

**KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION
WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE**

Form ACO-1
September 1999
Form Must Be Typed

ORIGINAL

Operator: License # 32325
Name: POPP OPERATING, INC.
Address: P.O. Box 187
City/State/Zip: Hoisington, KS 67544
Purchaser: _____

Operator Contact Person: Rickey Popp
Phone: (620-) 786-5514

Contractor: Name: Discovery Drilling Co., Inc.
License: 31548

Wellsite Geologist: Jim Musgrove

Designate Type of Completion:
 New Well Re-Entry Workover

Oil SWD SIOW Temp. Abd.
 Gas ENHR SIGW
 Dry Other (Core, WSW, Expl., Cathodic, 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./SWD

Plug Back Plug Back Total Depth

Commingled Docket No. _____

Dual Completion Docket No. _____

Other (SWD or Enhr.?) Docket No. _____

3/29/03 4/3/03 4/4/03
Spud Date or Date Reached TD Completion Date or
Recompletion Date Recompletion Date

API No. 15 - 185-23,176-00-00

County: Stafford

120 N & 120 E of
-SE-SW-NE Sec. 15 Twp. 23 S. R. 13W East West

2190 feet from (N) (circle one) Line of Section

1530 feet from (E) (circle one) Line of Section

Footages Calculated from Nearest Outside Section Corner:

(circle one) (NE) SE NW SW

Lease Name: Ward Well #: 1

Field Name: Happy Valley

Producing Formation: Arbuckle

Elevation: Ground: 1880 Kelly Bushing: 1888

Total Depth: 3900 Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at 304.48 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 11/18/03
(Data must be collected from the Reserve Pit)

Chloride content 9,000 ppm Fluid volume 320 bbls

Dewatering method used Haul free fluid

Location of fluid disposal if hauled offsite: _____

Operator Name: Ellinwood Tank Svc

Lease Name: Siefkes B#2 License No.: 4297

Quarter NW Sec. 13 Twp. 22 S. R. 12 East West

County: Stafford Docket No.: D-22,209

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information of side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

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.

Signature: Rickey Popp

Title: President Date: 7-30-03

Subscribed and sworn to before me this 30th day of July, 2003.

Notary Public: Jane M. Steiner

Date Commission Expires: 5/20/07

KCC Office Use ONLY

Letter of Confidentiality Attached

If Denied, Yes Date: _____

Wireline Log Received

Geologist Report Received

UIC Distribution

NOTARY PUBLIC - State of Kansas
JANE M. STEINERT
My Appt. Exp. 5/20/07

Operator Name: POPP OPERATING, INC. Lease Name: WARD Well #: 1

Sec. 15 Twp. 23 S. R. 13W East West County: Stafford

INSTRUCTIONS: Show important tops and base 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. Attach copy of all Electric Wireline Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken Yes No
(Attach Additional Sheets)

Samples Sent to Geological Survey Yes No

Cores Taken Yes No

Electric Log Run Yes No
(Submit Copy)

List All E. Logs Run:

Dual Induction, Micro Compensation,
Density/Neutron & Borehole Sonic

Log Formation (Top), Depth and Datum Sample

Name	Top	Datum
Anhy	769	+1119
Howard	2891	-1003
Heebner	3278	-1390
Lansing	3430	-1542
Base KC	3686	-1798
Arb	3811	-1923

CASING RECORD New 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.	Selling Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface Pipe	12 1/4	8 5/8	23	304.48	60/40Poz	250	2%Gel&3%CC
Production St.	7 7/8	5 1/2	14	3892	Econobond	175	4%Gel&2%CC

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				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)	Depth
4	3812.5-14.5'	natural	

TUBING RECORD Size 2-7/8" Set At 3843' Packer At none Liner Run Yes No

Date of First, Resumed Production, SWD or Enhr. 4-25-03 Producing Method Flowing Pumping Gas Lift Other (Explain)

Estimated Production Per 24 Hours Oil Bbls. 30 Gas Mcf none Water Bbls. 112 Gas-Oil Ratio 25% Gravity 36

Disposition of Gas Vented Sold Used on Lease (If vented, Sumit ACO-18.) METHOD OF COMPLETION Open Hole Perf. Dually Comp. Commingled Other (Specify) _____ Production Interval _____



ORIGINAL COPY

SALES OFFICE:
 100 S. Main
 Suite #607
 Wichita KS 67202
 (316) 262-3699
 (316) 262-5799 FAX

SALES & SERVICE OFFICE:
 10244 NE Hiway 61
 P.O. Box 8613
 Pratt, KS 67124-8613
 (316) 672-1201
 (316) 672-5383 FAX

ACIDIZING - FRACTURING - CEMENTING

Invoice

Bill to:		7080000	Invoice	Invoice Date	Order	Order Date
POPP OPERATING		RECEIVED AUG 01 2003 KCC WICHITA	303132	3/31/03	6075	3/29/03
P.O. Box 187			Service Description			
Hoisington, KS 67544			Cement			
			Lease		Well	
			Ward		1	
AFE	CustomerRep	Treater	Well Type	Purchase Order	Terms	
	R. Popp	D. Scott	New Well		Net 30	

<u>ID.</u>	<u>Description</u>	<u>UOM</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Price</u>
D203	60/40 POZ (COMMON)	SK	250	\$7.84	\$1,960.00 (T)
C310	CALCIUM CHLORIDE	LBS	645	\$0.75	\$483.75 (T)
C194	CELLFLAKE	LB	54	\$2.00	\$108.00 (T)
F163	WOODEN CEMENT PLUG, 8 5/8"	EA	1	\$85.00	\$85.00 (T)
E107	CEMENT SERVICE CHARGE	SK	250	\$1.50	\$375.00
E100	HEAVY VEHICLE MILEAGE - 1 WAY	MI	25	\$3.25	\$81.25
E104	PROPPANT / BULK DELIV SERVICES/TON MILE, \$200 MIN	TM	269	\$1.30	\$349.70
R200	CASING CEMENT PUMPER, 0-300' 1ST 4" HRS ON LOC.	EA	1	\$662.00	\$662.00
R701	CEMENT HEAD RENTAL	EA	1	\$250.00	\$250.00

Sub Total: \$4,354.70

Discount: \$1,306.64

Discount Sub Total: \$3,048.06

Tax Rate: 6.30% **Taxes:** \$116.27

(T) Taxable Item

Total: \$3,164.33

PLEASE REMIT TO Acid Services, LLC, Dept No 1131 , Tulsa, OK 74182

Accounts become past due the last day of the month following billing. Interest rate 1.5% per month (18% per year) on past due accounts.

ORIGINAL

FIELD ORDER

6075



INVOICE NO.	Subject to Correction		
Date 3-29-03	Lease Ward	Well # 1	Legal 16-23r-13w
Customer ID	County Stafford	State KS	Station PrattKS
CHARGE	Depth	Formation TP=300' 23 ppr	Shoe Joint 13 Requested
	Casing 8 5/8	Casing Depth 300	TD 305
	Customer Representative Rick Popp		Treater D. Scott
	Job Type Surface New Well		

Popp Operating

AFE Number PO Number

Materials Received by **X Aubrey Popp**

Product Code	QUANTITY	MATERIAL, EQUIPMENT and SERVICES USED	UNIT PRICE	AMOUNT	ACCOUNTING	
					CORRECTION	AMOUNT
D203	250 sk	Cmt Common 60/46 por				
C310	643 Lb	Calcium Chloride				
C194	54 Lb	Cell/flake				
F163	1 ca	Top Wood Plug 8 5/8				
E107	250 sk	Cmt Serv Chg				
E100	1 ca	UNITS 1 way MILES 25				
E104	269 tm	TONS 1 way MILES 25				
R200	1 ca	EA. 0-300' PUMP CHARGE				
R701	1 ca	Cmt Head Rental				
Discounted Price =			3048.06			

10244 NE Hiway 61 • P.O. Box 8613 • Pratt, KS 67124-8613 • Phone (620) 672-1201 • Fax (620) 672-5383 TOTAL

TREATMENT REPORT



Customer ID	Date
Customer: Popp Oper	3-29-03
Lease: Ward	Lease No. / Well #

Field Order # 6025	Station Pratt KS	Casing 8 5/8	Depth 300'	County Stafford	State KS
Type Job Surface New Well			Formation	Legal Description 13-235-13w	

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME		
Casing Size 8 5/8	Tubing Size	Shots/Ft		Acid 250 s/lk 60/46 202		RATE	PRESS 500	ISIP
Depth 285	Depth PBTD	From	To	Pre Pad 3% CC 1/4 # C.F.		Max		5 Min.
Volume 18.2	Volume	From	To	Pad 1.25 @ 3 14.5 ppg		Min		10 Min.
Max Press 300	Max Press	From	To	Free 33.6 Bbls SL		Avg		15 Min.
Well Connection	Annulus Vol.	From	To			HHP Used		Annulus Pressure
Plug Depth	Packer Depth	From	To	Flush Fresh H2O		Gas Volume		Total Load

Customer Representative Rick Popp	Station Manager Dave Astry	Treater D. Scott
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Service Units	106	35	57	38	70				
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Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
1700					On loc w/Trk's Safety mtg
					Log on Bottom Circ w/Rig
2122	100		33.6	5.0	St mixing Cmt @ 14.5 ppg 250 s/lk
2136	⊖			5.0	Close In + Release Wood Top Plug
2137	100			5.0	St Disp w/H2O
2142	130		18.5	⊖	Disp In + Close In w.H.
					Circ O Bbli Cmt = 0 s/lk
					wait 30 min Jet Cellar
					Good Cmt In Cellar ✓
					Job Complete
					Thank You Scotty



ORIGINAL

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 100 S. Main
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 10244 NE Hiway 61
 P.O. Box 8613
 Pratt, KS 67124-8613
 (316) 672-1201
 (316) 672-5383 FAX

ACIDIZING - FRACTURING - CEMENTING

Invoice

Bill to:		7080000	Invoice	Invoice Date	Order	Order Date
POPP OPERATING P.O. Box 187 Hoisington, KS 67544			304029	4/10/03	6076	4/4/03
<p style="text-align: center;">RECEIVED AUG 01 2003 KCC WICHITA</p>		Service Description				
		Cement				
		Lease		Well		
		Ward		1		
APE	CustomerRep	Treater	Well Type	Purchase Order	Terms	
	R. Popp	D. Scott	New Well		Net 30	

<u>ID.</u>	<u>Description</u>	<u>UOM</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Price</u>
D207	ECONOBOND (COMMON)	SK	175	\$12.37	\$2,164.75 (T)
D203	60/40 POZ (COMMON)	SK	25	\$7.84	\$196.00 (T)
C195	FLA-322	LB	120	\$7.50	\$900.00 (T)
C141	CC-1, KCL SUBSTITUTE	GAL	2	\$40.00	\$80.00 (T)
C302	MUD FLUSH	GAL	500	\$0.75	\$375.00 (T)
F191	GUIDE SHOE-REGULAR, 5 1/2"	EA	1	\$185.00	\$185.00 (T)
F231	FLAPPER TYPE INSERT FLOAT VALVES, 5 1/2"	EA	1	\$165.00	\$165.00 (T)
F143	TOP RUBBER CEMENT PLUG, 5 1/2"	EA	1	\$70.00	\$70.00 (T)
F101	TURBOLIZER, 5 1/2"	EA	11	\$71.00	\$781.00 (T)
E107	CEMENT SERVICE CHARGE	SK	200	\$1.50	\$300.00
E100	HEAVY VEHICLE MILEAGE - 1 WAY	MI	25	\$3.25	\$81.25
E104	PROPPANT / BULK DELIV SERVICES/TON MILE, \$200 MIN	TM	214	\$1.30	\$278.20
R208	CASING CEMENT PUMPER, 3501-4000' 1ST 4 HRS ON LOC	EA	1	\$1,680.00	\$1,680.00
R701	CEMENT HEAD RENTAL	EA	1	\$250.00	\$250.00
R702	CASING SWIVEL RENTAL	EA	1	\$125.00	\$125.00

Sub Total: \$7,631.20

Discount: \$2,289.59

Discount Sub Total: \$5,341.61

Tax Rate: 6.30%

Taxes: \$216.82

(T) Taxable Item

Total: \$5,558.43

PLEASE REMIT TO Acid Services, LLC, Dept No 1131 , Tulsa, OK 74182

Accounts become past due the last day of the month following billing. Interest rate 1.5% per month (18% per year) on past due accounts.



INVOICE NO.
Date: 4-4-03
Customer ID

Subject to Correction

FIELD ORDER

6376

Lease: Ward
Well #: 1
Legal: 13-235-13w
County: Stafford
State: KS
Station: Pratt KS
Depth: [blank]
Formation: TP=3892' 14 ppf
Shoe Joint: 40.
Casing: 5 1/2
Casing Depth: 3892'
TD: 3900
Job Type: LongString New Well
Customer Representative: Rick Papp
Treater: D. Scott

CHARGE

Popp Operating

AFE Number: [blank] PO Number: [blank]

Materials Received by: X *Ruby Papp*

Product Code	QUANTITY	MATERIAL, EQUIPMENT and SERVICES USED	UNIT PRICE	AMOUNT	ACCOUNTING	
					CORRECTION	AMOUNT
D207	175 sk	Econo Bond Common	✓			
D203	25 sk	60/40 por Common	✓			
C195	120 Lb	FLA-322	✓			
C141	2 gal	CC-1	✓			
C302	500 gal	mud Flush	✓			
E191	1 Ea	Guide Shoe 5 1/2	✓			
F231	1 Ea	ISFV w/Fill	✓			
F143	1 Ea	Top Swiper Plug	✓			
F101	11 Ea	Centralizer	✓			
E107	200 sk	Cmt Serv Chg				
E100	1 Ea	UNITS 1 way MILES 25				
E104	214 tm	TONS 1 way MILES 25				
R208	1 Ea	EA 3501-4000' PUMP CHARGE				
R701	1 Ea	Cmt Head Rental 5 1/2				
R702	1 Ea	1sg Swivel Rental "				
Discounted Price =				5341.61		

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TOTAL

TREATMENT REPORT



Customer ID	Date				
Customer Papp Oper	4-4-03				
Lease Ward	Lease No.				
	Well # 1				
Field Order # 6076	Station Pratt KS	Casing 5 1/2	Depth 3892	County Stafford	State KS

Type Job: Longstring New Well Formation: Legal Description: B-235-13w

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME	
Casing Size 5 1/2	Tubing Size	Shots/Ft		Acid 175ski Easo Bond	RATE	PRESS 2000	ISIP
Depth 3852	Depth P8TD	From	To	Perf Pad 1.8% FLA-322	Max		5 Min.
Volume 92.4	Volume	From	To	Pad 1.54 #3 13.7 ppg	Min	48 Bbls	10 Min.
Max Press 2000	Max Press	From	To	Frac 235sk per Plug R.H.	Avg	M.H.	15 Min.
Well Connection	Annulus Vol.	From	To	20 Bbls 2% KCL	HHP Used		Annulus Pressure
Plug Depth	Packer Depth	From	To	Flush 12 Bbls mud Flush	Gas Volume		Total Load

Customer Representative: Rick Papp Station Manager: Dave Autry Treater: D. Scott

Service Units	106	35	57	44	72			
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Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
0800					On loc w/Trki Safety mtg 6.5. Bottom ISFV Top 5. J. Cent 1-2-3-7-9-10-11-13-22-25-27 Csg on Bottom Drop Ball & Circ 1/2 Rig
1147	200		20	6	St 2% KCL Flush
1152	200		12	6	St mud Flush
1155	200		5	6	H2O Spacer
1158	300		48	6	St mixing amt @ 13.7 ppg 175ski
1207	0		10	5	Close In + Wash pump line
1212	100			7	Release Plug & St Disp w/H2O
1221	400		70	6.0	Lifting amt 70 Bbls out
1226	1500		92.4	0	Plug Down + psi Test Csg
1228	0				Release psi Held
					Rotated Csg
					Good Circ During Job
					Plg R.H. M.H. 1/2 255sk's per amt
					Job Complete
					Thank you Scott

Popp Operating Co.
Ward #1
2160' FNL & 1500' FEL
Section 15-23s-13w
Stafford County, Kansas
Page No. 1

RECEIVED
AUG 01 2003
KCC WICHITA

5 1/2" Production Casing Set

Contractor: Discovery Drilling Company (Rig #2)
Commenced: March 29, 2003
Completed: April 4, 2003
Elevation: 1888' K.B.; 1886' D.F.; 1880' G. L.
Casing Program: Surface; 8 5/8" @ 307'
Production; 5 1/2" @ 3901'
Samples: Samples saved and examined 3000' to the Rotary Total Depth.
Drilling Time: One (1) foot drilling time recorded and kept 3000' to the Rotary Total Depth.
Measurements: All depths measured from the Kelly Bushing.
Formation Testing: There was one (1) Drill Stem Test ran by Trilobite Testing Co.
Electric Log: By Rosel Company; Dual Induction, Micro Compensated Density/Neutron and Borehole Sonic.
Gas Detector: None.

<u>Formation</u>	<u>Log Depth</u>	<u>Sub-Sea Datum</u>
Anhydrite	769	+1119
Herington	1786	+102
Krider	1796	+92
Winfield	1846	+42
Towanda	1900	-12
Ft. Riley	1946	-58
Florence	2001	-113
Wreford	2098	-210
Council Grove	2124	-236
Funston	2141	-253
Crouse	2161	-273
Bader	2221	-333
Cottonwood	2286	-398
Neva	2309	-421
Red Eagle	2368	-480
Foraker	2404	-516
Indian Cave	2556	-668
Stotler	2683	-795
Tarkio	2756	-868
Bern	2812	-927
Howard	2891	-1003
Topeka	2976	-1088
Heebner	3278	-1390
Toronto	3297	-1409

RECEIVED
 AUG 0 1 2003
 KCC WICHITA

Douglas	3314	-1426
Brown Lime	3412	-1524
Lansing	3430	-1542
Base Kansas City	3686	-1798
Marmaton	3706	-1818
Conglomerate Sand	3718	-1830
Viola	3726	-1838
Simpson Shale	3766	-1878
Simpson Sand	3781	-1893
Arbuckle	3811	-1923
Rotary Total Depth	3900	-2012
Log Total Depth	3902	-2014

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

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

TOPEKA SECTION

- 3022-3034' Limestone; tan, finely crystalline, slightly granular, slightly cherty, scattered porosity, no shows.
- 3041-3054' Limestone; as above, slightly fossiliferous, questionable stain, plus white chalk.
- 3068-3076' Limestone; gray and tan, fossiliferous, fair porosity, trace spotty brown stain, trace of free oil and fair odor in fresh samples.
- 3088-3100' Limestone; white and gray, fine to medium crystalline, chalky, plus white chalk.
- 3130-3140' Limestone; gray and tan, fossiliferous, trace fossil fragments, chalky in part, poor spotty stain, trace of free oil and questionable odor in fresh samples.
- 3165-3174' Limestone; tan and gray, finely crystalline, granular, fossiliferous, scattered porosity, chalky.
- 3181-3190' Limestone; tan, fossiliferous, few medium crystalline, brown to black stain, trace of free oil and faint odor in fresh samples.
- 3190-3206' Limestone; as above, no shows.
- 3240-3250' Limestone; tan and brown, finely crystalline, slightly dolomitic, some sucrosic, poor visible porosity, no shows.
- 3250-3278' Limestone; as above, increasingly granular, chalky in part.

TORONTO SECTION

- 3297-3312' Limestone; white to gray, chalky, poor visible porosity, dense.

LANSING SECTION

- 3430-3434' Limestone; white, finely crystalline, slightly fossiliferous, poor visible porosity, trace dull gray stain, no show of free oil or odor in fresh samples.
- 3438-3447' Limestone; gray to white, fossiliferous/oolitic, poorly developed porosity, no shows.

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AUG 01 2003
KCC WICHITA

- 3458-3466' Limestone; gray to white, finely crystalline, slightly fossiliferous, chalky, scattered intercrystalline to pinpoint porosity, dull gray and brown stain, weak show of free oil and faint odor in fresh samples.
- 3473-3476' Limestone; gray, oolitic, chalky, trace gray to brown stain, weak show of free oil and faint odor in fresh samples.
- 3480-3490' Limestone; as above.
- 3493-3498' Limestone; gray to white, finely crystalline, fossiliferous, few pieces, fair to good intercrystalline to vugular type porosity, good brown stain, weak show of free oil and questionable odor in samples.
- 3518-3526' Limestone; tan, oolitic, fair oocastic porosity, brown to golden brown stain and saturation, show of free oil and faint odor in fresh samples.
- 3528-3550' Limestone; gray and white, fossiliferous in part, chalky, trace poor spotty stain, black to dull gray stain, no show of free oil or odor in fresh samples.
- 3561-3569' Limestone; tan, gray, oocastic, good oocastic porosity, spotty golden brown to dark brown stain, show of free oil (gassy) and fair odor in fresh samples.
- 3581-3586' Limestone; gray to white, oolitic, fair porosity, fair to good dark brown stain and saturation, show of free oil and fair odor in fresh samples.
- 3594-3600' Limestone; gray, white, oocastic/oolitic, fair to good interoolitic to oocastic porosity, good stain and saturation, good show of free oil and good odor in fresh samples.
- 3604-3610' Limestone; as above.
- 3633-3640' Limestone; gray, fossiliferous, good brown and black stain and saturation, good show of free oil and good odor in fresh sample.
- 3665-3669' Limestone; cream and gray, oolitic, fossiliferous, slightly chalky, good brown stain, show of free oil and faint odor in fresh samples.
- 3681-3685' Limestone; white to gray, fossiliferous, black spotty stain.

MARMATON SECTION

- 3706-3714' Limestone; gray and white, fossiliferous, slightly chalky, brown to black stain, trace of free oil, no odor.

CONGLOMERATE SECTION

- 3718-3721' Sand; white to clear, very fine to medium grained, quartzitic, sub rounded to sub angular, good dark brown to black stain, trace of free oil and no odor in fresh samples.

RECEIVED
AUG 01 2003
KCC WICHITA

VIOLA SECTION

- 3727-3740' Chert; gray, tan, opaque and boney, no shows.
- 3740-3750' Chert; gray and white, boney, few weathered, brown and dark brown edge staining.
- 3750-3766' Chert; as above, fair to good golden brown stain, plus trace limestone, gray, fine to medium crystalline, cherty.

SIMPSON SAND SECTION

- 3782-3791' Sand; medium grained, quartzitic, sub rounded, few sub angular, dolomitic, scattered porosity, dark brown stain and saturation, show of free oil and no odor in fresh samples.

ARBUCKLE SECTION

- 3811-3814' Dolomite; gray to tan, sucrosic, good pinpoint porosity, good stain and saturation, show of free oil and good odor in fresh samples.
- 3814-3821' Dolomite; tan and white, medium crystalline, sucrosic, good intercrystalline to vugular to pinpoint porosity, good stain and saturation, good show of free oil and strong odor in fresh samples.

Drill Stem Test #1 3811-3819' (Log 3813-3821")

Times: 45-30-45-45

Blow: IFP – surging/plugging action
Flushed tool two (2) times, no help
FFP – no blow, flushed tool two (2) times, strong blow (OBB) 4 minutes

Recovery: 305' heavy oil and gas cut mud
(70% oil, 10% gas, 20% mud)
300' clean gassy oil
(90%, 10% gas)
60' slightly mud cu gassy oil
(5% mud, 10% gas, 85% oil)
60' heavy oil cu watery mud
(2% water, 5% mud, 93% oil)
60' slightly oil cut mud
(5% oil, 95% mud)

Pressures: ISIP plugged
FSIP 1413 psi
IFP plugged
FFP 177-355 psi
HSH 2149-2087 psi

- 3821-3840' Dolomite; gray and white, finely oolitic, slightly cherty, scattered porosity, trace dull gray to black stain, trace of free oil and good odor in fresh samples.
- 3840-3848' Dolomite; tan and gray, medium crystalline, gray to brown stain, show of free oil and faint odor in fresh samples.

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- 3848-3860' Dolomite; gray and white, medium crystalline, fair to good intercrystalline porosity, fair dull gray to brown and black stain, show of free oil and strong odor in fresh samples.
- 3860-3870' Dolomite; as above.
- 3870-3890' Dolomite; gray and white, fine to medium crystalline, fair to good intercrystalline to vugular type porosity, black and dull gray stain, show of free oil (dead appearing) and good odor in fresh samples.
- 3890-3902 Dolomite; gray and white, medium and coarse crystalline, good intercrystalline and vugular type porosity, black stain, show of free oil (dead) and good odor in fresh samples, plus white chert.

Rotary Total Depth 3900 (-2012)

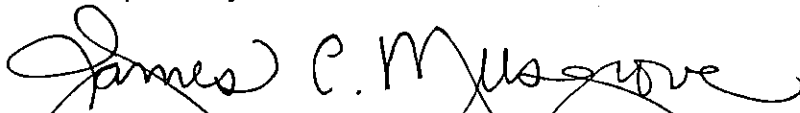
Log Total Depth 3902 (-2014)

Recommendations:

On the basis of the favorable structural position and positive results of Drill Stem Test #1, it was recommended by all parties involved to set and cement 5 1/2" production casing at 3901' (one foot off bottom) and the following zones be tested in the Ward #1:

- | | |
|-----------------------|---------------------|
| 1. Arbuckle 3811-3814 | perforate |
| 2. Simpson Sand | 3782-3791 perforate |
| 3. Conglomerate Sand | 3718-3721 perforate |
| 4. Marmaton | 3708-3712 perforate |
| 5. Lansing | 3665-3669 perforate |
| 6. Lansing | 3633-3639 perforate |
| 7. Lansing | 3604-3610 perforate |
| 8. Lansing | 3594-3600 perforate |
| 9. Lansing | 3571-3576 perforate |
| 10. Lansing | 3551-3559 perforate |
| 11. Lansing | 3518-3524 perforate |
| 12. Lansing | 3501-3506 perforate |
| 13. Lansing | 3494-3498 perforate |
| 14. Lansing | 3458-3466 perforate |
| 15. Bader | 2250-2260 perforate |

Respectfully submitted;


James C. Musgrove
Petroleum Geologist