KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

ORIGINAL

Form ACO-1
September 1999
Form Must Be Typed

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

Operator: License # 33712
Name: Clark Energy LLC
Address: 1198 Road 31
City/State/Zip: Havana , KS
Purchaser: Quest Energy Services
Operator Contact Person: Randy Clark
Phone: (620) 330-2110
Contractor: Name: ~~Thorton Drilling~~ M.O.K.A.T
License: 5831
Wellsite Geologist: Julie Schafer

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: N/A
Well Name: N/A
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. ____

11-28-07	11-29-07	12-29-07
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 019-26839-00-00
County: Chautauqua
SW - SE - SE - NE Sec. 13 Twp. 33 S. R. 12 ☑ East ☐ West
2885 feet from (S) / N (circle one) Line of Section
405 feet from (E) / W (circle one) Line of Section
Footages Calculated from Nearest Outside Section Corner:
(circle one) NE (SE) NW SW
Lease Name: Brougham Well #: 13-7
Field Name: Fraiser
Producing Formation: South Mound
Elevation: Ground: 970 Kelly Bushing: N/A
Total Depth: 1763 Plug Back Total Depth: N/A
Amount of Surface Pipe Set and Cemented at 42 Feet
Multiple Stage Cementing Collar Used? ☐ Yes ☑ No
If yes, show depth set N/A Feet
If Alternate II completion, cement circulated from 1763
feet depth to Surface w/ 180 sx cmt.
Alt 2 - Dlg - 1/29/09

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)
Chloride content Air drill ppm Fluid volume N/A bbls
Dewatering method used Air dry
Location of fluid disposal if hauled offsite:
Operator Name: ____
Lease Name: ____ License No.: ____
Quarter ____ Sec. ____ Twp. ____ S. R. ____ ☐ East ☐ West
County: ____ Docket No.: ____

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: Randy W. Clark
Title: Mgr. Date: 3-4-08
Subscribed and sworn to before me this 4th day of March, 20 08.
Notary Public: Jennifer Monday, CSR
Date Commission Expires: 2/24/09

NOTARY PUBLIC - State of Kansas
JENNIFER MONDAY
My Appt. Expires 2-24-09

KCC Office Use ONLY

N Letter of Confidentiality Received
✓ If Denied, Yes ☐ Date: ____
____ Wireline Log Received
____ Geologist Report Received
____ UIC Distribution

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MAR 05 2008
CONSERVATION DIVISION
WICHITA, KS

Side Two

Operator Name: Clark Energy LLC Lease Name: Brougham Well #: 13-7

Sec. 13 Twp. 33 S. R. 12 ☑ East ☐ West County: Chautauqua

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:

Density-Neutron, Dual Induction, Temp

☑ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
Lenapah Limestone	1017	-47
Altamont Limestone	1072	-102
Oswego Limestone	1302	-322
Mississippi	1716	-746

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.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Casing	6.75	4.5	10.5	1758	Thick Set	180	Phenoseal and .
							Gilsonite

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose: ___ Perforate ___ Protect Casing ___ Plug Back TD ___ Plug Off Zone	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives

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
2	979-981	200 gal. acid, 5500lbs sand, 400 bbl water	979-981

TUBING RECORD	Size	Set At	Packer At	Liner Run
	2 3/8	1050	N/A	☑ Yes ☐ No

Date of First, Resumerd Production, SWD or Enhr.	Producing Method
1-5-07	☐ Flowing ☑ Pumping ☐ Gas Lift ☐ Other *(Explain)*

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	0	0	15		

Disposition of Gas: ☐ Vented ☐ Sold ☐ Used on Lease *(If vented, Submit ACO-18.)*

METHOD OF COMPLETION: ☐ Open Hole ☑ Perf. ☐ Dually Comp. ☐ Commingled ☐ Other *(Specify)*

Production Interval

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CONSOLIDATED OIL WELL SERVICES, INC.
P.O. BOX 884, CHANUTE, KS 66720
620-431-9210 OR 800-467-8676

TICKET NUMBER 11387
LOCATION Barnett
FOREMAN Coop

TREATMENT REPORT & FIELD TICKET
CEMENT

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
11-30-07	2781	Brougham #13-1				CQ

CUSTOMER: Randy Clark
MAILING ADDRESS:
CITY | STATE | ZIP CODE:

TRUCK #	DRIVER	TRUCK #	DRIVER
418	James N		
460	Willie		
403764	Jamie K		
Akmel y T.P.			

JOB TYPE L.S HOLE SIZE 6¾ HOLE DEPTH 1260 CASING SIZE & WEIGHT 4½
CASING DEPTH 1252 DRILL PIPE TUBING OTHER
SLURRY WEIGHT SLURRY VOL WATER gal/sk CEMENT LEFT In CASING -0-
DISPLACEMENT 28 DISPLACEMENT PSI MIX PSI RATE

REMARKS: Pumped 2bbl gel ahead, Est. circulation, pumped 180sks cement, flushed pump & lines displaced plug to bottom, set shoe, shut in.
-Circulated cement to surface-

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401	1	PUMP CHARGE		840.00
5406	45	MILEAGE		148.50
5402	1252	Footage		316.26
5407	1	Bulk Truck		285.00
5501C	4hr x 2	Transport		800.00
1126A	180 sks	OWC cement		2772.00
1107A	120#	Phenoseal		126.00
1110	900#	Gilsonite		432.00
1118B	100#	Gel		15.00
1123	2500 gl	City Water		96.00
4404	1	4½ Rubber Plug		40.00
			SALES TAX	219.32
			ESTIMATED TOTAL	6090.08

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MAR 05 2008
CONSERVATION DIVISION
WICHITA, KS

21838

AUTHORIZATION TITLE DATE

0-486' Samples not examined

***Note: Making significant water @ 486'**

486-490' Shale, medium gray

490-492' Shale, dark gray

492-494' Shale, grayish-black/black

Canister #8 @ 9:25 a.m. – Grayish-black/black shale, 492-494', *canister dumped after 5 hours, no gas desorbed*

494-510' Shale, medium gray

510-550' Upper Layton Sandstone, light gray, 14-16% porosity, laminated with shale, no petroliferous odor/show

550-560' Shale, medium-light gray, silty

560-656' Shale, medium gray, lime streaks

656-657½' Shale, black

Canister #9 @ 10:45 a.m. – Black shale, 656-657½'

657½-660' Shale, medium gray

660-666½' Limestone, light brownish-gray/tan, hard, medium-fine grained, rough texture

666½-667½' Shale, black

667½-698½' Shale, medium gray, silty

698½-743' Layton Sandstone, light gray, very fine grained, well sorted, silty, 16-18+% porosity, shaley laminations, no petroliferous odor/show, no gas bubbles observed under microscope at time drilled

Hand gas check @ 736' – no flow

743-762' Layton Sandstone, light gray with yellowish-gray tint, 18-20+% porosity, medium gray, sub-angular, laminated with carbonaceous and micaceous partings, no oil staining, no petroliferous odor/show, no fluorescence, no gas bubbles observed under microscope @ time drilled

***Note: Picked up additional water @ 755'; had to startup booster (water surging), due to the large volumes of gas and water, gas checks could not be performed from this point forward.**

Hand gas check @ 761' – no flow

762-766' Sandy-shale, medium gray

766-807' Layton Sandstone, light gray, fine grained, well sorted, tightly packed quartz, 16-20% porosity, silty, shaley laminations, no petroliferous odor/show, no gas bubbles observed under microscope at time drilled

807-820' Shale, medium-light gray, sandy, lime streaks

820-844' Shale, medium gray

Top of the Drum Limestone @ 844' (+126')

844-865' Limestone, off-white/light brownish-gray, fine grained, locally medium crystalline, rough texture, grainy, fossiliferous

865-872' Shale, dark gray

872-878' Shale, grayish-black

878-881½' Hushpuckney Shale, black, no gas bubbles observed under microscope at time drilled

Canister #41 @ 2:00 p.m. – Hushpuckney Shale, 878-881½'

881½-883' Limestone, off-white, hard, medium-fine grained, rough texture

883-929' Sandstone, light gray, 16-18% porosity, no petroliferous odor/show

929-939' Limestone, off-white, medium-fine grained, rough texture

939-979½' Shale, medium-dark gray

979½-982½' South Mound Shale, black, strong petroliferous odor, no gas bubbles observed under microscope at time drilled

Canister #28 @ 3:05 p.m. – South Mound Shale, 979½-982½'

982½-1014' Shale, dark gray

1014-1015' Holdenville Shale, grayish-black

1015-1017' Shale, medium-light gray, soft

Top of the Lenapah Limestone @ 1017' (-47')

1017-1026' Limestone, tan/off-white, fine grained, rough texture, gritty, fossiliferous

1026-1035' Shale, greenish-gray, silty/sandy

1035-1037' Limestone, light brownish-gray, fine grained, rough texture

1037-1072' Shale, medium gray, greenish tint

Top of the Altamont Limestone @ 1072' (-102')

1072-1104' Limestone, light-brownish-gray, fine grained, locally medium crystalline, rough texture

1104-1124' Weiser Sandstone, light gray, 10-12% porosity, no petroliferous odor/show until 1112' then, 12% porosity, very silty, fine grained, well cemented, slight petroliferous odor, no show of oil on pit, 80% lightly mottled light green fluorescence, shale laminations

1124-1149' Weiser Sandstone (90%), light gray, uniform pale brown oil staining, 16-18% porosity, strong petroliferous odor, oil film/sheen on pit, oil blebs on cuttings (next day had good show of oil on pit from morning blowoff); Sandstone (10%), light gray, well cemented, laminated with carbonaceous and micaceous partings, 90% solid medium-bright green oil fluroescence

1149-1212' Silty-shale, medium gray, sandy

11/29/07

Top of the Pawnee Limestone @ 1212' (-242')

1212-1232' Limestone, light brownish-gray, pinkish tint, fine grained, smooth texture

1232-1236½' Shale, dark gray

1236½-1238' Lexington Shale, black, very carbonaceous, disseminated pyrite

1238-1243' Shale, dark gray

1243-1255' Shale, greenish-gray, silty

1255-1270' Sandy-shale, medium gray

1270-1302' Shale, medium gray

Top of the Oswego Limestone @ 1302' (-332')

1302-1330' Limestone, dark brown to light grayish-tan/off-white, fine grained, smooth texture

1330-1334' Shale, dark gray

1334-1336' Summit Shale, black, very carbonaceous, abundant coal micro flakes, pyrite with white calcite

1336-1339' Shale, medium gray

1339-1356½' Limestone, tan, fine grained, rough texture

1356½-1359' Shale, dark gray

1359-1362½' Mulky Shale, black, carbonaceous

Canister #8 @ 11:40 a.m. – Mulky Shale, 1359-1362½'

1362½-1364¾' Shale, dark gray

1364¾-1377' Limestone, tan, fine grained, rough texture

1377-1384½' Shale, medium-dark gray

1384½-1386' Bevier Coal

Canister #07 @ 12:20 p.m. – Bevier Coal, 1384½-1386'

1386-1401½' Shale, medium-dark gray

Top of the Verdigris Limestone @ 1401½' (-461½')

1401½-1403' Limestone, dark brownish-gray, hard, fine grained, locally medium crystalline, rough texture

1403-1404' Shale, dark gray

1404-1405¼' Croweburg Shale, black

1405¼-1406½' Croweburg Coal

Canister #20 @ 12:40 p.m. – Croweburg Shale & Coal, 1404-1406½'

1406½-1412' Shale, light gray

1412-1420' Upper Cattleman Sandstone, light gray, poor porosity, no petroliferous odor/show

1420-1444' Shale, medium gray

1444-1446¾' Shale, black/grayish-black, slightly carbonaceous, disseminated pyrite

1446¾-1448' Fleming Coal, mostly vitreous, few thin dull bands, thin pyrite bands, semi-bright to bright satiny luster, 10% flat joint faces

1448-1524' Shale, light gray

1524-1525' Shale, dark gray

1525-1535' Cattleman Sandstone, light gray, poor porosity, no petroliferous odor/show

1535-1560' Shale, light gray/medium brown

1560-1572' Shale, very light gray, sandy

1572-1576½' Shale, medium gray

1576½-1693¼' Shale, dark gray/grayish-black (thin, carbonaceous lenses), lime streaks

1693¼-1695¾' Riverton Coal, vitreous bands, thinner bands look grainy, disseminated pyrite, glassy silky-metallic luster, locally white calcite layers, 10% flat cleat faces

1695¾-1716' Sandy-shale, medium gray, clay cementation, gritty/grainy, irregular quartz crystals

Top of the Mississippi @ 1716' (-746')

1716-1726' Chert, white, mostly chalky and siliceous, few flinty and dense cuttings, no visible porosity, no petroliferous odor/show

1726-1752' Chert, white, uniform pale brown oil staining, 85% sandy/sucrosic, 10% chalky, 5% flinty, overall <5-8% pinpoint and pinhead vuggy porosity, 5% of cuttings with 12+% intercrystalline and vuggy porosity, faint oil odor, no oil show, scattered black bitumen, 100% uniform bright yellowish-white oil fluorescence

1752-1763' Limestone (70%), light olive gray, very fine grained, silty, sandy appearance; Chert (30%), light bluish-gray, flinty, some limestone/chert fused pieces, no visible porosity/vugs, no petroliferous odor/show, 100% mottled bright yellowish-green oil fluorescence

T.D. @ 1763'

Julie Shaffer
Petroleum Geologist