

Submit To Appropriate District Office State Lease - 6 copies Fee Lease - 5 copies <u>District I</u> 1625 N French Dr., Hobbs, NM 88240 <u>District II</u> 1301 W. Grand Avenue, Artesia, NM 88210 <u>District III</u> 1000 Rio Brazos Rd., Aztec, NM 87410 <u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM 87505	State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505	Form C-105 Revised June 10, 2003 WELL API NO. 30-015-35514 5. Indicate Type of Lease STATE ☒ FEE ☐ State Oil & Gas Lease No.
WELL COMPLETION OR RECOMPLETION REPORT AND LOG		
1a. Type of Well. OIL WELL ☐ GAS WELL ☐ DRY ☒ OTHER <u>Injection</u>		7 Lease Name or Unit Agreement Name South Culebra Bluff 23
b. Type of Completion: NEW ☐ WORK ☐ DEEPEN ☐ PLUG ☐ DIFF. WELL OVER BACK RESVR. ☐ OTHER ☒ Injection		
2. Name of Operator Range Operating New Mexico, Inc.		8. Well No. 021
3 Address of Operator 100 Throckmorton Street Suite 1200 Fort Worth TX 76102		9 Pool name or Wildcat Loving, Brushy Canyon, East 40350
4 Well Location Unit Letter <u>1</u> : <u>2460</u> Feet From The <u>South</u> Line and <u>1160</u> Feet From The <u>East</u> Line Section <u>23</u> Township <u>23S</u> Range <u>28E</u> NMPM County <u>Lddy</u>		
10. Date Spudded 07-01-07	11. Date T.D. Reached 07-15-07	12. Date Compl. (Ready to Prod.) 08-24-07
13 Elevations (DF& RKB, RT, GR, etc.) GR 2997'		14. Elev. Casinghead
15 Total Depth 6329'	16. Plug Back T.D. 6268'	17. If Multiple Compl. How Many Zones? 18. Intervals Drilled By Rotary Tools X Cable Tools
19. Producing Interval(s), of this completion - Top, Bottom, Name Lower Brushy Canyon		20. Was Directional Survey Made Vertical Well
21. Type Electric and Other Logs Run Compensated Z - Densilog Compensated Neutron GR Log / DLL GR Log		22 Was Well Cored No
23. CASING RECORD (Report all strings set in well)		
CASING SIZE	WEIGHT LB /FT.	DEPTH SET
8 5/8"	24	347
5 1/2	15.5	6327
24 LINER RECORD		25. TUBING RECORD
SIZE	TOP	BOTTOM
26 Perforation record (interval, size, and number) 6140' - 6179' 6210' - 6218'		27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC. DEPTH INTERVAL 6140'-6218' AMOUNT AND KIND MATERIAL USED Acidize w/2350 gals 15% NEFE HCL / 42 bbls Produced H ₂ O.
AUG 29 2007 OGD-ARTESIA		
28 PRODUCTION		
Date First Production		Production Method (<i>Flowing, gas lift, pumping - Size and type pump</i>)
Well Status (<i>Prod or Shut-in</i>)		
Date of Test	Hours Tested	Choke Size
Prod'n For Test Period	Oil - Bbl	Gas - MCF
Water - Bbl	Gas - Oil Ratio	
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate
Oil - Bbl.	Gas - MCF	Water - Bbl.
Oil Gravity - API - (<i>Conn.</i>)		
29 Disposition of Gas (<i>Sold, used for fuel, vented, etc</i>) Sold		Test Witnessed By
30. List Attachments		
31 I hereby certify that the information shown on both sides of this form as true and complete to the best of my knowledge and belief <i>Bill Troy for LCS</i> Signature Printed Name Linda C. Stiles Title Sr. Engineering Tech Date 08-28-2007 E-mail Address lstyles@rangeresources.com		

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, items 25 through 29 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico		Northwestern New Mexico	
T. Anhy	T. Cherry Canyon 3420	T. Ojo Alamo	T. Penn. "B"
T. Salt 2381	T. Brushy Canyon 4664	T. Kirtland-Fruitland	T. Penn. "C"
B. Salt	T. Atoka	T. Pictured Cliffs	T. Penn. "D"
T. Yates	T. Miss	T. Cliff House	T. Leadville
T. 7 Rivers	T. Devonian	T. Menefee	T. Madison
T. Queen	T. Silurian	T. Point Lookout	T. Elbert
T. Grayburg	T. Montoya	T. Mancos	T. McCracken
T. San Andres	T. Simpson	T. Gallup	T. Ignacio Otzte
T. Glorieta	T. McKee	Base Greenhorn	T. Granite
T. Paddock	T. Ellenburger	T. Dakota	T.
T. Blinébry	T. Gr. Wash	T. Morrison	T.
T. Tubb	T. Delaware Sand 2602	T. Todilto	T.
T. Drinkard	T. Bone Springs 6242	T. Entrada	T.
T. Abo	T. Lamar LS 2602	T. Wingate	T.
T. Wolfcamp	T. Salado 268	T. Chinle	T.
T. Penn	T.	T. Permian	T.
T. Cisco (Bough C)	T.	T. Penn "A"	T.

OIL OR GAS SANDS OR ZONES

No. 1, from.....to.....

No. 3, from.....to.....

No. 2, from.....to.....

No. 4, from.....to.....

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from.....to.....feet.....

No. 2, from.....to.....feet.....

No. 3, from.....to.....feet.....

LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thickness In Feet	Lithology
150	2602	2452	Salt & Anhydrite
2602	6242	3640	SS, SLTST, & SH
6242	6290	48	LS & SH

OPERATOR
WELL/LEASE
COUNTY

RANGE PRODUCTION CO.
SCB 23-21
EDDY

141-0082

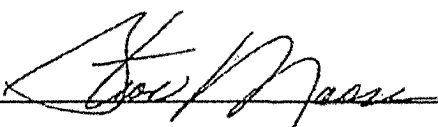
STATE OF NEW MEXICO
DEVIATION REPORT

305	0.25
505	0.25
721	1.00
885	3.00
978	2.75
1,191	3.00
1,355	2.00
1,514	1.75
1,799	2.25
2,053	3.50
2,306	3.75
2,424	3.75
2,677	3.00
2,931	3.00
3,185	3.25
3,468	2.75
3,721	2.50
3,976	2.25
4,451	3.00
4,927	2.00
5,401	1.50
5,876	1.50
6,329	1.50

AUG 29 2007
OCD-ARTESIA

STATE OF TEXAS

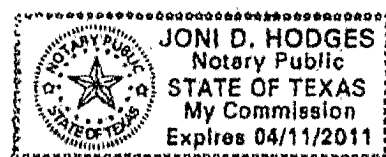
COUNTY OF MIDLAND

BY: 

The foregoing instrument was acknowledged before me on
Moore on behalf of Patterson-UTI Drilling Company LLC.


Notary Public for Midland County, Texas
My Commission Expires: 4/11/11

July 23, 2007, by Steve



6.

CASING DETAIL AND CEMENTING REPORT

Well:	SCB 23-21	Field	East Loving	County	Eddy	State:	NM
Total depth:	6329	Bit Size:	7.875	Avg Hole size:		Mud wt:	10.1

String detail (list each item in order run)																	
Length	Cum Length	No Jts	OD	Description	Mfg	Wt	Grade	Threads	Cond								
1.65	1.65		5.500	Guide Shoe	BJ			LTC	New								
86.08	87.73	2	5.500	Casing		15.5	J55	LTC	New								
1.4	89.13		5.500	Float Collar	BJ			LTC	New								
2782.87	2872	65	5.500	Casing		15.5	J55	LTC	New								
2.2	2874.2		5.500	DV Collar	BJ			LTC	New								
3457.61	6331.81	80	5.500	Casing		15.5	J55	LTC	New								
	6331.81																
	6331.81																
	6331.81																
	6329.61	Total length															
MINUS	20	Cut-off															
PLUS	17.44	RIG KB															
	6327.05	Setting depth															
Wt of csg string in mud:	86000																
Wt of csg set on slips:	88000																

Cement used		Cementing company:		BJ Cementers					Design
Stage	No. sacks	Cement type and additives		PPG	YIELD	BBLS	BPM	TOC	
SPACER		H2O							
Lead	805	15-61-11-C+6/10%FL-25+6/10%FL-52A+5/10%BA-1		13.2	1.64	263	6	3500'	
Tail									
Displacement									
STAGE 2	IF APPLICABLE								
Lead	1000	35-65-6C+5%Salt+3/10%FL-52A+LCM		12.5	2.1	374	7		
Tail	100	Class C Neal		14.8	1.32	24			
Displacement									

Full circ (Y/N):	No	Pipe reciprocated?	Y
Cement to Surface	No	Pipe rotated?	N
Bbls to Surface	N/A	Float held (Y/N):	Y
		Plug bumped (Y/N):	

Centralizer and scratcher placement (type, depth and amount):

Centralizers: 6307', 6241', 6154', 6070', 5983', 5897', 5811', 5724', 5638', 5552', 5468', 5379', 5293', 5211', 5125', 5038', 4952', 4865', 4783', 4696', 4610', 4524', 4440', 4355' = 24

Casing on location NOT RUN							
Length	No Jts	OD	Description - Mfg	Wt	Grade	Threads	Cond
215.64	5	5.5		15.5	J-55	LTC	New

Remarks:

Full returns on the 1st Stage. Full returns until we dropped the plug then it slowly went to nothing on the 2 nd Stage

Reported by:	Kevin Carter	Date:	7/15/2007
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CASING DETAIL AND CEMENTING REPORT

Well:	SCB 23-21	Field	East Loving	County	Eddy	State:	NM	
Total depth:	348	Bit Size:	12.25	Avg Hole size:	12.25	Mud wt:	8.7	

String detail (list each item in order run)									
Length	Cum Length	No Jts	OD	Description	Mfg	Wt	Grade	Threads	Cond
0.8	0.8			Texas Guide Shoe	BJ			ST&C	New
43.32	44.12	1	8.675			24	J-55	ST&C	New
1.44	45.56		8.675	Float Collar	BJ			ST&C	New
304.44	350	7	8.675			24	J-55	ST&C	New
	350								
	350								
	350								
	350								
	350								
MINUS	20	Total length							
PLUS	17.44	Cut-off							
	347.44	RIG KB							
		Setting depth							
Wt of csg string in mud:		10000							
Wt of csg set on slips:		N/A							

Cement used		Cementing company.	BJ Services	PPG	YIELD	BBLs	BPM	Design
Stage	No. sacks	Cement type and additives						TOC
SPACER		Fresh water		8.3		10		
Lead	220	Class C+2%CACL2		14.8	1.32	51	5	
						0		
Displacement								
STAGE 2	IF APPLICABLE					0		
						0		
Displacement								

Full circ (Y/N)	Y	Pipe reciprocated?	Y
Cement to Surface	Y	Pipe rotated?	N
Bbls to Surface	3	Float held (Y/N):	Y
		Plug bumped (Y/N):	Y

Centralizer and scratcher placement (type, depth and amount):

Centralizers at 329', 261', 218', 177', 133', 47' = 6 Centralizers

Casing on location NOT RUN							
Length	No Jts	OD	Description - Mfg	Wt	Grade	Threads	Cond
630'	15	8.675		24	J-55	STC	New

Remarks:

Bumped plug 500 psi over, release pressure no flow back

Circulating 235 psi., Pressure to 647 psi. (Ok)

Reported by: Kevin W. Carter

Date: 7/1/2007



Baker Atlas

DUAL LATEROLOG MICRO LATEROLOG GAMMA RAY LOG

FILE NO: MD6996	COMPANY WELL	RANGE OPERATING NM, INC.
API NO: 30-015-35514	FIELD	SCB 23 NO. 21
	COUNTY	LOVING EAST (BRUSHY CANYON)
		EDDY STATE NM
Ver. 3.87 FINAL PRINT	LOCATION: 2460' FSL & 1160' FEL	OTHER SERVICE ZDL/CN
	SEC 23 TWP 23S RGE 28E	
PERMANENT DATUM	GL ELEVATION 2997 FT	ELEVATIONS:
LOG MEASURED FROM	KB 3015 FT ABOVE P.D.	KB 3015 FT
DRILL. MEAS. FROM	KELLY BUSHING	DF 3014 FT
		GL 2997 FT

DATE	14-JUL-2007			
RUN	TRIP	1	1	
SERVICE ORDER	536779			
DEPTH DRILLER	6329 FT			
DEPTH LOGGER	6319 FT			
BOTTOM LOGGED INTERVAL	6315 FT			
TOP LOGGED INTERVAL	4300 FT			
CASING DRILLER	8.625 IN	348 FT		
CASING LOGGER	346 FT			
BIT SIZE	7.875 IN			
TYPE OF FLUID IN HOLE	BRINE/ S. GEL			
DENSITY	VISCOSITY	10 LB/G	32 S	
PH	FLUID LOSS	10	100 C3	
SOURCE OF SAMPLE	PIT			
RM AT MEAS. TEMP.	.035 OHMM	75 DEGF		
RMF AT MEAS. TEMP.	.026 OHMM	75 DEGF		
RMC AT MEAS. TEMP.	—	—		
SOURCE OF RMF	RMC	CALCULATED	—	
RM AT BHT	.024 OHMM	108 DEGF		
TIME SINCE CIRCULATION	5 HRS			
MAX. RECORDED TEMP.	108 DEGF			
EQUIP. NO.	LOCATION	ML 4109	MIDLAND, TX	
RECORDED BY	J. RICH/C. WELLS			
WITNESSED BY	M. WETCALF			



COMPENSATED Z-DENSILOG
COMPENSATED NEUTRON LOG
GAMMA RAY LOG

Baker Atlas

FILE NO:
MD6996

COMPANY
WELL

RANGE OPERATING NM, INC.

SCB 23 NO. 21

API NO:
30-015-35514

FIELD

LOVING EAST (BRUSHY CANYON)

COUNTY

EDDY

STATE NM

Ver. 3.87
FINAL PRINT

LOCATION:

2460' FSL & 1160' FEL

OTHER SERVICE
DLL/MLL

SEC 23 TWP 23S RGE 28E

PERMANENT DATUM
LOG MEASURED FROM
DRILL MEAS. FROM

GL ELEVATION 2997 FT
KB 3015 FT ABOVE P.D.
KELLY BUSHING

ELEVATIONS:
KB 3015 FT
DF 3014 FT
GL 2997 FT

DATE	14-JUL-2007		
RUN	TRIP	1	1
SERVICE ORDER	536779		
DEPTH DRILLER	6329 FT		
DEPTH LOGGER	6319 FT		
BOTTOM LOGGED INTERVAL	6300 FT		
TOP LOGGED INTERVAL	150 FT		
CASING DRILLER	8.625 IN	0 348 FT	0
CASING LOGGER	348 FT		
BIT SIZE	7.875 IN		
TYPE OF FLUID IN HOLE	BRINE/ S. GEL		
DENSITY	VISCOSITY	10 LB/G	32 S
PH	FLUID LOSS	10	100 C3
SOURCE OF SAMPLE	PIT		
RM AT MEAS. TEMP.	.035 OHMM	0 75 DEGF	0
RMF AT MEAS. TEMP.	.026 OHMM	0 75 DEGF	0
RMC AT MEAS. TEMP.	--	0 --	0
SOURCE OF RMF	RMC	CALCULATED	--
RM AT BHT	.024 OHMM	0 108 DEGF	0
TIME SINCE CIRCULATION	5 HRS		
MAX. RECORDED TEMP.	108 DEGF		
EQUIP. NO.	LOCATION	ML 4109	MIDLAND, TX
RECORDED BY	J. RICH/C. WELLS		
WITNESSED BY	M. METCALF		