



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1198701
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: _____

1198701

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: <input type="checkbox"/> Yes <input type="checkbox"/> No
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Date of First, Resumed Production, SWD or ENHR.	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____
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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> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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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. 7553

Date	10-25-13	Sec.	21	Twp.	13	Range	17	County	Ellis	State	Ks	On Location		Finish	3:00 PM
Lease								Well No.		1					
Contractor								Discovery #1		Owner to 310 Rd, 1/2 N, 10/1 into					
Type Job								Surface		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.					
Hole Size				12 1/4"		T.D.		1230'		Charge To Damar Resources					
Csg.				8 5/8"		Depth		1230'		Street					
Tbg. Size						Depth				City State					
Tool						Depth				The above was done to satisfaction and supervision of owner agent or contractor.					
Cement Left in Csg.				33'		Shoe Joint		33'		Cement Amount Ordered 450 sx Common 3% cc					
Meas Line				Displace		76 1/4 BLS		2% Gel							
EQUIPMENT												Common 450			
Pumptrk		16		No.		Cementer		Billy		Helper					
Bulktrk		12		No.		Driver		David		Gel. 9					
Bulktrk		p.u.		No.		Driver		Rick		Calcium 16					
JOB SERVICES & REMARKS												Hulls			
Remarks:				Cement did Circulate				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 475							
								Mileage							
FLOAT EQUIPMENT															
								Guide Shoe							
								Centralizer							
								Baskets							
								AFU Inserts							
								Float Shoe							
								Latch Down							
								1- Baffle plate							
								1- Rubber plug							
								Pumptrk Charge 9							
								Mileage 9							
												Tax			
												Discount			
												Total Charge			
Signature												Cliff Mayfield			

JAMES C. MUSGROVE
Petroleum Geologist
212 Main Street
P.O. Box 215
Clifton, KS 67525

Office (620) 588-4250

Res. Clifton (620) 587-3444

Damar Resources
Drilling Unit #1
SE-SW-SW-NE (2525' FNL & 2115' FEL)
Section 21-13s-17w
Ellis County, KS
Page 1

5 1/2" Production Casing Set

Contractor: Discovery Drilling Company (Rig #1)
Commenced: October 24, 2013
Completed: November 1, 2013
Elevation: 1996' K.B; 1994' D.F; 1988' G.L.
Casing program: Surface; 8 5/8" @ 1230'
Production 5 1/2" @ 3674'
Sample: Samples saved and examined 2900' to the Rotary Total Depth.
Drilling time: One (1) foot drilling time recorded and kept 2900 ft to the Rotary Total Depth.
Measurements: All depths measured from the Kelly Bushing.
Drill Stem Tests: There were six (6) Drill Stem Tests ran by Trilobite Testing Co.
Electric Log: By Pioneer Energy Services; Dual Induction, Compensated Neutron/Density and Micro.

<u>Formation</u>	<u>Log Depth</u>	<u>Sub-Sea Datum</u>
Anhydrite	1223	+773
Base Anhydrite	1269	+727
Topeka	3014	-1018
Heebner	3255	-1259
Toronto	3276	-1280
Lansing	3300	-1304
Base Kansas City	3524	-1528
Arbuckle	3539	-1543
Rotary Total Depth	3675	-1629
Log Total Depth	3675	-1629

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

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

TOPEKA SECTION

3014-3030' Limestone; brown/gray, fossiliferous, dense, poorly developed porosity.
3045-3052' Limestone; gray, slightly dolomitic, poor visible porosity, trace poor spotty light brown stain, no free oil and no odor in fresh samples.

- 3067-3084' Limestone; tan, finely crystalline, fossiliferous, chalky in part, no show.
- 3100-3118' Limestone; gray, tan, finely crystalline, fossiliferous, slightly cherty, no shows.
- 3187-3200' Limestone; white/gray, finely crystalline, few fossiliferous, plus amber chert, no shows.
- 3208-3220' Limestone; white, gray, slightly fossiliferous, chalky, poor brown and black stain, no free oil and faint odor in fresh samples.

TORONTO SECTION

- 3276-3290' Limestone; tan, gray, chalky, finely crystalline, poor intercrystalline type porosity, brown stain, no free oil and no odor in fresh samples.

LANSING SECTION

- 3300-3308' Limestone; tan, gray, finely crystalline, chalky, poor porosity, no shows.
- 3313-3326' Limestone; white, gray, chalky, few cherty, no shows.
- 3325-3338' Limestone; white/gray, slightly chalky, scattered vuggy type porosity, trace stain, show of free oil and questionable odor in fresh samples.

Drill Stem Test #1 3250-3340'

Times: 5-60-30-30

Blow: Weak

Recovery: 7' mud

Pressures:

ISIP	386	psi
FSIP	108	psi
IFP	16-16	psi
FFP	17-20	psi
HSH	1595-1567	psi

- 3346-3356' Limestone; white, gray, finely crystalline, few fossiliferous, chalky in part, brown spotty stain, no show of free oil and no odor in fresh samples, plus white chert.
- 3370-3376' Limestone; gray, white, finely oolitic, chalky, gray and brown stain and saturation, show of free oil and questionable odor in fresh samples.
- 3382-3390' Limestone; white/cream, oolitic/fossiliferous, slightly chalky, brown stain, trace of free oil and faint odor.
- 3393-3406' Limestone; as above, sub oomoldic in part, chalky, poorly developed porosity, trace stain, weak show of free oil and no odor in fresh samples.

Drill Stem Test #2 3325-3411'

Times: 5-60-45-45

Blow: Weak

Recovery: 10' oil spotted mud

Pressures: ISIP 340 psi
FSIP 273 psi
IFP 15-18 psi
FFP 20-29 psi
HSH 1647-1637 psi

3432-3446' Limestone; white, few fossiliferous, chalky, poor porosity, poor stain, no show of free oil and no odor in fresh samples, plus amber/gray chert.

3462-3470' Limestone; white, gray, finely crystalline, fossiliferous in part, scattered pinpoint porosity, trace brown stain and black stain, weak show of free oil and faint odor in fresh samples.

3474-3482' Limestone; white/cream, finely crystalline, finely fossiliferous, chalky, scattered porosity, light brown stain, trace of free oil and good odor in fresh samples.

3490-3500' Limestone; white, gray, cream, finely crystalline, few fossiliferous, poor visible porosity, no shows.

Drill Stem Test #3 3416-3515'

Times: 5-60-45-45

Blow: Weak

Recovery: 2' mud, show of oil

Pressures: ISIP 726 psi
FSIP 294 psi
IFP 17-18 psi
FFP 19-23 psi
HSH 1699-1645 psi

3515-3525' Limestone; white, gray, chalky, few cherty, dense.

ARBUCKLE SECTION

3539-3563' Dolomite; white, gray, fine and medium crystalline, scattered intercrystalline porosity, brown and golden stain/saturation, show of free oil and good odor in fresh samples, plus trace tan, sucrosic, dolomite, few sandy, fair stain, saturation, show of free oil.

Drill Stem Test #4 3523-3563'

Times: 5-60-45-45

Blow: Surface

Recovery: 29' oil cut mud
 (5% oil, 95% mud)
 1' heavy oil cut mud
 (45% oil, 55% mud)

Pressures: ISIP 1037 psi
 FSIP 821 psi
 IFP 18-21 psi
 FFP 22-32 psi
 HSH 1773-1701 psi

3563-3578' Dolomite; as above, sucrosic, scattered porosity, good stain and saturation, show of free oil and fair/good odor in fresh samples.

3578-3586' Dolomite; gray, tan, sucrosic, good pinpoint and intercrystalline type porosity, good stain and saturation, show of free oil, trace white chert.

3586-3610' Dolomite; white/gray and cream finely crystalline, poor visible, plus white chalk, trace black dead stain, no free oil and no odor.

3610-3630' Dolomite; as above, plus white chert, trace pink finely crystalline dolomite, no shows.

3630-3640' Dolomite; white, medium crystalline, fair porosity, plus amber and gray chert.

3640-3650' Dolomite; pink and gray, white, finely crystalline, slightly cherty, dense, plus white chalk.

3650-3675' Dolomite; as above, fair to good porosity, no shows, plus white chert.

Rotary Total Depth 3675 (-1679)
 Log Total Depth 3675 (-1679)

Remarks: Drill Stem Tests #5 & #6 were straddle tests.

Drill Stem Test #5 3556-3582'

Misrun – plugged tool

Drill Stem Test #6 3557-3581'

Times: 5-60-60-90

Blow: Good (7 1/2")


Final Flow: Weak to fair (5 1/2")

Recovery: 7' clean oil
8' mud cut oil
(40% mud, 60% oil)
125' slightly oil cut mud
(3% oil, 97% mud)

Pressures: ISIP 1079 psi
FSIP 1031 psi
IFP 70-163 psi
FFP 70-82 psi
HSH 1812-1749 psi

Recommendations:
5 1/2" production casing was set and cemented on the Dreiling Unit #1.

Respectfully submitted;


James C. Musgrove,
Petroleum Geologist

