. CONFIDENTIAL

KANSAS CORPORATION COMMISSION ORIGINAL Form ACO-1 OIL & GAS CONSERVATION DIVISION Form Must Be Typed A MELIDER

WELL COMPLETION FORM WELL HISTORY - DESCRIPTION OF WELL & LEASE

Operator: License # 33365	API No. 15 - 125-31186-00-00
Name: Layne Energy Operating, LLC	County: Montgomery
Address: 1900 Shawnee Mission Parkway	SE_SE_Sec. 16 Twp. 33 S. R. 16
City/State/Zip: Mission Woods, KS 66205	964 feet from S/ N (circle one) Line of Section
Purchaser:	681 [E] W (circle one) Line of Section
Operator Contact Person: M. Brent Nattrass	Footages Calculated from Nearest Outside Section Corner:
Phone: (913) 748-3960	(circle one) NE SE NW SW
Contractor: Name: MOKAT Drilling DEC 1 9 2006	Lease Name: Mitchell Well #: 16-16
License: 5831 CONFIDENTIAL	Field Name: Cherokee Basin Coal Area
Wellsite Geologist:	Producing Formation: Cherokee Coals
Designate Type of Completion:	Elevation: Ground: 752' Kelly Bushing:
New Well Re-Entry Workover	Total Depth: 1145' Plug Back Total Depth: 1137'
OilSWDSIOWTemp. Abd.	Amount of Surface Pipe Set and Cemented at 21.5 Feet
✓ GasENHR ✓ SIGW	Multiple Stage Cementing Collar Used? Yes No
Dry Other (Core, WSW, Expl., Cathodic, etc)	If yes, show depth setFeet
If Workover/Re-entry: Old Well Info as follows:	If Alternate II completion, cement circulated from 1137
Operator:	feet depth to Surface w/ 120 sx cmt.
Well Name:	<u>'</u>
Original Comp. Date: Original Total Depth:	Drilling Fluid Management Plan (Data must be collected from the Reserve Pit)
Deepening Re-perf Conv. to Enhr./SWD	Chloride content N/A ppm Fluid volume bbls
Plug BackPlug Back Total Depth	Dewatering method used N/A - Air Drilled
Commingled Docket No	
Dual Completion Docket No	Location of fluid disposal if hauled offsite:
Other (SWD or Enhr.?) Docket No	Operator Name:
8/22/2006 8/23/2006 5/14/2007	Lease Name: License No.:
Spud Date or Date Reached TD Completion Date or	Quarter Sec TwpS. R East West
Recompletion Date Recompletion Date	County: Docket No.:
INSTRUCTIONS: An original and two copies of this form shall be filed with	h the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita,
Kansas 67202, within 120 days of the spud date, recompletion, workov Information of side two of this form will be held confidential for a period of	rer or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. 12 months if requested in writing and submitted with the form (see rule 82-3-s and geologist well report shall be attached with this form. ALL CEMENTING
All requirements of the statutes, rules and regulations promulgated to regulation are complete and correct to the best of my knowledge.	ate the oil and gas industry have been fully complied with and the statements
Signature: MB Nation	KCC Office Use ONLY
Title: Agent Date: 9/10/07	Letter of Confidentiality Attached
Subscribed and sworn to before me this 10 day of Suptemb	If Denied, Yes Date:
20_07.	, Wireline Log Received
Mac tand lin Hur line	Geologist Report Received RECEIVED KANSAS CORPORATION COMMISSION
	LIN DARLING OIC DISTINGUION
Jate Commission Expires: 17 17	- State of Kansas SEP 1 1 2007
My Appt. Expi	165 1/ 7/000 /

Operator Name: Layne Energy Operating, LLC							Well #: 16-16		
Sec. 16 Twp.	33 S. R. 16	✓ East	County	y: Mont	gomery				
tested, time tool ope temperature, fluid re	n and closed, flowin covery, and flow rate	and base of formations p g and shut-in pressures, es if gas to surface test, a final geological well site	whether st along with f	hut-in pr	essure reached	static level, hydro	static pressu	es, bottom hole	
Drill Stem Tests Take		☐ Yes 📝 No		V L	.og Forma	tion (Top), Depth a	nd Datum	Sample	
Samples Sent to Ge	ological Survey	Yes V No		Nam	ne		Тор	Datum	
Cores Taken		☐ Yes 🗸 No		Paw	nee Lime		445 GL	307	
Electric Log Run (Submit Copy)		✓ Yes No		Exce	ello Shale		617 GL	135	
List All E. Logs Run:		KCC		V SI	nale		670 GL	828'	
Compensated D	ensity Neutron	· ~ 1 0 2006		Mine	eral Coal		716 GL	36	
Dual Induction	ensity Neutron	MFIDENTIAL		Miss	sissippian		1057 GL	-305	
			RECORD		ew Used	otion ato			
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weig	ght	Setting Depth	Type of Cement	# Sacjs Used	Type and Percent Additives	
Surface	11"	8.625"	24		21.5'	Class A	4	Type 1 cement	
Casing	6.75"	4.5"	10.5		1137'	Thick Set	120	10# KOL seal @ sx	
		ADDITIONAL	CEMENTIN	NG / SQL	JEEZE RECORI	D			
Purpose: Perforate	Depth Top Bottom	Type of Cement	#Sacks	Used	d Type and Percent Additives				
Protect Casing Plug Back TD									
Plug Off Zone									
Shots Per Foot		ON RECORD - Bridge Plug		•		icture, Shot, Cement			
	···	Footage of Each Interval Per	forated		(A	mount and Kind of Ma	terial Used)	Depth	
	See Attached Pa	age					······		
TUBING RECORD 2-3	Size	Set At 1010'	Packer At	t	Liner Run	Yes 🗸 No			
	d Production, SWD or E	nhr. Producing Met	nod	7 F:- ·		🗀	——————————————————————————————————————		
SI - waiting for	· · · · · · · · · · · · · · · · · · ·	Bbls. Gas	Mcf	Flowing Wate			Othe	or (Explain) Gravity	
Per 24 Hours				*******				Gravity	
Disposition of Gas	METHOD OF C	COMPLETION			Production Inte	rval			
Vented Soid (If vented, Su	Used on Lease bmit ACO-18.)	Open Hole Other (Speci	Perf.		ually Comp.	Commingled KA		EIVED RATION COMMISSION	

SEP 1 1 2007

Operator Name:	Layne Energy Operating, LLC.		
Lease Name:	Mitchell 16-16		
	Sec. 16 Twp. 33S Rng. 16E, Montgomery County		
API:	15-125-31186-00-00		
Shots per Foot	Perforation Record	Acid, Fracture, Shot, Cement Squeeze Record	Depth
	Initial Po	erforations	
4	Rowe 984' - 985.5'	5300 lbs 20/40 sand 451 bbls water	825' - 985.5'
•	Sycamore Shale 825' - 830'	800 gals 15% HCl acid	020 000.0
	Weir 792' - 794.5'	5200 lbs 20/40 sand	
4	Mineral 717' - 719.5'	477 bbls water	670.5' - 794.5'
, <u></u>	Croweburg 670.5' - 673.5'	850 gals 15% HCl acid	
		333 333 1373 1373	

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SEP 1 1 2007

Layne Energy, Inc.

1900 Shawnee Mission Parkway, Mission Woods, Kansas 66205 Phone: (913) 748-3987 Fax: (913) 748-3970

September 10, 2007

Mr. Steve Bond Kansas Corporation Commission Oil & Gas Conservation Division 130 S. Market, Room 2078 Wichita, KS 67202



Re:

Amended Well Completion Forms

Dear Mr. Bond:

I have enclosed the amended ACO-1 form and associated data for the following well:

API # 15-125-31186-00-00 Mitchell 16-16

We respectfully request that all information submitted be kept confidential. Per provision E-4 of K.A. R. 82-3-107, we request that the term of the confidentiality be extended by one year.

If you need additional information, please contact me at (913) 748-3960.

Sincerely,

MacLaughlin Darling
MacLaughlin Darling

Engineering Technician

Enclosures

cc:

Well File

Field Office

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SEP 1 1 2007

CONSERVATION DIVISION WICHITA, KS



Layne Energy, Inc.

1900 Shawnee Mission Parkway, Mission Woods, Kansas 66205 Phone: (913) 748-3987 Fax: (913) 748-3970

December 19, 2006

Kansas Corporation Commission Oil & Gas Conservation Division 130 S. Market, Room 2078 Wichita, KS 67202



Re: Well Completion Form

To Whom It May Concern:

I have enclosed the ACO-1 form and associated data for the following wells:

API # 15-125-31186 Mitchell 16-16

We respectfully request that all information submitted be kept confidential and per provision E-4 of K.A. R. 82-3-107, we request that the term of the confidentiality be extended by one year.

If you need additional information or have any questions or comments, please contact me at (913) 748-3987.

Best regards,

Brooke C. Maxfield

Enclosures

Cc Well File Field Office

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DEC 2 0 2006

CONSERVATION DIVISION WICHITAL KS



12/19/08

CONFIDENTIAL

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

Form ACO-1
September 1999
Form Must Be Typed

WELL COMPLETION FORM WELL HISTORY - DESCRIPTION OF WELL & LEASE

Operator: License # 33365	API No. 15 - 125-31186 -00 -00
Name: Layne Energy Operating, LLC	County: Montgomery
Address: 1900 Shawnee Mission Parkway	
City/State/Zip: Mission Woods, KS 66205	964feet from (S)/ N (circle one) Line of Section
Purchaser:	681 feet from (E)/ W (circle one) Line of Section
Operator Contact Person: M. B. Nattrass	Footages Calculated from Nearest Outside Section Corner:
Phone: (913) 748-3987 DEC 1 9 2000	(circle one) NE SE NW SW
Contractor: Name: MOKAT Drilling	Lease Name: Mitchell Well #: 16-16
License: 5831	Field Name: Cherokee Basin Coal Area
Wellsite Geologist:	Producing Formation: Cherokee Coals
Designate Type of Completion:	Elevation: Ground: 752 Kelly Bushing:
New Well Re-Entry Workover	Total Depth: 1145 Plug Back Total Depth: 1137
Oil SWD SIOW Temp. Abd.	Amount of Surface Pipe Set and Cemented at 21.5 Feet
✓ GasENHR ✓ SIGW	Multiple Stage Cementing Collar Used?
Dry Other (Core, WSW, Expl., Cathodic, etc)	If yes, show depth setFeet
If Workover/Re-entry: Old Well Info as follows:	If Alternate II completion, cement circulated from 1137
Operator:	feet depth to Surface w/ 120 sx cmt.
Well Name:	1/15/11/05/100
Original Comp. Date: Original Total Depth:	Drilling Fluid Management Plan ALTINH 6-21-08 (Data must be collected from the Reserve Pit)
Deepening Re-perf Conv. to Enhr./SWD	Chloride content_N/A ppm Fluid volumebbls
Plug Back Plug Back Total Depth	Dewatering method used N/A - Air Drilled
Commingled Docket No	
Dual Completion Docket No	Location of fluid disposal if hauled offsite:
Other (SWD or Enhr.?) Docket No	Operator Name:
8/22/2006 8/23/2006	Lease Name: License No.:
Spud Date or Date Reached TD Completion Date or	Quarter Sec TwpS. R
Recompletion Date Recompletion Date	County: Docket No.:
Kansas 67202, within 120 days of the spud date, recompletion, workown information of side two of this form will be held confidential for a period of the same of t	the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, er or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. 12 months if requested in writing and submitted with the form (see rule 82-3-130) and geologist well report shall be attached with this form. ALL CEMENTING S. Submit CP-111 form with all temporarily abandoned wells.
All requirements of the statutes, rules and regulations promulgated to regulation are complete and cofrect to the best of my knowledge.	ate the oil and gas industry have been fully complied with and the statements
Signature: MS VIIII	KCC Office Use ONLY
Title: Agent Date: 12/19/06	Letter of Confidentiality Attached
Manager 101	Letter of Confidentiality Attached
Subscribed and sworn to before me thisday of	Wireline Log Received
20 () () ()	Geologist Report RECEIVED Geologist Report RECEIVED GEOLOGIST REPORT RECEIVED
Notary Publid	UIC Distribution
Date Commission Expires: 12/28/07	DEC 2 0 2006
⊕ NCJAN Fractic Admin	CONSERVATION DIVISION WICHITM, KS

. Well #: 16-16 Lease Name: Mitchell Operator Name: Layne Energy Operating, LLC County: Montgomery 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. ✓ No Formation (Top), Depth and Datum Drill Stem Tests Taken Yes **√** Log Sample (Attach Additional Sheets) Name Top Datum Samples Sent to Geological Survey Yes **V** No Pawnee Lime 307 445 GL Cores Taken Yes **✓** No Electric Log Run ✓ Yes No Excello Shale 135 617 GI (Submit Copy) V Shale 670 GL 828' List All E. Logs Run: Mineral Coal 716 GL 36 Compensated Density Neutron 1057 GL **Dual Induction** Mississippian -305CASING RECORD ✓ New Used Report all strings set-conductor, surface, intermediate, production, etc. Type and Percent Size Hole Size Casing Weight Setting Type of Cement # Sacis Purpose of String Drilled Set (In O.D.) Lbs. / Ft. Used Depth Additives Surface 11 8.65 24 21.5' Class A 4 Type 1 cement 6.75 10.5 1137' Thick Set 120 Casing 4.5 ADDITIONAL CEMENTING / SQUEEZE RECORD Purpose: Depth Type of Cement #Sacks Used Type and Percent Additives Top Bottom _ Perforate **Protect Casing** Plug Back TD Plug Off Zone PERFORATION RECORD - Bridge Plugs Set/Type Acid, Fracture, Shot, Cement Squeeze Record Shots Per Foot Specify Footage of Each Interval Perforated Depth (Amount and Kind of Material Used) SI - waiting on completion TUBING RECORD Size Set At Packer At Liner Run Yes **✓** No Date of First, Resumerd Production, SWD or Enhr. **Producing Method** Flowing Pumping Gas Lift Other (Explain) SI - waiting on pipeline **Estimated Production** Oil Bbls. Gas Mcf Bbls. Gas-Oil Ratio Water Gravity Per 24 Hours METHOD OF COMPLETION RECEIVED Disposition of Gas Production Interval KANSAS CORPORATION COMMISSION ☐ Vented ☐ Sold ☐ Used on Lease Commingled Open Hole Perf. Dually Comp. (If vented, Submit ACO-18.) DEC 2 0 2006

Other (Specify)

CONSERVATION DIVISION WICHITA KS



MORNING COMPLETION REPORT

Report Called in by: : JOHN ED	Report	Called in	by: :	JOHN	ED
--------------------------------	--------	-----------	-------	-------------	----

Report taken by:

KRD

LEASE NAME & #		AFE#	DATE	DAYS	CIBP	PBTD
		^FE#		DAIS	DEPTH	TYPE FLUID
MITCHELL 16-16		G01013800100	8/22/2006	1	TYPE	
RESENT OPERAT	ION:					WT
COCOT OA OU'C	LINEDS OF TOTAL	C DEDT''		FROM UNDER SURF		vis
EEPEST CASING D SHOE DEPTH	LINERS OD TOP & SHO	E VEPIH	REPAIR DOWN	I IIME MKS	CONTRACTOR RIG NO	
Juge ber III			TEST	PERFS		
PACKER OR ANCHOR	FISHING TOOLS	OD ID		то	SQUEEZ	ED OR PLUG BACK PERF
				то		то
				<u>TO</u>		TO
				<u>то</u> то		TO TO
HRS	BRIEF DESCRIPTION	N OF OPERATION				
пкэ	BRIEF DESCRIPTIO	OF OFERAIN	<u> </u>			
	MIRU MOKAT, DRIL	LED 11" HOLE, 2	21.5' DEEP, R	IH W/ 1 JT 8 5/8" SU	RFACE CASING, 4 SX	CEMENT.
	SDFN.					
	 					
						.
					<u> </u>	
					 	
DAILY COST ANAL	YSIS					
DAILY COST ANAL	YSIS				DETAILS OF RENTALS S	ERVICES & MISC
	YSIS			Грен	DETAILS OF RENTALS, SE	ERVICES, & MISC
	YSIS				ING @ 6.50/ft	
	YSIS			(CEME	ING @ 6.50/ft ENT)	ERVICES, & MISC
RIG	ysis 200			(CEME	ING @ 6.50/ft	
RIG				(CEME	ING @ 6.50/ft ENT)	80
RIG				(CEMI DIRTV SURF	LING @ 6.50/ft ENT) VORKS (LOC,RD, PIT) ACE CASING	80 400 200
RIG				(CEMI DIRTV SURF	LING @ 6.50/ft ENT) VORKS (LOC,RD, PIT)	80 400 200
EUPERVISION	200			(CEMI DIRTV SURF	LING @ 6.50/ft ENT) VORKS (LOC,RD, PIT) ACE CASING	80 400
RIG SUPERVISION RENTALS				(CEMI DIRTV SURF	LING @ 6.50/ft ENT) VORKS (LOC,RD, PIT) ACE CASING	80 400 200
DAILY COST ANALY RIG SUPERVISION RENTALS SERVICES	200			(CEMI DIRTV SURF	LING @ 6.50/ft ENT) VORKS (LOC,RD, PIT) ACE CASING	80 400 200
RIG SUPERVISION RENTALS	200			(CEMI DIRTV SURF	LING @ 6.50/ft ENT) VORKS (LOC,RD, PIT) ACE CASING	80 400 200
RIG SUPERVISION RENTALS SERVICES	400			(CEMI DIRTV SURF	LING @ 6.50/ft ENT) VORKS (LOC,RD, PIT) ACE CASING	80 400 200
UPERVISION ENTALS ERVICES	400			(CEMI DIRTV SURF	LING @ 6.50/ft ENT) VORKS (LOC,RD, PIT) ACE CASING	80 400 200

KANSAS CORPORATION COMMISSION

DEC 2 0 2006

KCC

P.O. BOX 884, CHANUTE, KS 66720 620-431-9210 OR 800-467-8676 DEC 1 9 2006 CONFIDENTIAL TICKET NUMBER 10623

LOCATION Fucks

FOREMAN Troy Strickler

TREATMENT REPORT & FIELD TICKET CEMENT

DATE	CUSTOMER #	WE	LL NAME & NUI	MBER	SECTION	TOWNSHIP	RANGE	COUNTY
8-24-06	4758	Mitchell	16-16					MG
CUSTOMER	_							
MAILING ADDRE	c Energy			_	TRUCK#	DRIVER	TRUCK #	DRIVER
				Gus	446	Calin		
P.O. R	ox 160			Johns	439	Jarrid		
C11.Y		STATE	ZIP-CODE			4 100 14 Ar 20 15 AMAZ 45 AAP 7 A		
Sycamore	£	Ks						
	gestring			HOLE DEPTH_	1145	CASING SIZE & WE	EIGHT 4%"	10.5 *
CASING DEPTH_	1137'	DRILL PIPE	17 in .	TUBING			OTHER	
SLURRY WEIGHT	T_13.20	SLURRY VOL_	38 661	WATER gal/sk	80	CEMENT LEFT in C	ASING Ø'	
DISPLACEMENT	1887	DISPLACEMEN	T PSI 600	MIX PSI //00	Bun Alu	RATE		
REMARKS: 5	afety Med	tim: Rig	up to 4	5" Casing	Renet O	roubition w/	2	4-
Pump 45	k Gel - Flu	sh. 5861 h	Ktor Dea	er, lobbl 1	netarilicate	, 9851 Dye	2300 6	
mixed	20sks T	Lick Set	Coment	W/ 10#	Vol-Seal	2 13.2 # R	day 1 x	c/ or +
Rung +1	ires. Rel.	ease Plu	s. Disal	ace w/	18RL/ 128	ter. Final	A. a. D.	JA OLLO
600PSI.	Rumo Plus	to Inno	ST WE	: £ 7a. x =	Palana	Prossuc.	Ti I i	esswe
Good C.	ement t	o su Con	e - last	1 china	L. Q.	PIETSWE.	F104+ H	<u> </u>
			c c 6000	Siane	re fite			
			-		Til Cords	10		
					Job Comple	pr.		

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401		PUMP CHARGE	800.00	600 00
5406	40	MILEAGE		800.00
			3.15	126.00
1126A	120sks	Thick Set Coment	14:65	/758.co
IIIOA	1200 #	Kol-Seal 10 # Payfu	. 36 *	432.00
1118A	200#	Gel- Flush	./4**	28.00
1111 A	50 #	Metarilicate Pre-Flush	1.65#	82.50
5407A	6.6 Tan	Ton-Mileage Bulk Truck	1.05	277.20
4404		44 Top Rubber Phy RECEIVED	40.00	40.00
		KANSAS CORPORATION COMMISSIO	N	
		DEC 2 0 2006		
		CONSERVATION DIVISION WICHITA, KS	Sub Total	3543.70
		5.37	SALES TAX	124.0.4

AUTHORIZATION CALLED by John Ed. TITLE

ESTIMATED 366 7. 74

_____DATE_____

GEOLOGIC REPORT

LAYNE ENERGY
Mitchell 16-16
SE SE, 964 FSL, 681 FEL
Section 16-T33S-R16E
Montgomery County, KS



 Spud Date:
 8/22/2006

 Drilling Completed:
 8/23/2006

 Logged:
 8/23/2006

 A.P.I. #:
 1512531186

 Ground Elevation:
 752'

Depth Driller: 1145'
Depth Logger: 1145'

Surface Casing: 8.625 inches at 21.5'
Production Casing: 4.5 inches at 1137'

Cemented Job: Consolidated

Open Hole Logs: Dual Induction SFL/GR, High Resolution

Compensated Density/Neutron

Formation Tops (in feet below ground level)

Kansas City Group Surface (Drum Limestone)
Pawnee Limestone 445
Excello Shale 617
"V" Shale 670
Mineral Coal 716
Mississippian 1,057

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