

Confidentiality Requested:

Yes No

Kansas Corporation Commission Oil & Gas Conservation Division

1180419

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 #			API No. 15			
Name:			Spot Description:			
Address 1:			Sec.	TwpS. R	East West	
Address 2:			Feet from North / South Line of Section			
City:	State: Z	ip:+	Fe	eet from East /	West Line of Section	
Contact Person:			Footages Calculated from	Nearest Outside Section C	Corner:	
Phone: ()			□ NE □ NW	V □SE □SW		
CONTRACTOR: License #			GPS Location: Lat:	, Long:		
Name:				(e.g. xx.xxxxx)	(e.gxxx.xxxxx)	
Wellsite Geologist:			Datum: NAD27	NAD83 WGS84		
Purchaser:			County:			
Designate Type of Completion:			Lease Name:	W	ell #:	
	e-Entry	Workover	Field Name:			
	_		Producing Formation:			
☐ Oil ☐ WSW ☐ D&A	☐ SWD	∐ SIOW ∏ SIGW	Elevation: Ground:	Kelly Bushing:		
	GSW	Temp. Abd.	Total Vertical Depth:	Plug Back Total D	epth:	
CM (Coal Bed Methane)	dow	Temp. Abd.	Amount of Surface Pipe Se	et and Cemented at:	Feet	
☐ Cathodic ☐ Other (Co	ore, Expl., etc.):		Multiple Stage Cementing	Collar Used? Yes	No	
If Workover/Re-entry: Old Well I			If yes, show depth set:		Feet	
Operator:			If Alternate II completion, c	cement circulated from:		
Well Name:			feet depth to:	w/	sx cmt.	
Original Comp. Date:						
Deepening Re-perf	J	ENHR Conv. to SWD	Drilling Fluid Managemer	nt Dlan		
☐ Plug Back	Conv. to G		(Data must be collected from to			
Commingled	Pormit #:		Chloride content:	ppm Fluid volume	: bbls	
Dual Completion			Dewatering method used: _			
SWD			Location of fluid disposal if	f hauled offsite:		
☐ ENHR						
GSW	Permit #:		Operator Name:			
_ _			Lease Name:	License #:_		
Spud Date or Date R	eached TD	Completion Date or	QuarterSec	TwpS. R	East West	
Recompletion Date		Recompletion Date	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:									

Page Two



Operator Name:				_ Lease l	Name: _			Well #:		
Sec Twp	S. R	East V	West	County	:					
INSTRUCTIONS: Shopen and closed, flow and flow rates if gas to	ring and shut-in pres o surface test, along	sures, whether s with final chart(shut-in pre s). Attach	ssure reac extra shee	hed stati t if more	c level, hydrosta space is neede	itic pressures, bot d.	tom hole temp	erature, flui	d recovery,
Final Radioactivity Lo- files must be submitte						gs must be ema	ailed to kcc-well-lo	gs@kcc.ks.go	v. Digital el	ectronic log
Drill Stem Tests Taker (Attach Additional S		Yes	No				on (Top), Depth ar			mple
Samples Sent to Geo	logical Survey	Yes	☐ No		Nam	e		Тор	Da	tum
Cores Taken Electric Log Run		☐ Yes ☐ Yes	☐ No ☐ No							
List All E. Logs Run:										
			CASING		☐ Ne					
	0: 11-1-	· ·				ermediate, product		# O	T	d Damasat
Purpose of String	Size Hole Drilled	Size Cas Set (In O		Weig Lbs. /		Setting Depth	Type of Cement	# Sacks Used		d Percent itives
		AD	DITIONAL	CEMENTIN	NG / SQL	JEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Ce	ement	# Sacks	Used	Type and Percent Additives				
Perforate Protect Casing										
Plug Back TD Plug Off Zone										
Did you perform a hydrau	•					Yes	No (If No, ski	p questions 2 ar	nd 3)	
Does the volume of the to							= :	p question 3)	of the ACO	()
Was the hydraulic fractur	ing treatment information	on submitted to the	e chemicai d	isciosure re	gistry?	Yes	No (If No, fill	out Page Three	or the ACO-1	<i>)</i>
Shots Per Foot		ION RECORD - I Footage of Each I					cture, Shot, Cement mount and Kind of Ma		d	Depth
TUBING RECORD:	Size:	Set At:		Packer A	i:	Liner Run:	Yes No			
Date of First, Resumed	Production, SWD or Ef	NHR. Prod	ducing Meth	ıod:		1				
			Flowing	Pumpin	g	Gas Lift C	Other (Explain)			
Estimated Production Per 24 Hours	Oil	Bbls.	Gas	Mcf	Wate	er B	bls. (Gas-Oil Ratio		Gravity
DISPOSITIO	ON OF GAS:		M	METHOD OF	COMPLE	ETION:		PRODUCTION	ON INTERVA	
Vented Sold		Open		Perf.	Dually	Comp. Cor	mmingled			
	bmit ACO-18.)		(Specify)		(Submit)	ACO-5) (Sub	mit ACO-4)			

ALLIED OIL & GAS SERVICES, LLC 054734 Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 31 RUSSELL, KANSAS 67665		SER	VICE POINT:	
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1			Lussel	1 55
DATE 10-8-13 SEC. TWP. RANGE 19 W	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
OLD OR NEW Circle one)	H KS.64	N 4W	COUNTY LOOKS	STATE LANSAS
ozz ozgania (me)			JØØ	
CONTRACTOR STEWDER WELL "BRAD"	OWNER			
TYPE OF JOB DEN PORT COLOR (CIRC-CEMENT) HOLE SIZE TD	/	KEED!	225 sx)
HOLE SIZE T.D. / CASING SIZE 5/2 DEPTH	CEMENT	gol (-
TUBING SIZE 2 76 DEPTH	AMOUNT	ORDERED 300		4% GeL
DRILL PIPE DEPTH 11110			74-11-0	IL AR SX
TOOL PORT COLLER DEPTHO 1918		!		
PRES. MAX 750 MINIMUM 750 MEAS. LINE SHOE JOINT	COMMON		_@ <u>12 90</u>	24/6,5
MEAS. LINE SHOE JOINT CEMENT LEFT IN CSG.	POZMIX	90	_@ <u>_9,35</u> _	<u>841, 50</u>
PERFS.	GEL CHLORIDE	10	_@_ <u>23,40</u>	234,
DISPLACEMENT 7 83 Gave 2,3 BBL	ASC		_@ @	
EQUIPMENT	Flo. SoaL	56 #	@ 2.97	164 32
	,		@	100
PUMPTRUCK CEMENTER & Loury G,			@	
# 417 HELPER Was Dy 62.			_@	
BULK TRUCK	-		_@	
# 473 DRIVER Danky S.	***************************************		_@ _@	
BULK TRUCK			- [@]	
# DRIVER	HANDLING	302 x TOTAL SX		286,6b
	MILEAGE4	96,392 x 2.6	@ 2,60	1290,62
REMARKS:			_	5735. 6
Test CSG TO 750# (Hevo) POKT COLOR CIRC	≠	SERVI		
Mixed 45 BBL/ Coment (225 SX) +				
Temmy Circulated to SURFACE, Diop, 7,3 BBL, Bellind, Closed P.C.				- 60
of Offect To 750 # (HeLD) Ray 5"	EXTRA FO	CK CHARGE		2249,84
DOINTS OF 27/8 O WISHED - CLEAN,	MILEAGE	Y MF 37	@ <u>7,70</u>	284,90
congt Dis Cipculate To Sustace, THANK'S	MANIFOLD	Ves	@ 7, /	-\\c-
	LYME	32	@ 4,40	162,80
			@	
CHARGE TO: Jen Gasco Luc.				
STREET		•	TOTAL	2697,5
				•
CITYSTATEZIP	 	PLUG & FLOAT	FOITDMEN	т
STate Rep. (Pat Bepora RC)	:	TEOG G FEOAT	roon men	
ON LOCATION - CEMENT DID CIRCULATE TO: Allied Oil & Gos Services II. SURFACE!	··· 1		@	
Cement Missingular			- @ . @	
To: Allied Oil & Gas Services, LLC.			· @	
You are hereby requested to rent cementing equipment	:		@	
and furnish cementer and helper(s) to assist owner or	!	,	@	
contractor to do work as is listed. The above work was		- '		
done to satisfaction and supervision of owner agent or			TOTAL	
contractor. I have read and understand the "GENERAL				
TERMS AND CONDITIONS" listed on the reverse side.	SALES TAX	(If Any)	1100 14	F
	TOTAL CHA	RGES	433,19	
PRINTED NAME	.,		6,62	IN 30 DAYS
^	DISCOUNT			IN 30 DAYS
MICHATURE / /// LA	Net	\$ 674	6, 二个)	-
MINIONE THEIR PARMINENTINA	, -			
· · · · · · · · · · · · · · · · · · ·				

ALLIED OIL & GAS SERVICES, LLC 054875 Federal Tax I.D.# 20-5975804

RUSS	OX 31 ELL, KA	NSAS 676	65			SER	VICE POINT: 	sell, Kr
DATE 9.24.13	SEC.	TWP	RANGE	С	ALLED OUT	ON LOCATION	JOB START	JOB FINISH
LEASEVEVERKO	1	B-60	<u> </u>	Zun	ch Ks		COUNTY	STATE
OLD OR NEW (Cir		0 4	le 14		nest 1v40		7,000	1 1/2
CONTRACTOR		nerica	0 1		OWNER OWNER			
TYPE OF JOB HOLE SIZE	77/8	T.D	f string		, CEMENT		an.	
CASING SIZE	5/2		тн <i>35</i> 5	778	AMOUNT OR	DERED	180 sk	ASC
TUBING SIZE DRILL PIPE		DEF						
TOOL		DEI DEI						
PRES. MAX			IMUM		COMMON	-	@	
MEAS. LINE			DE JOINT 2	3./o [']	POZMIX		_@	
CEMENT LEFT IN	CSG.				GEL		_@	
PERFS.		€2 .F	201		CHLORIDE_		_@	
DISPLACEMENT		36 , 1'l	1120		ASC <u>/80</u>	SK ASC	_@ <i>2ን</i> ‹ ዓ	\$ 3,762.00
	EQU	JIPMENT					_@ 	
DI IMP TRI ICH	CEL AELIT	- 1	PFOR	nensil	2			·
11 0	CEMENT HELPER	EK JO	77 17 1900	1610 11			_	
BULK TRUCK	ILLFER	VVQ04	93.11		12 mule	1/Flush	_@ <u>58.7</u>	\$ 704 40
	DRIVER	Day	n-4 S.			-	_@	
BULK TRUCK			1				_@ 	
# E	RIVER				HANDLING .	215.42 73	_@ <u>2.48</u>	\$ 534 24
						359.27 Tm		\$ 934. 10
	RE	MARKS:	_				TOTAL	\$ 5,934.74
* BAN Flo	soul E	Squiptn	4/b. (see	PET	- Egulphan	L)		
* Cikculate	d m	add 7	For 7 hr	<u>- D</u> (0)	PNS BAI	SERVI	CE	
* Pumpec	12	mudel	17.1. A		,			
	Oct	12 A+ FA						
-X K/3 ~ //	Ency	11<1	16 8 5.76	2 41	DEPTH OF JO	B	···	3557.78
	505C	1150	50 20.8	2 22 3	PUMPTRUCK	CHARGE		<u>555%.18</u> ₱ 2,558.75
* Ran 1: * Displaced 86.17	505C	1150	M Down	2 22 3 A SSY	PUMPTRUCK EXTRA FOOT	CHARGE AGE	<u>@</u>	<i>2,5</i> 58.75
* Displaced	505C	Late	M Down	2 22 3 A SSY	≻ PUMP TRUCK EXTRA FOOT {MILEAGE	CHARGE AGE Legrap 31 m	_@ _@ 	\$ 284.90
* Displaced	505C	Late	Down Led Co #1	2 22 3 A SSY	≻ PUMP TRUCK EXTRA FOOT {MILEAGE	CHARGE AGE	_@ _@ 	\$ 284.90
* Displaced R 86.17	5056	Late Late	H Down	2 22 3 A SSY	≻ PUMP TRUCK EXTRA FOOT {MILEAGE	CHARGE AGE Legrap 31 m	_@ @ つっつ @ 4,40	\$ 284.90
The Displaced Review of Sec. 17.	Teng	Late Land	Hanker Oil	Assy Joops	≻ PUMP TRUCK EXTRA FOOT {MILEAGE	CHARGE AGE Legrap 31 m	_@ @ <u>7,75</u> @ <u>4,40</u> @	\$ 2558.75 \$ 284.93 \$ 162.63
The Displaced Review of Sec. 17.	Teng	Late Land	Hanker Oil	Assy Joops	≻ PUMP TRUCK EXTRA FOOT {MILEAGE	CHARGE AGE Legrap 31 m	_@ @ <u>7,75</u> @ <u>4,40</u> @	\$ 284.90
The Displaced Review of Sec. 17.	Teng	Late Land	Hanker Oil	Assy Joops	PUMP TRUCK EXTRA FOOT MILEAGE MANIFOLD	CHARGE AGE Jervy 31 m Light 37 m		\$ 2558.75 \$ 284.90 \$ 162.60 \$3,006.45
* Displaced R 86.17	Teng	Late Land	Hanker Oil	Assy Joops	PUMP TRUCK EXTRA FOOT MILEAGE MANIFOLD	CHARGE AGE Legrap 31 m		\$ 2558.75 \$ 284.90 \$ 162.60 \$3,006.45
The Displaced Review of Sec. 17.	Teng	Late Land	Hanker Oil	Assy Joops	PUMP TRUCK EXTRA FOOT MILEAGE MANIFOLD	CHARGEAGE	- @ - @	\$ 2558.75 \$ 284.90 \$ 162.80 \$3,006.45
The Displaced Review of Sec. 17.	Teng	Late Land	Hanker Oil	Assy Joops	PUMP TRUCK EXTRA FOOT MILEAGE MANIFOLD	CHARGEAGE	- @ - @	\$ 2558.75 \$ 284.90 \$ 162.80 \$3,006.45
CHARGE TO:	Teng	Late Land	Hanker Oil	Assy Joops	PUMP TRUCK EXTRA FOOT MILEAGE MANIFOLD	CHARGEAGE	- @ - @	\$ 2558.75 \$ 284.90 \$ 162.80 \$3,006.45
CHARGE TO: CITY To: Allied Oil & G	Teng. ST.	ATE	Hanker Dil	ASSY JOOPS	PUMPTRUCK EXTRA FOOT (MILEAGE A MANIFOLD A M	CHARGE AGE LEGYLY 37 m Light 37 m PLUG & FLOAT Togt 5Ha Got Down Out Collar Wort Collar	@ 7.710 @ 4,40 @ 28,40	\$ 2558.75 \$ 284.90 \$ 162.80 \$ 3606.45 \$ 389.30 \$ 398.75 \$ 182.50
CHARGE TO: STREET CITY To: Allied Oil & G You are hereby req	Teng. ST. ias Servi	ATE	thanke SIP_	ASSY TOOPS	PUMPTRUCK EXTRA FOOT (MILEAGE A MANIFOLD A M	CHARGEAGE	@ 7.710 @ 4,40 @ 28,40	\$ 2558.75 \$ 284.90 \$ 162.80 \$ 3606.45 \$ 389.30 \$ 398.75 \$ 182.50
CHARGE TO: STREET CITY To: Allied Oil & G You are hereby req and furnish cement	Teng ST. as Servi quested to ter and h	ATE	thanks ZIP enting equipm assist owner of	ASSY DODPS	PUMPTRUCK EXTRA FOOT (MILEAGE A MANIFOLD A M	CHARGE AGE LEGYLY 37 m Light 37 m PLUG & FLOAT Togt 5Ha Got Down Out Collar Wort Collar	@ 7,710 @ 4,40 @ EQUIPMEN @ — — — — — — — — — — — — — — — — — — —	\$ 2558.75 \$ 284.90 \$ 162.80 \$ 389.30 \$ 398.75 \$ 142.00 \$ \$ 142.00
CHARGE TO: STREET CITY To: Allied Oil & G You are hereby req	Teng. ST. sas Servi quested to ter and hork as is	ATE	enting equipm assist owner ce above work	ent or was	PUMPTRUCK EXTRA FOOT (MILEAGE A MANIFOLD A M	CHARGE AGE LEGYLY 37 m Light 37 m PLUG & FLOAT Togt 5Ha Got Down Out Collar Wort Collar	@ 7,710 @ 4,40 @ EQUIPMEN @ — — — — — — — — — — — — — — — — — — —	\$ 2558.75 \$ 284.90 \$ 162.80 \$ 3606.45 \$ 389.30 \$ 398.75 \$ 182.50
CHARGE TO: To: Allied Oil & G You are hereby requand furnish cement contractor to do we done to satisfaction contractor. I have	Teng. ST. ST. ST. ST. St. St. St. St	ces, LLC. or rent cem elper(s) to listed. The or understand understand	enting equipment assist owner agent and the "GENER	ent or was or RAL	PUMPTRUCK EXTRA FOOT (MILEAGE A MANIFOLD A Star Foot Foot Foot Foot Foot Foot Foot Foo	CHARGE AGE LEGYG 37 m LIGHT 37 m LIGHT 37 m AGG SHOW AGG	@ 7,710 @ 4,40 @ TOTAL EQUIPMEN @ — — — — — — — — — — — — — — — — — — —	\$ 2558.75 \$ 284.90 \$ 162.60 \$ 360.45 \$ 389.30 \$ 398.75 \$ 142.50 \$ 318.80 \$ 3030.10
CHARGE TO: To: Allied Oil & G You are hereby requand furnish cement contractor to do we done to satisfaction	Teng. ST. ST. ST. ST. St. St. St. St	ces, LLC. or rent cem elper(s) to listed. The or understand understand	enting equipment assist owner agent and the "GENER	ent or was or RAL	PUMPTRUCK EXTRA FOOT (MILEAGE / MANIFOLD / // 5½ F //	CHARGE AGE Leavy 31 m Light 37a PLUG & FLOAT Tost SHOO AICH Down Out Coll ar Light 2ers Raskets FAny)	@	\$ 2558.75 \$ 284.90 \$ 162.80 \$ 360.45 \$ 378.75 \$ 142.00 \$ 318.80 \$ 3030.10
CHARGE TO: To: Allied Oil & G You are hereby requand furnish cement contractor to do we done to satisfaction contractor. I have	Teng. ST. ST. ST. ST. St. St. St. St	ces, LLC. or rent cem elper(s) to listed. The or understand understand	enting equipment assist owner agent and the "GENER	ent or was or RAL	PUMPTRUCK EXTRA FOOT (MILEAGE / MANIFOLD / // 5½ F //	CHARGE AGE Leavy 31 m Light 37a PLUG & FLOAT Tost SHOO AICH Down Out Coll ar Light 2ers Raskets FAny)	@	\$ 2558.75 \$ 284.90 \$ 162.80 \$ 360.45 \$ 378.75 \$ 142.00 \$ 318.80 \$ 3030.10
CHARGE TO: To: Allied Oil & G You are hereby requand furnish cement contractor to do we done to satisfaction contractor. I have	Teng. ST. ST. ST. ST. St. St. St. St	ces, LLC. or rent cem elper(s) to listed. The or understand understand	enting equipment assist owner agent and the "GENER	ent or was or RAL	PUMPTRUCK EXTRA FOOT (MILEAGE / MANIFOLD / /x 5½ F /x 5½ F /x 5½ F SX 5½ G SX	CHARGE AGE Legyy 31 m Light 37a PLUG & FLOAT Tost SHOC GICH Down Port Collar Whitely zers RASKENS FANY) GES \$11,9 E1,788.2	— — — — — — — — — — — — — — — — — — —	\$ 2558.75 \$ 284.90 \$ 162.80 \$ 360.45 \$ 378.75 \$ 142.00 \$ 318.80 \$ 3030.10
To: Allied Oil & G You are hereby req and furnish cement contractor to do we done to satisfaction contractor. I have TERMS AND COI	Teng. ST. sas Servi juested to ter and h ork as is n and suj read and NDITIO	ces, LLC. orent cem elper(s) to listed. The pervision of understan NS" listed	enting equipm assist owner of eabove work of owner agent and the "GENER on the reverse	ent or was or RAL	PUMPTRUCK EXTRA FOOT (MILEAGE / MANIFOLD / /x 5½ F /x 5½ F /x 5½ F SX 5½ G SX	CHARGE AGE LEGYG 37 m LIGHT 37 m LIGHT 37 m AGG SHOW AGG	— — — — — — — — — — — — — — — — — — —	\$ 2558.75 \$ 284.90 \$ 162.80 \$ 360.45 \$ 378.75 \$ 142.00 \$ 318.80 \$ 3030.10



ALLIED OIL & GAS SERVICES, LLC 054730 Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 31		SERV	ICE POINT:	
RUSSELL, KANSAS 67665			USSE	UKS.
CEC TWO DANCE C	ALLED OUT	ON LOCATION	JOB START	IOD EINIEU
DATE 9-20-13 SEC. TWP. RANGE C	ALLED OUT	ON LOCATION	11.00PM	JOB FINISH
	11 / 1/2 . 4	4	COUNTY	STATE
	4 6 4 N	TW	Rooks	MHYSAS
OLD OR (EW) (Circle one)]	
CONTRACTOR AMERICAN FROLE RIGHT!	OWNER			
TYPE OF JOB CREAT SURFACE	OTHER			
HOLE SIZE 12 74 T.D. 265	CEMENT	1.00	a	
CASING SIZE 8 5/8 DEPTH 264	AMOUNT ORD	ERED <u>(70)</u>	sx.Com	
TUBING SIZE New 1 23 # DEPTH			<u> </u>	
DRILL PIPE DEPTH TOOL DEPTH		2% G 6	2 	
TOOL DEPTH PRES. MAX MINIMUM	COMMON_17	Λ	@ in 90	3 043,00
MEAS. LINE SHOE JOINT	POZMIX		.@ <u>.hv.</u>	_50451
CEMENT LEFT IN CSG. 15-20	GEL 3		@ <u>23.40</u>	70,20
PERFS. DISPLACEMENT	CHLORIDE 6			384.00
DISPLACEMENT 16/BB-	ASC		_@	
EQUIPMENT [/]			_@	
_		•	-@	 .
PUMPTRUCK CEMENTER GLENA G.	-		_@	
# 417 HELPER WOODY 0,			- @ ——— @	
BULK TRUCK	Ī		@	-
# 473 DRIVER JOE G.	:		@	
BULK TRUĆK # DRIVER			_ @	
# DRIVER	HANDLING_I		@ <u>2.48</u>	
	MILEAGE 3/2	•		806.16
REMARKS:	-	0,06	TOTAL	4758,46
Ray 6 New Joint's OF 23 # 8/80	≫J•			
Set @ 264 Recieved CIRCULAT	ion	SERVI	CE	
Cement w/ 170 sx Com. 3 9 2	DEPTH OF JOB	1		
Displaced BBL Belling Cement + Shutin @ 250#				1512,25
	EXTRA FOOTA	GE	@	191874
CEMENT DID CIRCULATE	MILEAGE 37	HUMT	@7.70	284,90
	MANIFOLD		@	
TAITING	32	LVMT	@ 4,40	162,80
	· ·	 	. @	
CHARGE TO: /en GASCO /NC.	1			10000 95
STREET	ı		TOTAL	1959, 95
CITYSTATEZIP	P	LUG & FLOAT	EQUIPMEN	\mathbf{T}
	•		@	
· ·				
To: Allied Oil & Gas Services, LLC.			_@	
You are hereby requested to rent cementing equipment				
and furnish cementer and helper(s) to assist owner or			_@	
contractor to do work as is listed. The above work was				
done to satisfaction and supervision of owner agent or	,		TOTAL	
contractor. I have read and understand the "GENERAL	SALES TAX (If	Anv		
TERMS AND CONDITIONS" listed on the reverse side.			2 41	_
	TOTAL CHARG			
PRINTED NAME	DISCOUNT 1	3 43,68	IF PAII	O IN 30 DAYS
			·	/
SIGNATURE Keith Karlin	Her \$	5 374,	,	
	• •	*-		

MUD LOG

WellSight Systems

Scale 1:240 (5"=100') Imperial Measured Depth Log

Well Name: Veverka B #6

Location: Sec. 28 ;Twnsp. 8 s.; Rge. 19 w.

License Number: 34110 Region: Rooks County, KS

Spud Date: 9-20-2013 Drilling Completed: 9-26-2013

Surface Coordinates: 660' FNL 330' FEL

Bottom Hole

Coordinates:

Ground Elevation (ft): 1998 K.B. Elevation (ft): 2005 Logged Interval (ft): 2700 To: 3537 Total Depth (ft): 3554

Formation: Arbuckle

Type of Drilling Fluid: Chemical

Printed by MUD.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: TENGASCO, INC. Address: 1327 Noose Rd.

Hays, KS. 67601

GEOLOGIST

Name: Mike Bair

Company: Basin Resources L.L.C.

Address: Longmont, CO.

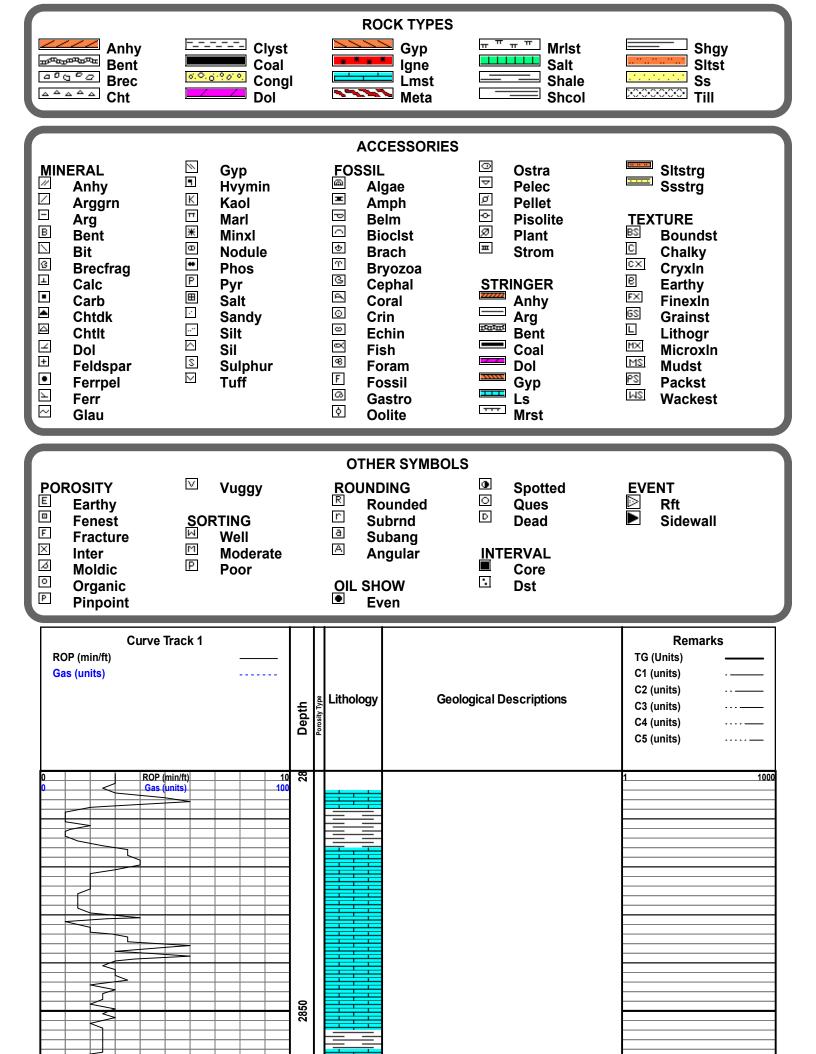
FORMATION TOPS

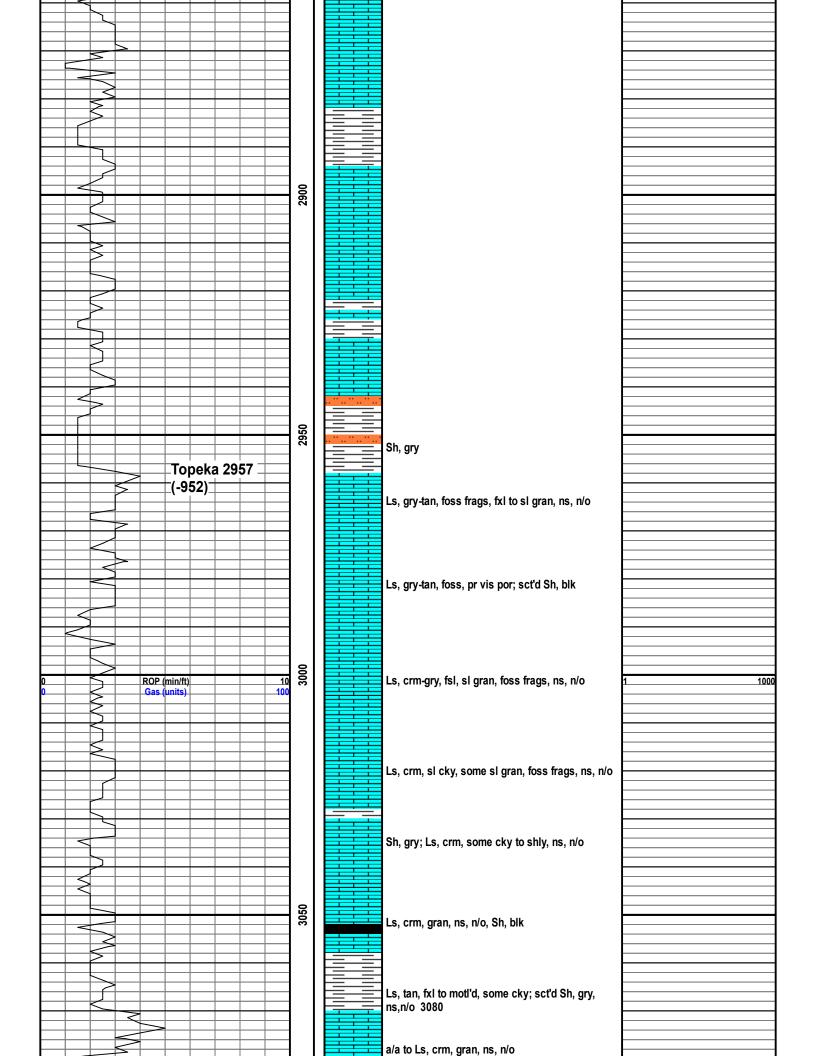
FORMATION	LOG	SAMPLE
Anhy	1422 (+583)	1428 (+577)
Topeka	3953 (-948) [°]	2957 (-952) [°]
Heebner	3158 (-1153)	3163 (-1158)
Toronto	3181 (-1176)	3186 (-1181)
Lansing	3198 (-1193)	3202 (-1197)
BKC	3407 (-1402)	3412 (-1407)
Arbuckle	3429 (-1424) [′]	3433 (-1428)
TD	3537 (-1532)	3547 (-1542)

DSTs

Comments

Production casing was ran to further test the economic potential of the Arbuckle formation.





										Ls, crm, foss, pkstn, ns, n/o 3100	
									3100	Ls, crm-tan, fxl to Chert, crm, fresh, dse; Slst, gry, argile, ns, n/o	
	<		\							Ls, crm, fxl to gran scome Ls, brn, fxl, ns, n/o	
				>						Chert, tan-brn, few ool to 1 pc Ls, crm, sl vis por, sl-L fr sfo wh bxn, n/o 3140	
	<									Ls, wh-crm, ool, pr-sl ixool por, spt'd surf stn, sl sfo wh bxn, fr rep. n/o	
			\						3150	Ls, wh, cky to Ls, tan, mdstn, nvp, ns, n/o	
	_		Λ Λ			ebne 63 (-1)		Sh, bk, platy, sl carb 3180	
		_								Ls, crm-tan, nvp, sl cky, ns, n/o	
		5	>		Toro (-118	onto 3 31)	3186	6		a/a; Sh, gry-grn, Slst, gry-grn, ns, n/o 3200	
				>						Ls, wh, fxl to ool, nvp, sct'd cky; few pc Chert, tan-brn, fresh, dse, ns, n/o	
0				ROP (min/ft) units)	Lans (-119	sing 97)	3202no	3200	Sh, gry; Ls, wh, cky in pt, few show rx a/a, n/o	1 1000
			\ \ \ \	>						a/a; abundant Chert, bone wh to op	
				>					0	Ls, crm-brn, ool, pr-sl ixool por, spt'd surf stn, v sl sfo wh bxn, low rep, wk odor 3260	
				<u></u>					3250	Ls, wh, fxl to Ls, brn, ook, pr vis por, ns, n/o	
										Ls, wh, ool, sl ixool por, spt'd surf stn, v sl sfo wh bxn, sl odor wh bxn, low rep; sct'd Chert, tan 3280	
		<u></u>		_						Ls, wh, some w it grn cast, fxl to pkstn, ns, n/o	
										Ls, wh, fxl to ool, spt'd surf stn, pr ixool por, v sl sfo, few rx w It live oil stn on edge, n/o 3310	

								3			
								33			
								1		Ls, crm, fxl, pr vis por, ns, n/o	
\vdash					_	+		1			
			\geq					1		ala al aku satid aku na nia	
\vdash	\vdash		\geq		-	+		1		a/a, sl cky; sct'd cky, ns, n/o	
			\geq					1		Ls, a/a to Ls, tan, mdstn, ns, n/o, r pc Ls, wh nvp,	
			\geq		_	+		1		spt'd surf stn, sl cky, v sl sfo wh bxn	
								1		, , , , , , , , , , , , , , , , , , ,	
					_	+		-			
								1		Sh, blk; Chert, wh; Ls, crm, ool, pr ixool por, v sl	
<u> </u>		\leq			-	+		-		sfo wh bxn, wk odor, v low rep	
						+		1		Sio wii bxii, wk odor, v iow rep	
								1			
					_	+		1			
								1		Ls, wh, crm, fxl, r pc w pr to sl pp por, sl sfo, low	
\vdash			\geq		_	+		1		rep	
								3350			
-		_			_	+		წ			
			5					1		Ls, wh, fxl, few pc ool, pr-sl ixool por, spt'd surf	
<u> </u>	\vdash	<u> </u>			_	+		-		stn, sI sfo, n/o	
			\geq					1			
	\Box	<u> </u>				+-		1		Lo sub-motified manifestions to sub-fit to the	
								1		Ls, wh, mst fxl, ns; few pcs Ls, wh, fxl, pr vis por,	
								4		oil stn on edge, poss v wk odor 3380	
		\vdash			+	+		1			
			\leq					1			
\vdash	\vdash		\vdash		+	+-		1		Sh, blk; Ls, crm, fxl, lt surf stn, sl sfo wh bxn, sl	
								1		pp por to Ls, crm, ool-gran, sI to few fr pp por,	
<u> </u>	\vdash					_		1		spt'd sat'd stn, sI-L fr sfo, v wk odor; r pc w sl	
								1		oom por 3090	
								1			
\vdash	\vdash		-		-	+		1		a/a to Ls, wh, fxl, ns, n/o	
			\geq					1			
\vdash					_	+		l e		a/a to Ls, tan, fxl, nvp, ns, n/o	
0				ROP (m	in/ft)		10	3400		·	1 1000
0			<	Gas (ur	nite\	 	440				
						KC 3		1		Ls, crm-wh, fxl, nvp; 1 pc w oil stn on frac face,	
					(·	1407)	1		xl growth, nsfo, poss v wk odor 3420	
					-	+-		1			
				>				1			
\vdash					_	+		1			
		\leq						1	===		
\vdash	\vdash	_	\rightarrow			+		-		sh, red; Ls, crm-tan, some weathered, ns, n/o	
					- Ah.	ickle		1		on, rea, Es, erm-am, some weatherea, ns, mo	
<u> </u>					_Arbı						
								4			
		\leq				(-14			44		
		<	2						44	Dolo crm.tan f.mvl sl.fow friving sl.l fr.sfo	
		<							4 4	Dolo, crm-tan, f-mxl, sl-few fr ixl por, sl - L fr sfo, It odor 3443 40-60 min	
					3433		28)			Dolo, crm-tan, f-mxl, sl-few fr ixl por, sl - L fr sfo, It odor 3443 40-60 min	
					3433	(-14	28)			It odor 3443 40-60 min	
					3433	(-14	28)			It odor 3443 40-60 min Dolo, crm, mxl, fr ixl por, few fr vg por, sat'd stn,	
					3433 -c1	s (-14	28)	450		It odor 3443 40-60 min Dolo, crm, mxl, fr ixl por, few fr vg por, sat'd stn, fr sfo, fr-gd rep, good odor 3452 20 min	
					3433 -c1	(-14	28)	3450		It odor 3443 40-60 min Dolo, crm, mxl, fr ixl por, few fr vg por, sat'd stn, fr sfo, fr-gd rep, good odor 3452 20 min Dolo, a/a to mxl, few lg xl, considerable free oil in	
4					3433 -c1	s (-14	28)	3450		It odor 3443 40-60 min Dolo, crm, mxl, fr ixl por, few fr vg por, sat'd stn, fr sfo, fr-gd rep, good odor 3452 20 min	
					3433 -c1	s (-14	28)	3450		It odor 3443 40-60 min Dolo, crm, mxl, fr ixl por, few fr vg por, sat'd stn, fr sfo, fr-gd rep, good odor 3452 20 min Dolo, a/a to mxl, few lg xl, considerable free oil in	
					3433 -c1	s (-14	28)	3450		It odor 3443 40-60 min Dolo, crm, mxl, fr ixl por, few fr vg por, sat'd stn, fr sfo, fr-gd rep, good odor 3452 20 min Dolo, a/a to mxl, few lg xl, considerable free oil in tray, gd vg por, fr-gd sfo, good odor 3452 40-60 min	best shows
					3433 -c1	s (-14	28)	3450		It odor 3443 40-60 min Dolo, crm, mxl, fr ixl por, few fr vg por, sat'd stn, fr sfo, fr-gd rep, good odor 3452 20 min Dolo, a/a to mxl, few lg xl, considerable free oil in tray, gd vg por, fr-gd sfo, good odor 3452 40-60 min Dolo, crm, mxl, spt'd sat'd stn, decr in ixl por,	best shows 3452 40 min
					3433 -c1	s (-14	28)	3450		It odor 3443 40-60 min Dolo, crm, mxl, fr ixl por, few fr vg por, sat'd stn, fr sfo, fr-gd rep, good odor 3452 20 min Dolo, a/a to mxl, few lg xl, considerable free oil in tray, gd vg por, fr-gd sfo, good odor 3452 40-60 min Dolo, crm, mxl, spt'd sat'd stn, decr in ixl por, decr sfo, incr barren, few rx fr-gd vg por, It odor	best shows
					3433 -c1	s (-14	28)	3450		It odor 3443 40-60 min Dolo, crm, mxl, fr ixl por, few fr vg por, sat'd stn, fr sfo, fr-gd rep, good odor 3452 20 min Dolo, a/a to mxl, few lg xl, considerable free oil in tray, gd vg por, fr-gd sfo, good odor 3452 40-60 min Dolo, crm, mxl, spt'd sat'd stn, decr in ixl por, decr sfo, incr barren, few rx fr-gd vg por, It odor 3460	best shows 3452 40 min
					3433 -c1	s (-14	28)	3450		It odor 3443 40-60 min Dolo, crm, mxl, fr ixl por, few fr vg por, sat'd stn, fr sfo, fr-gd rep, good odor 3452 20 min Dolo, a/a to mxl, few lg xl, considerable free oil in tray, gd vg por, fr-gd sfo, good odor 3452 40-60 min Dolo, crm, mxl, spt'd sat'd stn, decr in ixl por, decr sfo, incr barren, few rx fr-gd vg por, It odor 3460 increase in odor, dolo, mxl fr-gd ixl por, fr-gd sfo	best shows 3452 40 min
					3433 -c1	s (-14	28)	3450		It odor 3443 40-60 min Dolo, crm, mxl, fr ixl por, few fr vg por, sat'd stn, fr sfo, fr-gd rep, good odor 3452 20 min Dolo, a/a to mxl, few lg xl, considerable free oil in tray, gd vg por, fr-gd sfo, good odor 3452 40-60 min Dolo, crm, mxl, spt'd sat'd stn, decr in ixl por, decr sfo, incr barren, few rx fr-gd vg por, It odor 3460	best shows 3452 40 min
					3433 -c1	s (-14	28)	3450		It odor 3443 40-60 min Dolo, crm, mxl, fr ixl por, few fr vg por, sat'd stn, fr sfo, fr-gd rep, good odor 3452 20 min Dolo, a/a to mxl, few lg xl, considerable free oil in tray, gd vg por, fr-gd sfo, good odor 3452 40-60 min Dolo, crm, mxl, spt'd sat'd stn, decr in ixl por, decr sfo, incr barren, few rx fr-gd vg por, It odor 3460 increase in odor, dolo, mxl fr-gd ixl por, fr-gd sfo	best shows 3452 40 min
					3433 -c1	s (-14	28)	3450		It odor 3443 40-60 min Dolo, crm, mxl, fr ixl por, few fr vg por, sat'd stn, fr sfo, fr-gd rep, good odor 3452 20 min Dolo, a/a to mxl, few lg xl, considerable free oil in tray, gd vg por, fr-gd sfo, good odor 3452 40-60 min Dolo, crm, mxl, spt'd sat'd stn, decr in ixl por, decr sfo, incr barren, few rx fr-gd vg por, It odor 3460 increase in odor, dolo, mxl fr-gd ixl por, fr-gd sfo in many rx, fr odor, better show than 3460	best shows 3452 40 min
					3433 -c1	s (-14	28)	3450		It odor 3443 40-60 min Dolo, crm, mxl, fr ixl por, few fr vg por, sat'd stn, fr sfo, fr-gd rep, good odor 3452 20 min Dolo, a/a to mxl, few lg xl, considerable free oil in tray, gd vg por, fr-gd sfo, good odor 3452 40-60 min Dolo, crm, mxl, spt'd sat'd stn, decr in ixl por, decr sfo, incr barren, few rx fr-gd vg por, It odor 3460 increase in odor, dolo, mxl fr-gd ixl por, fr-gd sfo in many rx, fr odor, better show than 3460 SS, qtz, clr, R, fr srt, sat'd, v gd sfo; Dolo, crm,	best shows 3452 40 min
					3433 -c1	s (-14	28)	3450		It odor 3443 40-60 min Dolo, crm, mxl, fr ixl por, few fr vg por, sat'd stn, fr sfo, fr-gd rep, good odor 3452 20 min Dolo, a/a to mxl, few lg xl, considerable free oil in tray, gd vg por, fr-gd sfo, good odor 3452 40-60 min Dolo, crm, mxl, spt'd sat'd stn, decr in ixl por, decr sfo, incr barren, few rx fr-gd vg por, It odor 3460 increase in odor, dolo, mxl fr-gd ixl por, fr-gd sfo in many rx, fr odor, better show than 3460	best shows 3452 40 min
					3433 -c1	s (-14	28)	3450		It odor 3443 40-60 min Dolo, crm, mxl, fr ixl por, few fr vg por, sat'd stn, fr sfo, fr-gd rep, good odor 3452 20 min Dolo, a/a to mxl, few lg xl, considerable free oil in tray, gd vg por, fr-gd sfo, good odor 3452 40-60 min Dolo, crm, mxl, spt'd sat'd stn, decr in ixl por, decr sfo, incr barren, few rx fr-gd vg por, It odor 3460 increase in odor, dolo, mxl fr-gd ixl por, fr-gd sfo in many rx, fr odor, better show than 3460 SS, qtz, clr, R, fr srt, sat'd, v gd sfo; Dolo, crm, mxl, fr ixl por, sat'd stn, fr-gd sfo, wk-fr odor 3480	best shows 3452 40 min
					3433 -c1	s (-14	28)	3450		It odor 3443 40-60 min Dolo, crm, mxl, fr ixl por, few fr vg por, sat'd stn, fr sfo, fr-gd rep, good odor 3452 20 min Dolo, a/a to mxl, few lg xl, considerable free oil in tray, gd vg por, fr-gd sfo, good odor 3452 40-60 min Dolo, crm, mxl, spt'd sat'd stn, decr in ixl por, decr sfo, incr barren, few rx fr-gd vg por, It odor 3460 increase in odor, dolo, mxl fr-gd ixl por, fr-gd sfo in many rx, fr odor, better show than 3460 SS, qtz, clr, R, fr srt, sat'd, v gd sfo; Dolo, crm, mxl, fr ixl por, sat'd stn, fr-gd sfo, wk-fr odor 3480 Dolo, wh-salmon, spt'd hvy blk oil stn, tarry to gil,	best shows 3452 40 min
					3433 -c1	s (-14	28)			It odor 3443 40-60 min Dolo, crm, mxl, fr ixl por, few fr vg por, sat'd stn, fr sfo, fr-gd rep, good odor 3452 20 min Dolo, a/a to mxl, few lg xl, considerable free oil in tray, gd vg por, fr-gd sfo, good odor 3452 40-60 min Dolo, crm, mxl, spt'd sat'd stn, decr in ixl por, decr sfo, incr barren, few rx fr-gd vg por, It odor 3460 increase in odor, dolo, mxl fr-gd ixl por, fr-gd sfo in many rx, fr odor, better show than 3460 SS, qtz, clr, R, fr srt, sat'd, v gd sfo; Dolo, crm, mxl, fr ixl por, sat'd stn, fr-gd sfo, wk-fr odor 3480	best shows 3452 40 min
					3433 -c1	s (-14	28)			It odor 3443 40-60 min Dolo, crm, mxl, fr ixl por, few fr vg por, sat'd stn, fr sfo, fr-gd rep, good odor 3452 20 min Dolo, a/a to mxl, few lg xl, considerable free oil in tray, gd vg por, fr-gd sfo, good odor 3452 40-60 min Dolo, crm, mxl, spt'd sat'd stn, decr in ixl por, decr sfo, incr barren, few rx fr-gd vg por, It odor 3460 increase in odor, dolo, mxl fr-gd ixl por, fr-gd sfo in many rx, fr odor, better show than 3460 SS, qtz, clr, R, fr srt, sat'd, v gd sfo; Dolo, crm, mxl, fr ixl por, sat'd stn, fr-gd sfo, wk-fr odor 3480 Dolo, wh-salmon, spt'd hvy blk oil stn, tarry to gil,	best shows 3452 40 min
					3433 -c1	s (-14	28)	3500		It odor 3443 40-60 min Dolo, crm, mxl, fr ixl por, few fr vg por, sat'd stn, fr sfo, fr-gd rep, good odor 3452 20 min Dolo, a/a to mxl, few lg xl, considerable free oil in tray, gd vg por, fr-gd sfo, good odor 3452 40-60 min Dolo, crm, mxl, spt'd sat'd stn, decr in ixl por, decr sfo, incr barren, few rx fr-gd vg por, It odor 3460 increase in odor, dolo, mxl fr-gd ixl por, fr-gd sfo in many rx, fr odor, better show than 3460 SS, qtz, clr, R, fr srt, sat'd, v gd sfo; Dolo, crm, mxl, fr ixl por, sat'd stn, fr-gd sfo, wk-fr odor 3480 Dolo, wh-salmon, spt'd hvy blk oil stn, tarry to gil, mst barren, v wk odor, pr vis por 3490	best shows 3452 40 min
					3433 -c1	s (-14	28)			It odor 3443 40-60 min Dolo, crm, mxl, fr ixl por, few fr vg por, sat'd stn, fr sfo, fr-gd rep, good odor 3452 20 min Dolo, a/a to mxl, few lg xl, considerable free oil in tray, gd vg por, fr-gd sfo, good odor 3452 40-60 min Dolo, crm, mxl, spt'd sat'd stn, decr in ixl por, decr sfo, incr barren, few rx fr-gd vg por, It odor 3460 increase in odor, dolo, mxl fr-gd ixl por, fr-gd sfo in many rx, fr odor, better show than 3460 SS, qtz, clr, R, fr srt, sat'd, v gd sfo; Dolo, crm, mxl, fr ixl por, sat'd stn, fr-gd sfo, wk-fr odor 3480 Dolo, wh-salmon, spt'd hvy blk oil stn, tarry to gil, mst barren, v wk odor, pr vis por 3490 Dolo, crm, f-mxl, pr-sl ixl por, hvy tarry oil stn, sl	best shows 3452 40 min
					3433 -c1	s (-14	28)			It odor 3443 40-60 min Dolo, crm, mxl, fr ixl por, few fr vg por, sat'd stn, fr sfo, fr-gd rep, good odor 3452 20 min Dolo, a/a to mxl, few lg xl, considerable free oil in tray, gd vg por, fr-gd sfo, good odor 3452 40-60 min Dolo, crm, mxl, spt'd sat'd stn, decr in ixl por, decr sfo, incr barren, few rx fr-gd vg por, It odor 3460 increase in odor, dolo, mxl fr-gd ixl por, fr-gd sfo in many rx, fr odor, better show than 3460 SS, qtz, clr, R, fr srt, sat'd, v gd sfo; Dolo, crm, mxl, fr ixl por, sat'd stn, fr-gd sfo, wk-fr odor 3480 Dolo, wh-salmon, spt'd hvy blk oil stn, tarry to gil, mst barren, v wk odor, pr vis por 3490	best shows 3452 40 min
					3433 -c1	s (-14	28)			It odor 3443 40-60 min Dolo, crm, mxl, fr ixl por, few fr vg por, sat'd stn, fr sfo, fr-gd rep, good odor 3452 20 min Dolo, a/a to mxl, few lg xl, considerable free oil in tray, gd vg por, fr-gd sfo, good odor 3452 40-60 min Dolo, crm, mxl, spt'd sat'd stn, decr in ixl por, decr sfo, incr barren, few rx fr-gd vg por, It odor 3460 increase in odor, dolo, mxl fr-gd ixl por, fr-gd sfo in many rx, fr odor, better show than 3460 SS, qtz, clr, R, fr srt, sat'd, v gd sfo; Dolo, crm, mxl, fr ixl por, sat'd stn, fr-gd sfo, wk-fr odor 3480 Dolo, wh-salmon, spt'd hvy blk oil stn, tarry to gil, mst barren, v wk odor, pr vis por 3490 Dolo, crm, f-mxl, pr-sl ixl por, hvy tarry oil stn, sl	best shows 3452 40 min
					3433 -c1	s (-14	28)			It odor 3443 40-60 min Dolo, crm, mxl, fr ixl por, few fr vg por, sat'd stn, fr sfo, fr-gd rep, good odor 3452 20 min Dolo, a/a to mxl, few lg xl, considerable free oil in tray, gd vg por, fr-gd sfo, good odor 3452 40-60 min Dolo, crm, mxl, spt'd sat'd stn, decr in ixl por, decr sfo, incr barren, few rx fr-gd vg por, It odor 3460 increase in odor, dolo, mxl fr-gd ixl por, fr-gd sfo in many rx, fr odor, better show than 3460 SS, qtz, clr, R, fr srt, sat'd, v gd sfo; Dolo, crm, mxl, fr ixl por, sat'd stn, fr-gd sfo, wk-fr odor 3480 Dolo, wh-salmon, spt'd hvy blk oil stn, tarry to gil, mst barren, v wk odor, pr vis por 3490 Dolo, crm, f-mxl, pr-sl ixl por, hvy tarry oil stn, sl sfo, fr rep, few pcs Chert, wh, n/o 3510	best shows 3452 40 min
					3433 -c1	s (-14	28)			It odor 3443 40-60 min Dolo, crm, mxl, fr ixl por, few fr vg por, sat'd stn, fr sfo, fr-gd rep, good odor 3452 20 min Dolo, a/a to mxl, few lg xl, considerable free oil in tray, gd vg por, fr-gd sfo, good odor 3452 40-60 min Dolo, crm, mxl, spt'd sat'd stn, decr in ixl por, decr sfo, incr barren, few rx fr-gd vg por, It odor 3460 increase in odor, dolo, mxl fr-gd ixl por, fr-gd sfo in many rx, fr odor, better show than 3460 SS, qtz, clr, R, fr srt, sat'd, v gd sfo; Dolo, crm, mxl, fr ixl por, sat'd stn, fr-gd sfo, wk-fr odor 3480 Dolo, wh-salmon, spt'd hvy blk oil stn, tarry to gil, mst barren, v wk odor, pr vis por 3490 Dolo, crm, f-mxl, pr-sl ixl por, hvy tarry oil stn, sl	best shows 3452 40 min

				3550	Dolo, wh-crm, fxl, pr vis por, mst barren, few hvy tarry stn 3530 a/a w tarry to gil stn; sct'd chert 3540 a/a Dolo, crm, suc-fmxl, pr vis por, some w sd x ns, n/o 3554	kicked in from
	RTD 35			35	7 7 10 000 V	
				00		