



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1160070  
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: \_\_\_\_\_



1160070

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 <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No  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: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  Name Top Datum
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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> _____ <input type="checkbox"/> Other <i>(Specify)</i> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
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Form	ACO1 - Well Completion
Operator	Range Oil Company, Inc.
Well Name	Four J, Inc. 1
Doc ID	1160070

Tops

Name	Top	Datum
Heebner	1364	+165
Lansing	1681	-152
Kansas City	2021	-492
BKC	2195	-666
Mississippian	2779	-1250
Kinderhook	3102	-1573
Arbuckle	3171	-1642
LTD	3176	-1647

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/>

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

Sam Brownback, Governor

October 01, 2013

John Washburn  
Range Oil Company, Inc.  
9412 E. CENTRAL  
PO BOX 781775  
WICHITA, KS 67278-1775

Re: ACO1  
API 15-015-23985-00-00  
Four J, Inc. 1  
SE/4 Sec.30-28S-08E  
Butler 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,  
John Washburn



**DIAMOND TESTING, LLC**  
P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
(620) 653-7550 • (800) 542-7313  
STC/Fourj1dst1

Company Range Oil Company, Inc. Lease & Well No. Four J Inc. No. 1  
Elevation 1521 EGL Formation Arbuckle Effective Pay \_\_\_\_\_ Ft. Ticket No. J3138  
Date 7-27-13 Sec. 30 Twp. 28S Range 8E County Butler State Kansas  
Test Approved By Ken Wallace Diamond Representative John C. Riedl

Formation Test No. 1 Interval Tested from 3,160 ft. to 3,177 ft. Total Depth 3,177 ft.  
Packer Depth 3,155 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.  
Packer Depth 3,160 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.  
Depth of Selective Zone Set \_\_\_\_\_ ft.

Top Recorder Depth (Inside) 3,163 ft. Recorder Number 30046 Cap. 6,000 psi.  
Bottom Recorder Depth (Outside) 3,174 ft. Recorder Number 11073 Cap. 4,000 psi.  
Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ psi.

Drilling Contractor Summit Drilling Company - Rig 1 Drill Collar Length 300 ft I.D. 2 1/4 in.  
Mud Type Chemical Viscosity 48 Weight Pipe Length \_\_\_\_\_ ft I.D. \_\_\_\_\_ in.  
Weight 9.2 Water Loss 9.4 cc. Drill Pipe Length 2,834 ft I.D. 3 in.  
Chlorides 900 P.P.M. Test Tool Length 26 ft Tool Size 3 1/2-IF in.  
Jars: Make Sterling Serial Number 2 Anchor Length 17 ft. Size 4 1/2-FH in.  
Did Well Flow? No Reversed Out No Surface Choke Size 1 in. Bottom Choke Size 5/8 in.  
Main Hole Size 7 7/8 in. Tool Joint Size 3 1/2-XH in.

Blow: 1st Open: Weak, 1/4 in. blow throughout. No blow back during shut-in.  
2nd Open: No blow. Flushed tool & received a surface blow. Dead in 10 mins. No blow back during shut-in.

Recovered 18 ft. of clean gas cut oil = .088560 bbls. (Grind out: 10%-gas; 90%-oil)  
Recovered 15 ft. of slightly gas cut muddy oil = .073800 bbls. (Grind out: 5%-gas; 55%-oil; 40%-mud) Gravity: 28 @ 60°  
Recovered 33 ft. of TOTAL FLUID = .162360 bbls.  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Remarks Tool Sample Grind Out: 100%-oil

Time Set Packer(s) 4:40 P.M. Time Started off Bottom 6:40 P.M. Maximum Temperature 116°  
Initial Hydrostatic Pressure.....(A) 1556 P.S.I.  
Initial Flow Period.....Minutes 30 (B) 16 P.S.I. to (C) 22 P.S.I.  
Initial Closed In Period.....Minutes 30 (D) 1051 P.S.I.  
Final Flow Period.....Minutes 30 (E) 24 P.S.I. to (F) 30 P.S.I.  
Final Closed In Period.....Minutes 30 (G) 1046 P.S.I.  
Final Hydrostatic Pressure.....(H) 1555 P.S.I.

# GEOLOGIST'S REPORT

## DRILLING TIME AND SAMPLE LOG

COMPANY: Range Oil Co., Inc.		ELEVATIONS	
LEASE: Four J #1	WELL: 3177	KB: 1530'	DB: 1530'
LOCATION: 1978' S 1/4, 34th E 1/4	DF: 1520'	MAGNETIC AREAS	
SIC: 30	TSP: 285	ROE: Be	FROM: K5
COUNTRY: Butler	STATE: KS	ROE: Be	TO: K5
CONTRACTOR: Summit Drilling	STATE: KS	ROE: Be	TO: K5
SPUD: 7-20-13	COILUP: 7-29-13	ROE: Be	TO: K5
RTD: 3177'	TYPE: 3175'	ROE: Be	TO: K5
ADD UP: 135d	TYPE: 3175'	ROE: Be	TO: K5
SAMPLES SAVED FROM: 20' under surface		TO: 1640'	
DRILLING TIME KEPT FROM: 1200'		TO: RTD	
SAMPLES EXAMINED FROM: 1600'		TO: RTD	
GEOLOGICAL SUPERVISION FROM: 1600'		TO: RTD	
GEOLOGIST ON WELL: Ken Wallace		TO: RTD	
CORRECTION TOPS		SAMPLES	
1681 (-154)	1680 (-154)	1680 (-154)	1680 (-154)
1885 (-364)	1885 (-364)	1885 (-364)	1885 (-364)
2042 (-492)	2042 (-492)	2042 (-492)	2042 (-492)
2149 (-617)	2149 (-617)	2149 (-617)	2149 (-617)
2195 (-663)	2195 (-663)	2195 (-663)	2195 (-663)
2179 (-648)	2179 (-648)	2179 (-648)	2179 (-648)
2181 (-651)	2181 (-651)	2181 (-651)	2181 (-651)
3171 (-1483)	3171 (-1483)	3171 (-1483)	3171 (-1483)
3175 (-1479)	3175 (-1479)	3175 (-1479)	3175 (-1479)

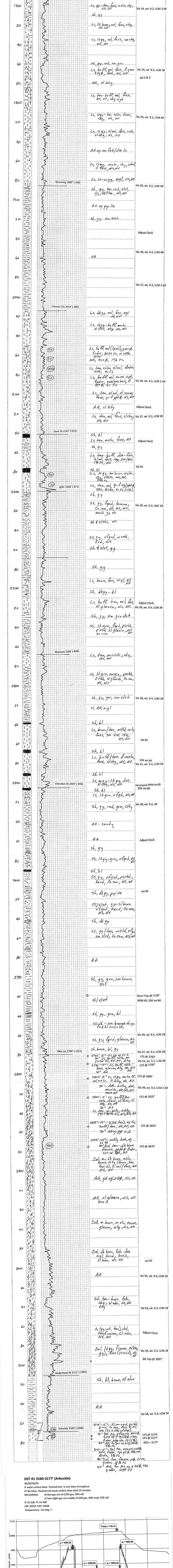
REMARKS: Production pipe was set to further evaluate Arbuckle (35T #1)

7-19-13 MIRT  
 7-20-13 8 am; drlg @ 73'  
 7-21-13 8 am; drlg @ 300'; 1/2" @ 232'  
 7-22-13 8 am; drlg @ 1149'; 1/2" @ 641'; 1/4" @ 1143'  
 7-23-13 7:35 am; Drlg @ 1735'; 1/2" @ 1645'  
 7-24-13 8 am; Drlg @ 2146'; 1/2" @ 2148'  
 7-25-13 8 am; Drlg @ 2557'  
 7-26-13 8 am; Drlg @ 2856'; 1" @ 2644'; Short trip @ 2720'  
 7-27-13 7:45 am; Drlg @ 3138'; Bit trip @ 3097'  
 7-28-13 9:45 am; RTD 3177'; prep to lay down drill pipe.  
 Ran DST #1 3160-3177' (Arbuckle)  
 7-29-13 7 am; RTD 3177'; set 5 1/2 inch csg @ 3173'; PD @ 8:05 pm.

### LEGEND

	Anhydrite		Salt		Sandstone		Shale		Carb sh		Limestone		Ool. Lirna		Chert		Dolomite
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SCALE: 1" = 100'



**DST #1 3160-3177' (Arbuckle)**  
 30/30/30/30  
 IF weak surface blow-flushed tool- 1/2 inch blow throughout  
 FF No blow- flushed tool- weak surface blow died 10 minutes  
 RECOVERED: 18 feet gas cut oil (10% gas, 90% oil)  
 15 feet slight gas cut muddy oil (5% gas, 40% mud, 55% oil)  
 IF 15-22# FF 24-30#  
 ISIP 1051# FSIP 1046#  
 Temperature: 116 deg. F





**ENTERED**

TICKET NUMBER 43333  
 LOCATION Eureka KS  
 FOREMAN Shannon Feck

**FIELD TICKET & TREATMENT REPORT**

CEMENT API # 15-015-23985

PO Box 884, Chanute, KS 66720  
 620-431-9210 or 800-467-8676

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
7-28-13	6942	Four J. Inc #1	30	285	8E	Butler
CUSTOMER Range Oil Company Inc			Summit Drlg Co			
MAILING ADDRESS 9412 E Central			TRUCK #	DRIVER	TRUCK #	DRIVER
CITY Wichita			445	Dave G		
STATE KS			667	Merle R		
ZIP CODE 67278			637	Colby N		

JOB TYPE 45 HOLE SIZE 7 7/8" HOLE DEPTH 3177' CASING SIZE & WEIGHT 5 1/2" @ 14#  
 CASING DEPTH 3173 DRILL PIPE \_\_\_\_\_ TUBING \_\_\_\_\_ OTHER \_\_\_\_\_  
 SLURRY WEIGHT 13.4-13.6 SLURRY VOL 54 Bbl WATER gal/sk 9.0 CEMENT LEFT in CASING 15.50 shoe joint  
 DISPLACEMENT 78.5 Bbl DISPLACEMENT PSI 600 MIX PSI 1100 Bump plug RATE Displace @ 5 BPM  
 REMARKS: Rig up to 5 1/2" casing w/ packer shoe set @ 3173'. Set packer shoe w/ 1000 psi, Break circulation w/ 5 Bbl H2O, mixed 100# caustic soda pre flush w/ 14 Bbl, 10 Bbl H2O spacer, mixed 150 SKS Thickset Cement w/ 5 # kol-seal/sk @ 13.4-13.6 #/gals. Shut down wash out pump & lines, displace w/ 78.5 Bbl H2O, final pumping pressure of 600 psi, bumped plug @ 1100 psi. Plug & float held. Good circulation @ all times.  
 Job complete

Centralizer on # 1, 3, 5, 7, 9

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401	1	PUMP CHARGE	1085.00	1085.00
5406	50	MILEAGE	4.20	210.00
1126A	150 SKS	Thickset Cement	20.16	3024.00
1110 A	750 #	Kol-seal @ 5#/sk	.46	345.00
1103	100 #	Caustic Soda pre flush (14-15 Bbl)	1.69	169.00
4253	1	Type A Packer Shoe	1663.00	1663.00
4454	1	5 1/2" latch down plug	266.75	266.75
4130	5	5 1/2" centralizers	50.50	252.50
4306	1	Thread lock kit	25.00	25.00
5407A	8.25 Tons	Ton mileage bulk Truck	1.41	577.54
5502C	7 Hrs	80 Bbl Vac Truck	90.00	630.00
1123	3000gals	City H2O	17.30/1000	51.90
			Sub Total	8299.64
			SALES TAX 6.40%	371.02
			ESTIMATED TOTAL	8670.66

Ravin 3737

AUTHORIZATION Sony Reed TITLE X DATE \_\_\_\_\_

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.



**CONSOLIDATED**  
Oil Well Services, LLC

**ENTERED**

TICKET NUMBER 42889  
LOCATION 180 Eldorado  
FOREMAN Jacob Storm

PO Box 884, Chanute, KS 66720  
620-431-9210 or 800-467-8676

**FIELD TICKET & TREATMENT REPORT**

**CEMENT**

Api 15-015-23985-00-00

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
7-20-13	6942	Four Five #1	30	28	8E	Butler
CUSTOMER Range oil			TRUCK # DRIVER TRUCK # DRIVER			
MAILING ADDRESS 125 N market Suite 1120			603	Jeremy A		
CITY STATE ZIP CODE Wichita KS 67202			491	Jeremy M		
			702	Jacob		

*JB  
JM  
DJ*

JOB TYPE Surface B HOLE SIZE 12 1/2 HOLE DEPTH 232 CASING SIZE & WEIGHT 8 5/8  
 CASING DEPTH 229 DRILL PIPE \_\_\_\_\_ TUBING \_\_\_\_\_ OTHER \_\_\_\_\_  
 SLURRY WEIGHT 14.5 lb SLURRY VOL 31.25 bbl WATER gal/sk \_\_\_\_\_ CEMENT LEFT in CASING 15 lb  
 DISPLACEMENT 13.56 bbl DISPLACEMENT PSI 300 MIX PSI 200 RATE 5 bpm

REMARKS: Softly meaning Break circulation mix 130 sks class A  
3/4 cc 2/4 gel 1/2 lb poly-Flake displace with 13 bbl circulating cement to  
Surface Job complete

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401S	1	PUMP CHARGE	870.00	870.00
5406	30	MILEAGE	4.20	126.00
5407	1	min bulk delivery	368.00	368.00
1104S	130	class A	15.70	2041.00
1102	320	calcium chloride	1.78	249.60
1118 B	250	gel	2.22	55.00
1107	50	poly-Flake	2.47	123.50
4132	2	8 5/8 centralizer	72.50	145.00
4432	1	8 5/8 wooden plug	84.00	84.00
			Subtotal	4062.10
			SALES TAX	112.61
			ESTIMATED TOTAL	4234.71

Ravin 3737

Storm

AUTHORIZATION DC TITLE \_\_\_\_\_ DATE \_\_\_\_\_

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.