely crystalline, oolitic, cherty in part, scattered porosity, brown stain, no free oil and no odor in fresh samples.

Limestone; white, gray, finely crystalline, chalky, trace white chert.

TORONTO SECTION

Limestone; gray, white, finely crystalline, oolitic, cherty in part, scattered porosity, brown stain, show of free oil and faint odor in fresh samples.

3164-3176' Limestone; gray, white, finely crystalline, chalky, poor visible porosity, no shows.

LANSING SECTION

Limestone; as above, fossiliferous, brown stain, show of free oil and good odor in fresh samples.

3212-3220' Limestone; gray, white, finely crystalline, fossiliferous in part, poorly developed porosity, no shows.

3228-3232' Limestone; as above.

3248-3256' Limestone; white, gray, finely crystalline, oomoldic, chalky, poor to fair porosity, poor stain, no free oil and no odor in fresh samples.

3260-3276' Limestone; white, gray, finely crystalline, chalky, trace white chert.

3285-3294' Limestone; gray, white, finely crystalline, oolitic, chalky in part, scattered porosity, brown stain, show of free oil and faint odor in fresh samples.

3296-3304' Limestone; as above, fossiliferous, brown stain, show of free oil and good odor in fresh samples.

Drill Stem Test #1 3230-3310'

- Misrun -

Drill Stem Test #2 3216-3310'

Times: 30-45-45-60

Blow: Fair

Recovery: 90' mud with oil spots

Pressures: ISIP 669 psi
FSIP 632 psi
IFP 19-35 psi
FFP 35-52 psi
HSH 1551-1545 psi

3333-3342' Limestone; white, tan, few fossiliferous, poor porosity, slightly chalky, no shows.

3360-3376' Limestone; white, gray, finely crystalline, few fossiliferous, poor porosity, chalky, no shows.

3385-3390' Limestone; white, tan, finely crystalline, few oolitic, chalky.

3403-3414' Limestone; white/gray, finely crystalline, poorly developed porosity, trace white/tan chert.

ARBUCKLE SECTION

3453-3460' Dolomite; white, medium crystalline, fair intercrystalline porosity, golden brown to dark brown stain, show of free oil and good odor, trace pyrite.

Drill Stem Test #3 3398-3460'

Times: 30-45-30-45

Blow: Strong

**Recovery: 464' gas in pipe
588' gassy oil
124' muddy gassy oil
(20% gas, 40% oil, 40% mud)
124' heavily oil and gas cut watery mud
(10% gas, 55% oil, 15% water, 20% mud)**

**Pressures: ISIP 1093 psi
FSIP 1092 psi
IFP 39-206 psi
FFP 214-336 psi
HSH 1730-1686 psi**

3460-3470' Dolomite; white, medium crystalline, fair intercrystalline porosity, golden to dark brown stain, show of free oil and good odor in fresh samples.

3470-3490' Dolomite; white, fine and medium crystalline, good intercrystalline to finely vuggy porosity, golden brown stain, trace of free oil and good odor in fresh samples.

3490-3510' Dolomite; white, light gray, fine to medium crystalline, good intercrystalline porosity, few with good vuggy porosity, dark brown stain, trace of free oil and fair odor in fresh samples.

3510-3520' Dolomite; white, medium crystalline, good intercrystalline and vuggy porosity, dark brown stain, trace of free oil and no odor in fresh samples.

3520-3525' Dolomite; white, light gray, medium crystalline, good intercrystalline and finely vuggy porosity, dark brown to black stain, trace of free oil and no odor in fresh samples.

**Rotary Total Depth 3525
Log Total Depth 3525**

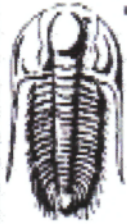
Recommendations:

5 1/2" production casing was set and cemented on the Mai Oil Operations, Wagner #2.

Respectfully submitted;

James C. Musgrove and Kurt Talbott
James C. Musgrove and
Kurt Talbott
Petroleum Geologists





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Mai Oil Operations
 8411 Preston Rd STE 800
 Dallas TX 75225
 ATTN: Jim Musgrove

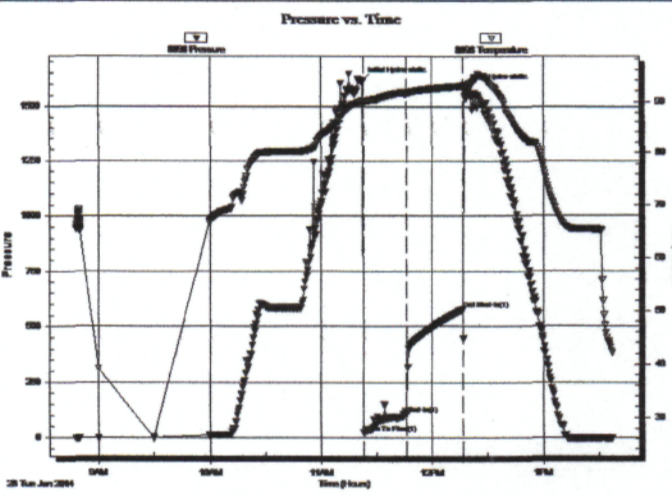
7-17S-14W Barton,KS
Wagner #2
 Job Ticket: 56048 **DST#: 1**
 Test Start: 2014.01.28 @ 08:47:50

GENERAL INFORMATION:

Formation: **C-F**
 Deviated: **No** Whipstock: **ft (KB)** Test Type: **Conventional Bottom Hole (Initial)**
 Time Tool Opened: **11:22:50** Tester: **Tate Lang**
 Time Test Ended: **13:37:40** Unit No: **49**
 Interval: **3230.00 ft (KB) To 3310.00 ft (KB) (TVD)** Reference Elevations: **1966.00 ft (KB)**
 Total Depth: **3310.00 ft (KB) (TVD)** **1958.00 ft (CF)**
 Hole Diameter: **7.88 inches** Hole Condition: **Good** KB to GR/CF: **8.00 ft**

Serial #: 8898 **Outside**
 Press@RunDepth: **108.51 psig @ 3242.00 ft (KB)** Capacity: **8000.00 psig**
 Start Date: **2014.01.28** End Date: **2014.01.28** Last Calib.: **2014.01.28**
 Start Time: **08:47:51** End Time: **13:37:40** Time On Btrm: **2014.01.28 @ 11:22:30**
 Time Off Btrm: **2014.01.28 @ 12:17:20**

TEST COMMENT: B.O.B. In 7 mins
 Dead no blow back
 Took mud on IF and Pulled it after ISI



PRESSURE SUMMARY

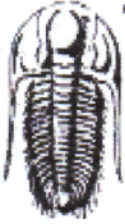
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1616.11	90.08	Initial Hydro-static
1	24.00	89.74	Open To Flow (1)
24	108.51	91.43	Shut-In(1)
55	576.10	92.88	End Shut-In(1)
55	1584.84	93.08	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
160.00	100%M	2.24

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Mai Oil Operations
 8411 Preston Rd STE 800
 Dallas TX 75225
 ATTN: Jim Musgrove

7-17S-14W Barton, KS
Wagner #2
 Job Ticket: 56050 **DST#: 3**
 Test Start: 2014.01.29 @ 14:34:33

GENERAL INFORMATION:

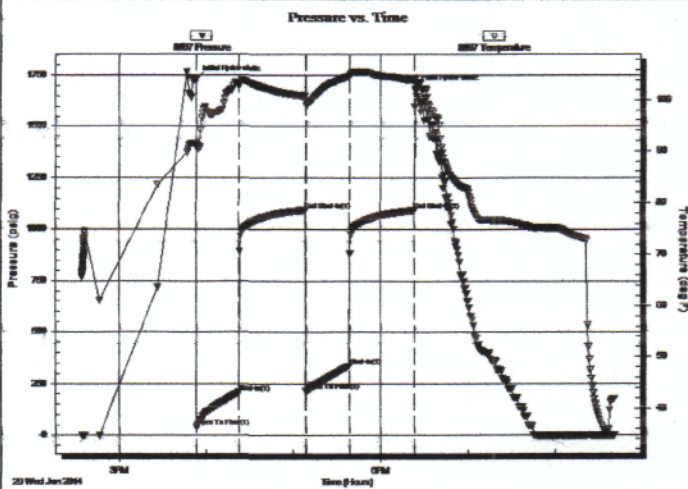
Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 15:53:23
 Time Test Ended: 20:40:12
 Interval: **3398.00 ft (KB) To 3460.00 ft (KB) (TVD)**
 Total Depth: 3460.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Tate Lang
 Unit No: 49
 Reference Elevations: 1966.00 ft (KB)
 1958.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: 8897

Inside

Press@RunDepth: 336.46 psig @ 3424.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.01.29 End Date: 2014.01.29 Last Calib.: 2014.01.29
 Start Time: 14:34:34 End Time: 20:40:13 Time On Btm: 2014.01.29 @ 15:53:13
 Time Off Btm: 2014.01.29 @ 18:23:53

TEST COMMENT: B.O.B. In 3 mins
 Strong blow back built to 9 1/2"
 B.O.B. In 4 mins
 Fair blow back built to 4 1/2"



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1730.25	91.38	Initial Hydro-static
1	39.43	90.71	Open To Flow (1)
29	206.42	102.97	Shut-In(1)
75	1093.13	100.82	End Shut-In(1)
76	214.38	99.96	Open To Flow (2)
106	336.46	104.54	Shut-In(2)
150	1091.52	104.00	End Shut-In(2)
151	1685.63	103.98	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
588.00	40%G 60%O	8.25
124.00	20%G 40%O 40%M	1.74
124.00	10%G 55%O 15%W 20%M	1.74
0.00	464 GIP	0.00

* Recovery from multiple tests

Gas Rates

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

QUALITY OILWELL CEMENTING, INC.

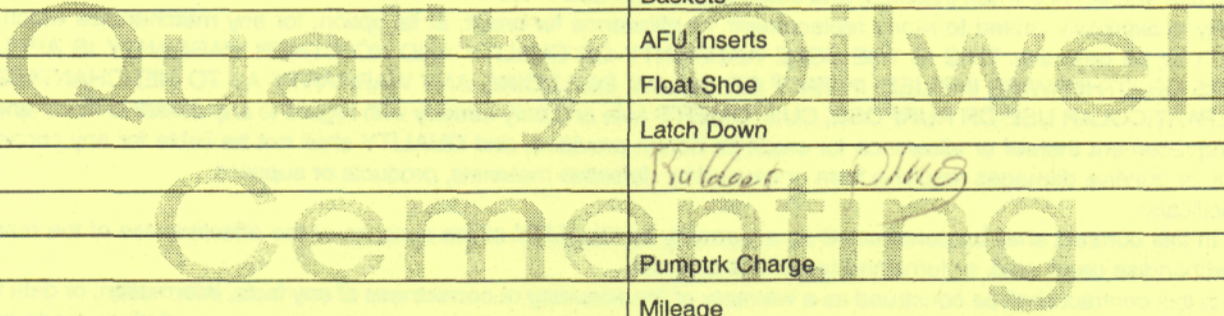
Federal Tax I.D.# 20-2886107

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

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

No. 7646

Date	1-25-14	Sec.	7	Twp.	17	Range	14	County	Barton	State	KS	On Location	7:30 AM	Finish	9:00 AM
Lease								Well No.		Location					
Wagner								2		eggs for Sale 4w to 80 th ave					
Contractor								3		Owner					
Southward										3/4 N Finto					
Type Job								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.							
Surface															
Hole Size								T.D.		Charge To					
12 1/4								938		Main Oil					
Csg.								Depth		Street					
8 5/8										Main Oil					
Tbg. Size								Depth		City					
										State					
Tool								Depth		The above was done to satisfaction and supervision of owner agent or contractor.					
Cement Left in Csg.								Shoe Joint		Cement Amount Ordered					
30 ft								30 ft		350 60/40 3% CC					
Meas Line								Displace							
								57 3/4 BBL		2% gel					
EQUIPMENT								Common							
Pumptrk								No.		Cement					
5										Helper					
Bulktrk								No.		Driver					
19										Beck					
Bulktrk								No.		Driver					
per										Chad					
JOB SERVICES & REMARKS								Hulls							
Remarks:								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							
Cement								Handling							
Circulate								Mileage							
FLOAT EQUIPMENT															
								Guide Shoe							
								Centralizer							
								Baskets							
								AFU Inserts							
								Float Shoe							
								Latch Down							
								Bulldozer							
								Pumptrk Charge							
								Mileage							
								Tax							
								Discount							
								Total Charge							
X Signature								Guy Driver							



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. 7151

Date	1-30-14	Sec.	7	Twp.	17	Range	14	County	Barton	State	Ks	On Location		Finish	4:00 P.M.		
Lease								Wagner		Well No.		#2					
Contractor								Southwind #3		Owner Ave, 3/4 N, E into							
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								Longstring		Charge To						Main oil operations	
Hole Size				7 7/8"		T.D.		3525'		Street							
Csg.				New 5 1/2" 14#		Depth		3523'		City						State	
Tbg. Size						Depth				The above was done to satisfaction and supervision of owner agent or contractor.							
Tool						Depth				Cement Amount Ordered						160 sy 60/40 10% Salt 2% Gel	
Cement Left in Csg.				20.65'		Shoe Joint		20.65'		Meas Line						Displace 85 1/4 BLS	
EQUIPMENT																	
Pumptrk				16		No.		Cementer		Common							
Bulktrk				3		No.		Helper		Poz. Mix							
Bulktrk				P.U.		No.		Driver		Gel.							
Bulktrk				P.U.		No.		Driver		Calcium							
JOB SERVICES & REMARKS																	
Remarks:								Hulls									
Rat Hole								Salt									
Mouse Hole								Flowseal									
Centralizers								Kol-Seal									
Baskets								Mud CLR 48									
D/V or Port Collar								CFL-117 or CD110 CAF 38									
Circulation Pump								Sand									
Plug Reathole w/ 3052								Handling									
Casing + mix 130 or Cement								Mileage									
shut down wash pump + lines								FLOAT EQUIPMENT									
Released plug + Displaced with								Guide Shoe									
85 1/4 BLS of water. Released + held								Centralizer 10 @ turbo's									
Lift pressure 700 #								Baskets 1 weatherford									
Land plug to 1350#								AFU Inserts									
								Float Shoe									
								Latch Down									
								Pumptrk Charge									
								Mileage									
								Tax									
								Discount									
								Total Charge									
X Signature								B. H. Hemen									